Usenet Newsgroup Archive: rec.radio.amateur.homebrew

1997-01 - 1997-05

These Usenet messages were preserved as a plain-text archive. This PDF was generated by Digital Library of Amateur Radio & Communications from the source text file in 2026.

Date span: 1997-01-01 through 1997-05-31

Source text: rec.radio.amateur.homebrew.txt

Source item: https://archive.org/details/usenet-rec

Messages included in this PDF: 5,479

Message records with no readable body available in the source text: 1

Messages are presented chronologically by archived date.

Binary or encoded payloads are not printed as blocks of encoded text; a placeholder appears where such material was detected. The original source text is unchanged.

1. Re: inductive coupling a meter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ac9h0$2vu$4@nadine.teleport.com>
Source record: 99052

In article <32C75082.E6D@psych.umass.edu>,
Gerry & Robin Lempicki <lempicki@psych.umass.edu> wrote:
>I salvaged a few old meters from some old equipment. I would like to
>change the faces and hook these up to indicate power out (not looking
>for anything accurate, just a neat large meter needle jumping on
>voice/signal modulation...these are abt 6" x 9"...would look cool) Does
>anyone have an idea for hooking these up? Can I wrap some wire around a
>coax to get an indication of power out? What type of circuit can i
>throw together to make this work? -Gerry

Hook the cathode (banded) end of a diode to the + meter terminal. Connect a wire from the - meter terminal to your rig's chassis or something else that's grounded. Connect a ceramic capacitor (one of the flat jobs, round or square) of any value from about .001 uF to 0.1 uF between the meter terminals. Then connect a wire to the other end of the diode and dangle it around the shack. Start with a short wire so you don't damage the meter with too much deflection. Adjust the deflection by changing the length and position of this wire.

Have fun!

Roy Lewallen, W7EL

2. -FS- Pair of Motorola MRF 247 RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: Ron Sibbitt <n8lmt@usa.net>
Message-ID: <01bbf780$de1df380$LocalHost@n8lmt>
Source record: 99053
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have a matched pair of new Motorola
MRF-247 transistors, I bought these
from RF Parts a few years ago to repair
a 160 watt 2m amp....never got around to
doing the job. I want $40.00 for the
pair... i'll pay the postage.

73,
Ron Sibbitt
5885 Galbraith Line Road
Croswell, MI 48422
E-Mail - n8lmt@usa.net

3. Rx1 Cw interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: Noel Keen <noelkeen@mcmsys.com>
Message-ID: <01bbf77d$0c8d9a80$27aa9ace@smdksbcr>
Source record: 99054

Could someone tell me where I can obtain an RX1 CW interface?

4. Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bbf795$435bd460$4a229bcf@kn6dv.qnet.com>
Source record: 99055

For those who are interested in the on going discussion of the interesting topic of " Good source for amplifier tips" I have upload part 10 and part 11 you van find the 11 parts via my home page:
--
http://www.av.qnet.com/~kn6dv

This is a uncensored and uncut archive with all the complete articles.
I am sorry for the delay of part 10 and 11 just been busy with Christmas thing etc.

HAPPY NEW YEAR

73 Will, KN6DV

kn6dv@contesting.com

REFORM
Unless the reformer can invent something which substisutes attractive virtues for atractive vices, he will fail.
(Walter Lippmann)

5. Aviation Radios Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: bjnash@connectnet.com
Message-ID: <32d0eb2c.15867777@news.connectnet.com>
Source record: 99056

Aircraft radios should be a drug on the market because the new regs mean a lot of them do not meet the 30ppm freq tolerance rule. Most are 12 volt units with a freq range of 118.0 to 135.95 mc in tenth mc steps, 5-10 watts output, AM. Transmit with carbon mikes. Some have 108.0 to 115.95 additional receivers built in to receive VOR and Loc. stations. If interested, I have a list of some of them for sale. send email to av@pdsig.com for an auto-response list.

BJ nash

AIRCRAFT REMANUFACTURING
1291 E.Vista Way, #150
VISTA, CA. 92084 (619) 749 0239 FAX: 749 6384
Sales Directory: Infobot@pdsig.com

6. Please help with unknown bandwidth of Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: rburden@student.ecel.uwa.edu.au
Message-ID: <5acoij$87b$1@enyo.uwa.edu.au>
Source record: 99057

Hi,

picked up some surplus commercial VHF radios at a recent Hamfest and
wondered if anyone knew the bandwidth for the following crystal filters:

HyQ "QF10701" and "QF10A7"
HCM "10M-4B"
Phillips "10.7N" and "10.7P"
Murata "CFM455F" and "CFM455D"

Thanks in advance,

Richard VK6FKB

ps - if these are of use to you then let me know!!

7. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5act14$23j8$1@news-s01.ny.us.ibm.net>
Source record: 99058

In message <32C3C9CA.2572@star.enet.dec.com> - "L.Mark Pilant"
<pilant@star.enet.dec.com>Fri, 27 Dec 1996 08:06:19 -0500 writes:
:>
:>
:>If anyone wants to ask me questions about this software, feel free to
:>send me E-mail: pilant@seesaw.enet.dec.com.
:>
:>I apologize for being so long winded, but there are probably some folks
:>that would benefit from these CDs; crude as they are (at the moment).
:>

In this day and age why would anyone publish what is exxentially a
database or infromation retrieval product that *required* its users
to use a specific operating environment? Particularly, when there are
at least three four other operating environments (DOS, Macintosh, Unix,
OS/2) in use among the product's target audience?

Everything that is done with the Windows database could have been done
just as easily, perhaps more easily, with HTML coding ... then the CD
ROMS would have been operating system independent. The user would only
need to furnish an appropriate HTML engine (aka Web Browser) for his
particular system.

HTML retrieval and display systems are here, more importantly they will
be around for quite some time ... and are platform independent.

As it is, I'm waiting on the OS/2 version of the QST CDROMS for my
personal system and the Macintosh version for my wife's system.

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==

8. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32c9fc57.3069250@news.airmail.net>
Source record: 99059

w8jitom@aol.com wrote:
>If the capacitor passes HF RF, then I suspect it is almost useless for
>lightning. It would only be effective at VLF frequencies and lower as an
>isolating device. Lightning and nearby stroke induced EMF has a rise time
>that is very fast, so the cap looks like it is not even there.

I don't entirely agree with this statement; most of the energy that
burns things up is low frequency, about 5 KHz. Most of the successful
output networks we've designed include an output blocking capacitor.
The voltage spike is limited by a spark gap. The average power is
limited by a series capacitor.

>A simple T
>network antenna tuner or high pass or band pass filter would do much more
>than any of these gas tube gimmicks for protecting a receiver. A pair of
>clamp diodes and a fuse link, plus a hardened front end would be better
>than transmit type surge suppressors.

I agree with the paragraph above entirely. But I would not operate
myself without a lightning arrestor (even if only a spark gap) across
the feedline to the building where the feedline(s) tie to the shack
ground.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

9. FS: 10,000 Volt Filter Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: w5kft@nts-online.net
Message-ID: <5ad1e6$jqs@news.nts-online.net>
Source record: 99060

I have FOUR General Electric Oil Filled Capacitors for sale.

2 each-- 1 MFD at 10 KV $20 each

2 each 2 MFD at 10 KV $25 each

Will take $80 for all four if you want the group

Bryan W5KFT

10. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: geoffm@cs.cs.huji.ac.il
Message-ID: <5ad10b$4pq@news.huji.ac.il>
Source record: 99061

J. Fred Riley (jfriley@iadfw.net) wrote:

: I agree with the paragraph above entirely. But I would not operate
: myself without a lightning arrestor (even if only a spark gap) across
: the feedline to the building where the feedline(s) tie to the shack
: ground.

If I remember correctly, the National Electical Code requires that feedlines
be grounded when entering a building. If this is the case, if there were
damage to the building and the lines were not grounded, your insurance
commpany could refuse to pay.

Note that a good direct current ground, is not necessarily a good
RF ground and vice versa.

Geoff.

--
Geoffrey S. Mendelson (4X/N3OWJ), Senior Programmer
Computer Science Institute, Hebrew University, Jerusalem, Israel
geoffm@cs.huji.ac.il (02) 65 85692 Fax (02) 561 7723 MANGO 050-961-978.
To get pgp public key: "finger geoffm@cs.huji.ac.il"

11. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0101970029580001@port36.vcnet.com>
Source record: 99062

In article <19961231195400.OAA18640@ladder01.news.aol.com>,
w8jitom@aol.com wrote:

> In article <measures-3112960244070001@port27.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
> >increased as the tube nears the end of its useful emissive life. Thus, a
> >rheostat to control filament voltage is is rather useful. However, to
> >the best of my knowledge, none of the commercial manufacturers provide a
> >means of adjusting filament voltage. Art Collins typically provided a
> >means of adjusting an amplifier's filament voltage.
>
> Another fact almost escaped your great storehouse of knowledge, hi! EVERY
> Ameritron PA after the early to mid 80's includes taps for adjusting
> filament voltage, and instructions for the proper settings for each line
> voltage range.

Primary taps are not nearly as flexible as a rheostat. Since a 3% change
in filament voltage results in doubling---or halving---the useful emission
life of the amplifier tube, transformer taps should be substantively
closer than 3% apart.

Tom:
1. How far apart are the transformer taps (in Ameritron amplifiers)?
2. Are the taps switch-selectable---or is disassembly required to change
taps as the electric-mains (line) voltage rises and falls?
3. Can the filament voltage be measured without disassembling the amplifier?
4. Is a separate filament transformer used?

...snip...

This issue seems to boil down to two things: Are we going to believe the
statement on page 141 in Eimac's *Care and Feeding of Power Grid Tubes*?
Is the algebraic expression [E1/E2]^23.4 correct?

Where's the beef, Mr. Rauch?

Do our "recognized amplifier experts" understand algebra?
---
e-mail copy to Mr Rauch

--
--Rich-- ag6k, 805-386-3734

12. Message from Pat Clawson

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: george.tamayo@infosoftpub.com
Message-ID: <98874671@infosoftpub.com>
Source record: 99063

Forwarded Message; CLAWSON@TELEGRAFIX.COM (PAT CLAWSON) said to GEORGE TAMAYO

C(>George...
C(>
C(>
C(>My remarks concering BBS systems were not meant in any way as
C(>a slight against ham radio operators. I've personally been involved
C(>in commercial broadcasting AND amateur radio activities for over
C(>20 years, and I have a very high regard for hams and recognize their
C(>public service activities and technical expertise.
C(>
C(>Still, there is a world of difference between commercial broadcasters
C(>-- who have tens of millions of dollars wrapped up in their stations
C(>-- and the local ham, who has at most several thousand dollars. I was
C(>attempting, perhaps somewhat inartfully at a very late hour, to make
C(>a similar comparison between BBS sysops and Web site operators.
C(>
C(>I hope you will post this to those newsgroups and lists that you
C(>forwarded my original message.
C(>
C(>Regards,
C(>
C(>Pat Clawson
C(>TeleGrafix Communications
C(>
C(>
C(>

George M. Tamayo - WD6EJO
South Mountain Online
---
* PowerAccess 1.50 That's not line noise--my modem's speaking in tongues!

13. Message from Pat Clawson

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: george.tamayo@infosoftpub.com
Message-ID: <06254672@infosoftpub.com>
Source record: 99064

Forwarded Message; CLAWSON@TELEGRAFIX.COM (PAT CLAWSON) said to GEORGE TAMAYO

C(>George...
C(>
C(>
C(>My remarks concering BBS systems were not meant in any way as
C(>a slight against ham radio operators. I've personally been involved
C(>in commercial broadcasting AND amateur radio activities for over
C(>20 years, and I have a very high regard for hams and recognize their
C(>public service activities and technical expertise.
C(>
C(>Still, there is a world of difference between commercial broadcasters
C(>-- who have tens of millions of dollars wrapped up in their stations
C(>-- and the local ham, who has at most several thousand dollars. I was
C(>attempting, perhaps somewhat inartfully at a very late hour, to make
C(>a similar comparison between BBS sysops and Web site operators.
C(>
C(>I hope you will post this to those newsgroups and lists that you
C(>forwarded my original message.
C(>
C(>Regards,
C(>
C(>Pat Clawson
C(>TeleGrafix Communications
C(>
C(>
C(>

George M. Tamayo - WD6EJO
South Mountain Online
---
* PowerAccess 1.50 That's not line noise--my modem's speaking in tongues!

14. Re: Group nets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5adnkk$d50@news1.mnsinc.com>
Source record: 99065
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

Perhaps there is a WEB SITE somewhere that lists all of the available
E-MAILING LISTS related to radio???

Does anyone know the URL of such a beastie?

Richard Wilkerson <richqrp@pacbell.net> whistled a happy tune like:

|>I know there is a hallicrafters group, are there any others? And what
|>is the addresses of these other groups.. thanks, rich
|>--
|>Rich Wilkerson WD6FDD, Santee, Ca.

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

15. Re: help: GE Porta.mobil

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: subbustr@whidbey.net
Message-ID: <5aduoj$93g@news.whidbey.com>
Source record: 99066

Paul...post this to rec.radio.swap and ask fer a
G/E Expert....U will get ur info better and FAST!!
dave

Oak Harbor,WA
98277
subbustr@whidbey.net
de VE7-LFA/W7

16. Re: 8 kw dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32ca97bc.43710976@news.santafe.edu>
Source record: 99067

r-paschal@worldnet.ATt.NET (Robert Paschal) wrote:

>Just got our electric power back this pm here in western Washington so am
>just reviewing the Dec 27 submissions.
>
>The suggestion for using a baseboard electric heater caught me attention as I
>have one stored in the garage. But -- I would have supposed that the
>elements in these are wire-wound --? It so, would this not introduce a very
>large inductive reactance?? Tell me it ain't so.
>
>Bob AA0MC
>
I believe that these are too inductive for my purposes, but I haven't
really checked it out. I am looking for something with bulk
resistivity. There were several good suggestions about using water
directly. And, one suggestion for making your own resistor. I must
admit it sounded a little like a pipe bomb to me. My biggest problem
is not the cost (although that is a consideration), but the "messing
around time" getting something to work. I have settled on a solution
which consists of a large ferrite transformer to step the impedance
down to drive two 5 kW 50 ohm water cooled loads. I already have a
handle on the transformer technology since each of the four power
modules has a transformer, which I made, in its output. The step down
transformer is just 4 times as big in volume of the core.

Thanks for your observaton.

Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

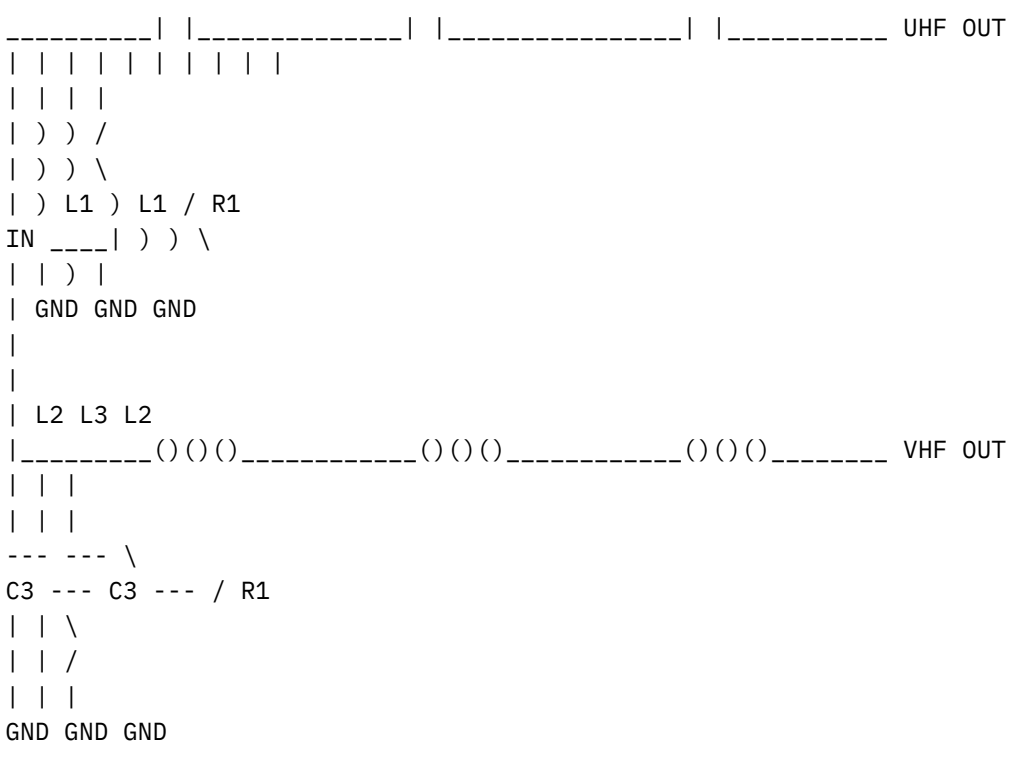
17. Re: Homebrew vhf/uhf Duplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: "Allan (VE6AQK)" <doblera@cadvision.com>
Message-ID: <32CAC68A.47BB@cadvision.com>
Source record: 99068

Brian wrote:
>
> I was wondering if anyone knows of plans for a homebrew
> duplexer(?). I'm not sure if the term duplexer is even correct.
> What I want to do is hook my roof vhf and uhf antennae into a single
> cable for use with my dual band rig for simultaneous tx/rx.
> Is this possible? Is there alot of loss/ high vswr through these
> commercial "vhf/uhf duplexers"?
> Thanks for your time.
>
> 73's
> Brian VE7IJQ

I think this is what you are looking for Brian...
73
de Allan VE6AQK

>From OCT 1991 QST:



Where:
C1: 4.8 pF
C2: 3.3 pF

C3: 15 pF
L1: 2 turns #14, 3/16" dia.
L2: 4 turns #14, 3/16" dia.
L3: 5 turns #14, 1/4" dia.
R1: 50k, 1/2 w.

I built mine over a solid pc board and wound both L2's and L3 from one piece
of wire. I built up the caps from three to four cer disc caps each, I used
four for C1 in parallel.

There is no perceptable difference between my home-brewed and my commercial
diplexers.
Galen, KF0YJ

18. Chassis for Sale (LIKE NEW)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: pollitt@dmv.com
Message-ID: <32caba15.194123811@news>
Source record: 99069
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.swap

Have chassis, metal and aluminum boxes for sale.

LIKE NEW, still in original packaging:

(2) Radio Shack Archer Cat No. 270-274A
Dimensions: 3 1/16 x 8 1/4 x 6 1/8

(1) Radio Shack Archer Cat No. 270-246
Dimensions: 5 x 7 x 2 (aluminum chassis)

(1) LMB Tite-Fit No. 784
Dimensions: 10 x 6 x 3 1/2

All four (4) for $ 25 postpaid.

E-mail to pollitt@dmv.com

Roy C. Pollitt KD4HC
Fenwick Island DE

19. power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: castew@awod.com
Message-ID: <32CAC1B1.129C@awod.com>
Source record: 99070

Can anyone direct me to a good schematic for a 30-50 amp 12v power supply. I would like to start homebrewing and feel that would be a good place to start.

Thank You
KF4LTK
Tony

20. Drake junkers/parts wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970101204200.PAA20338@ladder01.news.aol.com>
Source record: 99071

Looking for junker L-7 amplifier, L-7PS, for spare parts. Might also be interested in other 7 line junkers.

Happy New Year

21. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <32CAAC9B.16DB@calweb.com>
Source record: 99072

John Lockhart wrote:
>
> I bought some surplus 470 uF 450 VDC Rubycon electrolytic
> capacitors recently and have a couple of questions on using
> them.
>
> I don't see a vent hole/plug - do they vent up ("blow their top)
> or down?
>
> I'm amazed at their small size (about 1 3/4" H by 1 1/4" Diam).
> Is this a typical package size for 470 uF at 450 V nowadays??
> (want to leave room for replacement in future)
>
> Thanks for your help. I don't want to build them into a project/
> repair incorrectly.
>
> 73,
>
> John W0DC
HI John,

Some of these newer electrolytics have pie slice type serrations (sp)
on the top and these stressed points give way when it blows and believe
you me they will blow with vigor. As to the stress point on the
positive terminal for a PC mount that could be interesting given a
severe failure, but guess it would work if the cap separates from the
terminal and the negative mounting terminal bends enough to let the
thing vent. The size reduction is impressive given the size of the old
FP styles and early computer grades.

73

Bob, KE6F

22. "Square Law" detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: BSRQ97A@prodigy.com
Message-ID: <5aebbo$1f9m@usenetw1.news.prodigy.com>
Source record: 99073

Greetings.

I would like to hear from anyone who has built the square law detector described in Hayward and Demaw's book, "Solid State Design for the Radio Amateur" (page 147&8). I would like to hear about your experiences with the device, components used, and if you made any significant design changes. If you are interested in "comparing notes" please reply here or via e-mail to:

BSRQ97A@PRODIGY.COM

Thanks.
73's de N7GTB
-Vern
Richland, Wa.

23. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: czeczmar@free.polbox.PL
Message-ID: <199701012210.XAA21922@free.polbox.pl>
Source record: 99074

subscribe

_____
Polbox On-Line Service Internet Services Provider
+48 22 6656363 Web Pages Design
FREE EMAIL ACCOUNTS http://free.polbox.pl

24. Re: help: GE Porta.mobil

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5aessf$pkk@news1.mnsinc.com>
Source record: 99075

paul case <paulcase@usit.net> whistled a happy tune like:

|>I recently acquired two GE porta-mobil radios. These were originally
|>used on 44 mhz by the Tennessee Forestry Service. I would like to
|>convert them to 6 meters but I dont have the schematics on them. The
|>model# was worn on both of them but i could make out a FCC # which was
|>hr44las33 if that helps any. They disconnect in the middle. The lower
|>half is a power supply and the upper half is the tranciever. Possibly
|>the upper half may have plugged into a module for mobile use but im not
|>sure. Anyone having schematics or if anyone has done a 6 meter
|>conversion with these rigs any info will be appreciated

|> Thanks
|> Paul

Hello Paul - it sounds like you are going to have a blast with these units!

You will need the file MANUALS.TXT to find out who has the manuals.
It is available at my website (URL below) in the ham radio resources
section.

While you are at it, get xtals.txt also and you will know where to
obtain the crystals you will need for it on 6 meters also!

Happy New Year - Bry, AF4K

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

25. Re: Plans for 70cm duplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: Jim <jvpoll@dallas.net>
Message-ID: <32CB5522.64F5@dallas.net>
Source record: 99076
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.antenna

Jeff Gregor wrote:
>
> I am trying to find blueprints for the construction of a 70cm duplexer.
> The ARRL Antenna book has a great set of directions for a 2M duplexer,
> but I have not been able to find the 70cm equivilant. A co-worker of
> mine owns his own machine shop, so I can get one made fairly cheaply
> (better than paying $500+ for a commercially made one, anyway). If
> anyone can suggest (or even supply) construction directions for this I
> would certainly appreciate it! Email replies would be preferred but I
> will try and check back in the newsgroups in a couple of days.
>
> Thanks!
> Jeff Gregor, N1UDS
> hobbes99@ziplink.net

I have a page that describes a six-meter duplexer that can
be scaled to 440 MHz. We scaled the six design to two meters
even though I don't mention it on the page.

If you do scale the six meter design to 440 MHz you can probably
use 1/2" Heliax instead of 1 1/4".

The page is at:
http://www.dallas.net/~jvpoll/dup6m/dup.html

Hope this helps.
Jim

26. Re: 8 kw dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-01 00:00:00 UTC
From: scottcr@wku.edu
Message-ID: <1997Jan1.122746@axp1>
Source record: 99077

In article <19961230044056.AAA29973@LOCALNAME>, r-paschal@worldnet.ATt.NET (Robert Paschal) writes:
> Just got our electric power back this pm here in western Washington so am
> just reviewing the Dec 27 submissions.
>
> The suggestion for using a baseboard electric heater caught me attention as I
> have one stored in the garage. But -- I would have supposed that the
> elements in these are wire-wound --? It so, would this not introduce a very
> large inductive reactance?? Tell me it ain't so.
>
> Bob AA0MC
>
It is so. But there is a sneaky way around it, for the lower frequencies, at least. If the wire is wound on a ceramic form in the form of a traditional coil it will have considerable inductive reactance. BUT if in the exact center the direction of the winding is reversed (not layered but cw vs ccw), and the whole thing is symetrical, and close coupled to ensure mutual inductance, the inductance will largely cancel and you are left with the resistance.

General Radio did this year ago, making wirewound non-inductive resistors.

Know however that the R will change with temperature (power into the load); not exactly ideal. I'm not sure how fast nichrome changes R, maybe someone else would know.

73
WB9NEQ

--
Chris.Scott@WKU.EDU Chief Engineer, Public Radio- Western KY U
Telco: (502) 745-3834 Hm & Fax: (502) 781-1232
...just another insignificant VAX user. \\\//
(o o)
----------oo0-(_)-0oo----------

27. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970102213900.QAA23851@ladder01.news.aol.com>
Source record: 98992

In article <measures-0201970016310001@port57.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>> Sounds like you guys are in the twilight zone of receivers here. I'll
>buy into the
>> resistor theory if it is a good low noise high value resistor like a
>metal film of
>> about 1 meg. ...snip...
>
>I can not "hear" the bleeder resistor. It is an MOF-type.
>
>

The internal noise of even the worse resistor is meaningless in this
application. There is almost no current flow, and any current that does
flow would be caused by noise much larger than the noise generated in the
resistance.

Who cares what kind of resistor it is, so long as the RF impedance is very
high.

Arguing optimum ESD protection in unknown systems is like arguing the
number of angels on the head of a pin. There are too many variables.

The only safe thing is to bleed off any static charge during
non-threatning weather, and unhook everything during threatning weather.
Anything else is a wild guess as to how much it helps.

73 Tom

28. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970102213900.QAA23850@ladder01.news.aol.com>
Source record: 98993

Hi Rich,

In article <measures-3112960244070001@port27.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>he lower filament voltage. Of course, in actual practice, this is not
>quite realizeable because the filament voltage normally needs to be
>increased as the tube nears the end of its useful emissive life. Thus, a
>rheostat to control filament voltage is is rather useful. However, to
>the best of my knowledge, none of the commercial manufacturers provide a
>means of adjusting filament voltage. Art Collins typically provided a
>means of adjusting an amplifier's filament voltage.

All current production Ameritron PA's include a method of adjusting
voltage as well as a way of approximately determining when the PA filament
is likely being operated at excessive voltage. I assume you didn't look
very hard at all PA's.

>This issue seems to boil down to two things: Are we going to believe the
>statement on page 141 in Eimac's *Care and Feeding of Power Grid Tubes*?

>Is the algebraic expression [E1/E2]^23.4 correct?

I probably wasn't clear on two points. The formula does not contain
descriptions of what E1 is, E2 is, where it came from, and what the result
is (hours, days, percent, etc).

Secondly the issue wasn't the accuracy of the Eimac "Power Grid Tube
book", it was the source of **your** data. With the past track history of
misquoted facts and data, I just felt confirmation from a second source
would be better. So I still wonder...

Can anyone else confirm the 922 or Commander has the filament voltage Rich
claims?

Can anyone report short emission life on a 3-500Z used in a Kenwood??

Perhaps you made a mistake in measuring or reporting the voltage in the
Kenwood or in the Command PA??

73 Tom

29. 20, 30 or 40 M home brew reciever/transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: Virgil Chambers <edge@sprynet.com>
Message-ID: <01bbf901$bd30dc00$9b67afce@virgil>
Source record: 98994

Does anyone have a plan for a simple reciever or transciever for 20, 30 or 40 meter bands? I need a good 'first build' -
Also, any test equipment plans (beyond volt-ohm meters)

Thanks
Virgil Chambers, KF4LGZ

30. SSTV,FAX,RTTY,CW and more

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: "Bruce Raisley A.R.S. N9ZLE" <n9zle@concentric.net>
Message-ID: <32CC5FCE.4C68@concentric.net>
Source record: 98995
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.policy

Check out the HamComm adapter, its an inexpensive way of getting into
digital amateur comunications

You can get yours at: http://www.concentric.net/~n9zle/hc.html

31. SSTV,FAX,RTTY,CW and more

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: "Bruce Raisley A.R.S. N9ZLE" <n9zle@concentric.net>
Message-ID: <32CC5FA0.4562@concentric.net>
Source record: 98996

Check out the HamComm adapter, its an inexpensive way of getting into
digital amateur comunications

You can get yours at: http://www.concentric.net/~n9zle/hc.html

32. Re: QRP X MTR using the IC7400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5ahp6t$8r1@news1.mnsinc.com>
Source record: 98997

up <vspscpub@xs4all.nl> whistled a happy tune like:

|>Hello!

|>I heard that it is posible to make a simple xmtr using the IC-7400 and a
|>few other components...

|>I would appreciate it if anybody could let me know something more about
|>such a project.

|>Greetings,

|>Hans

Hans - there WERE some articles describing that in some old Hints & Kinks
"columns" in old QST magazines.
It's been years since I saw this but I think it was in the mid or late
1970s.

Hopefully someone witha good QST collection will read your message & poit
you in the right direction.

It would be great if we could get more of these old designs out on the
Worldwide web for downloading!

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

33. Re: Aviation Radios Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: jeffd@coriolis.com
Message-ID: <5ahe2g$oa7@underdark.highfiber.com>
Source record: 98998

bjnash@connectnet.com (BJ Nash) wrote:

>Aircraft radios should be a drug on the market because the new regs
>mean a lot of them do not meet the 30ppm freq tolerance rule. Most
>are 12 volt units with a freq range of 118.0 to 135.95 mc in tenth mc
>steps, 5-10 watts output, AM. Transmit with carbon mikes. Some have
>108.0 to 115.95 additional receivers built in to receive VOR and Loc.
>stations. If interested, I have a list of some of them for sale. send
>email to av@pdsig.com for an auto-response list.

>BJ nash

I'd be curious to know if anyone has successfully converted one of
these to 2M (it can't be that big a leap) and if so what it takes. I
assume they use synthesis of some sort.

People dump on AM a lot but I kinda like it.

Any thoughts out there?

--73--

--Jeff Duntemann KG7JF
Scottsdale, Arizona

34. Re: UHF/VHF books

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: pmooney@onyx.octacon.co.uk
Message-ID: <5ahg6r$2bg@runswick.octacon.co.uk>
Source record: 98999

wmackey@cpcnet.com wrote:

>Can anybody point me at some good reference books for UHF/VHF design
>techniques. I'm particularly interested in the gigahertz range
>circuitry. Thanks

>Wade, N3JLA

>wmackey@cpcnet.com

Hi Wade,

The best I've seen are the 'Microwave Handbook' vols 1,2 &3 published
by the RSGB here in the UK

Vol 1 Components & Operating Techniques
2 Construction & Testing
3 Bands & Equipment

You may be able to get them from the ARRL

Merry Christmas to all

73s de Paul G7SPV

35. power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <ece_9701022219@conchbbs.com>
Source record: 99000

Hi if you find what you need let me know were you got the parts from iv been looking for a transformer for to make a 30amp power supply.

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

36. 100watt dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <ecf_9701022219@conchbbs.com>
Source record: 99001

Hi can any one give me any info on how to make a 100 watt dummy load?

73s kc5cxu

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

37. Re: Rigorous analysis of Twin-T Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: rpenoyer@pacbell.net
Message-ID: <5aev59$hgj@news3.snfc21.pacbell.net>
Source record: 99078
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew

>I am looking for any book that does the rigorous analysis of the twin T
>filter. Preferably, the book or paper should discuss all the modes of
>operation of the filter including those when the zeros are in the right
>half plane. Information on other filters that are either notch or peaking
>at a certain frequency with better performance or lower parts count, or
>allowing simple adjustment of the frequency is also welcome.

For a decent discussion of the twin-T filter, look at "Electronics
Designers' Handbook," Second Edition, Landee, Davis, and Albrecht,
Revised by Giacoletto, McGraw-Hill, New York, 1977, pp. 6-55 to 6-57.

38. Ten Code

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: a050780t@bcfreenet.seflin.lib.fl.us
Message-ID: <5af3j1$21h@nntp.seflin.lib.fl.us>
Source record: 99079

Does anybody know where I can download a

Ten Code like 10-4, 10-20 etc.
Excuse me if it's not called that.

Please e-mail me if you can help.
Thank you

Jim Hein
a050780t@bcfreenet.seflin.lib.fl.us

39. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: bbaka@syix.com
Message-ID: <N.010197.195700.02@syix.com>
Source record: 99080

On 12/31/96 8:47AM, in message
<01bbf737$e3cf5ba0$926d3bc6@internet.roadrunner.com>, "David B. Holtkamp (K5KH)"
<holtkamp@roadrunner.com> wrote:

> > I have corona problems here Dave, at a few hundred feet above sea level.
> > In Death Valley, they even occur below sea level. We are talking receive,
> > not transmit.

Excuse me?? Corona during receive? Possibly due to the absurdly low humidity.
Did anyone know that the balls on car antennas are due to corona buildup during
driving, due to the rubber (er, compound) rubbing on the road?
Is this some kind of weird related effect?
Bill Baka, bbaka@syix.com, not actively hamming, but prior F.C.C. 1st class.

> Thanks for the long, informative message, Tom. I appreciate the help!
>
> 73s de David (K5KH)
>
> PS My news server has been dead for a few days...sorry for the delay in
> replying.
>

40. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: bbaka@syix.com
Message-ID: <N.010197.195704.74@syix.com>
Source record: 99081

> > I use a resistor to bleed the charge on my 70 foot vertical. Before I
> > > added the bleeder resistor, during windy weather, the charge on the
> > > vertical would arc over a 3500v air variable tuning capacitor about
> > every
> > > half minute. I prefer resistors to chokes because chokes have internal
> > > self resonances and resistors don't.
> >
> > Hi Rich!
> >
> > By "high value", do you mean 100k+? Or more than $0.25 a piece? <g>
> >
> David-------
> The vertical is two half waves in phase for 20m. This is also known as a
> Franklin Antenna. The antenna is mounted on the roof of a wooden
> toolshed. It is fed at roof level against a quarter wave counterpoise.
> The feed Z is around 700 ohms. The bleeder resistor is 10meg-ohms. This
> resistor can tolerate several kilovolts.
>
> --
> --Rich-- ag6k, 805-386-3734

Sounds like you guys are in the twilight zone of receivers here. I'll buy into the resistor theory if it is a good low noise high value resistor like a metal film of about 1 meg. Carbon has a bad way of inducing its own noise, which I don't think you would want. If you want a vendor of high voltage resistors try Angstromm-Jordan, which I believe may now be a division of Vishay. $10.00 a pop, but it may well be the answer. Windy weather tipped me off that cars had that same problem as soon as speeds went over 30-40 mph average so it may be some kind of electron accumulation due to the wind.
Bill Baka, bbaka@syix.com, E.E., SWL listener, but not a ham now, no time.

41. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: w6uv@ccnet.com
Message-ID: <32cb5685.10084050@news.ccnet.com>
Source record: 99082
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

On Sat, 28 Dec 1996 22:26:44 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
wrote:

:You'll need a pair of steerable yagis or helixes, for mode U/V. You can
:build these yourself and save a bunch of money. When the sat is near apogee,
:it hangs in virtually the same spot in the sky for long periods, so you can
:aim the antennas by hand, no need for auto-tracking, or even for rotators.
:The antennas don't have to be very high off the ground, since they are
:looking up. You can use a tripod or post mount and turn them directly
:by hand as needed. The antennas can be made from a length of 2x2 and use
:aluminum clothesline wire for elements. There are a number of antenna
:programs available on the net which can optimize the design for you.

I thought the P3D power output and antenna gain is high enough to
allow the use of omni antennas on the ground. Is this not true?

42. wd: d2mac encoder!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: peter smit <peter_smit@hoogovens.e-mail.com>
Message-ID: <32CAF885.F81@hoogovens.e-mail.com>
Source record: 99083

I would like to buy a d2mac encoder (no decoder)
if you have any information where i can get it.

Please help me

Peter smit
Peter_smit@hoogovens.e-mail.com

43. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0201970016310001@port57.vcnet.com>
Source record: 99084

In article <N.010197.195704.74@syix.com>, bbaka@syix.com (Bill Baka) wrote:

> > > I use a resistor to bleed the charge on my 70 foot vertical. Before I
> > > > added the bleeder resistor, during windy weather, the charge on the
> > > > vertical would arc over a 3500v air variable tuning capacitor about
> > > every
> > > > half minute. I prefer resistors to chokes because chokes have internal
> > > > self resonances and resistors don't.
> > >
> > > Hi Rich!
> > >
> > > By "high value", do you mean 100k+? Or more than $0.25 a piece? <g>
> > >
> > David-------
> > The vertical is two half waves in phase for 20m. This is also known as a
> > Franklin Antenna. The antenna is mounted on the roof of a wooden
> > toolshed. It is fed at roof level against a quarter wave counterpoise.
> > The feed Z is around 700 ohms. The bleeder resistor is 10meg-ohms. This
> > resistor can tolerate several kilovolts.
> >
> > --
> > --Rich-- ag6k, 805-386-3734
>
> Sounds like you guys are in the twilight zone of receivers here. I'll
buy into the
> resistor theory if it is a good low noise high value resistor like a
metal film of
> about 1 meg. ...snip...

I can not "hear" the bleeder resistor. It is an MOF-type.

--
--Rich-- ag6k, 805-386-3734

44. QRP X MTR using the IC7400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: up <vspscpub@xs4all.nl>
Message-ID: <32CB919F.3BC3@xs4all.nl>
Source record: 99085

Hello!

I heard that it is posible to make a simple xmtr using the IC-7400 and a few other components...

I would appreciate it if anybody could let me know something more about such a project.

Greetings,

Hans

73 from PA3GZN

Email: vspscpub@xs4all.nl

45. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <vwSW1JAzM5yyEw2S@ifwtech.demon.co.uk>
Source record: 99086

Bob Miller wrote:
>John Lockhart wrote:
>>
>> I bought some surplus 470 uF 450 VDC Rubycon electrolytic
>> capacitors recently and have a couple of questions on using
>> them.
>>
>> I don't see a vent hole/plug - do they vent up ("blow their top)
>> or down?
>>
>> I'm amazed at their small size (about 1 3/4" H by 1 1/4" Diam).
>> Is this a typical package size for 470 uF at 450 V nowadays??
>> (want to leave room for replacement in future)
>>
>> Thanks for your help. I don't want to build them into a project/
>> repair incorrectly.
>>
>
> Some of these newer electrolytics have pie slice type serrations (sp)
>on the top and these stressed points give way when it blows and believe
>you me they will blow with vigor. As to the stress point on the
>positive terminal for a PC mount that could be interesting given a
>severe failure, but guess it would work if the cap separates from the
>terminal and the negative mounting terminal bends enough to let the
>thing vent.

Don't forget the ripple-current rating. Using a perfectly good capacitor with AC currents in excess of its ripple-current rating will cause internal heating and early failure.

As Bob said, split lines are deliberately stamped into the closed end of the can, so that the can will fail gently at that location rather than building up extreme pressure. (Usually this works...)

Rubycon capacitors seem to be very common, and you can probably find the type you have in a catalog from one of the big distributors. If there isn't a type number on the capacitors you can usually find it by matching the capacitance, voltage, maximum temperature, tag connections and external dimensions. With luck the catalog will then give the ripple-current rating.

My guess would be about 1A, but you might be lucky enough to have a low series resistance type rated at about 2A.

In capacitor-input power supplies, a rule of thumb is to use capacitors with a ripple-current rating about of 2 times the average DC current.

It's obviously more complicated than that - for example, the ripple-current rating decreases with operating temperature - but a factor of 2 is a good place to start.

>The size reduction is impressive given the size of the old
>FP styles and early computer grades.
>
That's certainly true. You can tell the guys who were raised on big electrolytics - they're the ones with crossed fingers!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

46. Source of 3-500z Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <32CBE85C.6410@primenet.com>
Source record: 99087
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
May need a source for a pair of 3-500z's soon.
Where would one look for a good pair at a very
reasonable cost?

73, Brian ke7gh@primenet.com
```

47. F.S. : JAN 6186W (6AGEWA) from $.08 each

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: murray.p@ix.netcom.com
Message-ID: <5agqef$mck@dfw-ixnews10.ix.netcom.com>
Source record: 99088
Cross-posted to: rec.radio.swap,misc.industry.electronics.marketplace,rec.audio.tubes,rec.radio.amateur.homebrew

For Sale : Sharp cut-off pentode, 7 pin miniature, type JAN 6186W equal to 6AG5WA. These were made by philips in the USA in 1986. All are new and in the origonal clean boxes.

Quantity Price each Shipping

1 to 24 $.20 $3.00

25 to 49 $.18 $3.00

50 to 99 $.16 $3.00

100 to 499 $.14 free

500 to 999 $.12 free

1000 to 2499 $.10 free

2500 to 9999 $.08 free

Murray Pasternack
PO Box 6117
Laguna Niguel, CA 92607-6117

48. Re: Coherer...What is it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: Madjid <Madjid@cam.org>
Message-ID: <32CBF907.20C0@cam.org>
Source record: 99089

pfriedr wrote:
>
> I wonder if one of the old timers out there could tell me something about
> "Coherers"---what were they exactly and how did they work?
>
> I get the impression that they functioned as detectors, but I'm puzzled about
> references to "tappers" and other key-wound mechanisms designed to agitate
> them.
>
> Thanks in advance.

The "coherer" was (I think) the first RF detector. It was
made of a small glass tube filled with iron powder :)

You had to delicately shake the thing until you hear some
reception. I build one (when I was a kid) and never had any
results with it. I suppose that iron had to be a little
oxydized to act as a semiconductor and the coherer work as
a "Diode".

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

49. Need Filament transformer for SB-220 Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: DWINN@TNG.NET
Message-ID: <o6fFNGO#7GA.353@cobia.tng.net>
Source record: 99090

Does anyone know of a source for a Filament/bias Transformer used in the SB-220 and SB-2200 Amplifiers made by Heath.

Thanks,

Don AF4Z
AF4Z@TNG.NET

50. "FINE" SCANNER PAGE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-02 00:00:00 UTC
From: confused@primenet.com
Message-ID: <confused-0201971147350001@news.primenet.com>
Source record: 99091
Cross-posted to: rec.radio.amateur.equipment,rec.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.homebrew

If you are even remotly into SCANNING I would highly recommend visiting:

http://www.primenet.com/~confused/scan.html

There is a ton of links here for all scanning tastes!!
Check it out.
This page is allways growing so don't forget to E-mail me a link to your
page if it is scanning related I will be happy to included it!!
And please put a link to my page from yours!!

Have a great day!!
James
KE6YJQ

51. WTB / R392

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: "Edwin G. Buttell" <edd.b@mail.snet.net>
Message-ID: <32CCE91C.627C@mail.snet.net>
Source record: 98942
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I am looking for a clean,working R-392, in the N.E.or N.Y.area.
The connecting cables, power and audio are a big plus.
Let me know what you have and and what price you are asking.
Thanks de W1AFA Edd.B.

52. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: "Richard F. Gillette" <r.f.gillette@ieee.org>
Message-ID: <32CC5CC7.CD1@ieee.org>
Source record: 99002

I have a GAP vir. it has no dc return. I have used 3 @ 2.7k 2w composition carbon resistors is series across its center (gap) with good results. Gap states their impedance at this point is close to 50 ohms, hence less than 1% of TX power goes to the resistors. I have no noise problem from them. They are in a heat shrink insulator for the environment.

--

Richard F. Gillette PE, W9PE, Board Member, Harper CC \\////
RF gillette inc. PO Box 1605, Palatine, IL 60078-1605 (oo)
r.f.gillette@ieee.org, v)847-526-2626, f)847-526-2944 ooOO=={}==OOoo=

53. Re: What are tiny tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: "Richard F. Gillette" <r.f.gillette@ieee.org>
Message-ID: <32CC584E.3741@ieee.org>
Source record: 99003
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hearing aids (before transistors) used them.

--
Richard F. Gillette PE, W9PE, Board Member, Harper CC \\////
RF gillette inc. PO Box 1605, Palatine, IL 60078-1605 (oo)
r.f.gillette@ieee.org, v)847-526-2626, f)847-526-2944 ooOO=={}==OOoo=

54. Re: Aviation Radios Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: dledoux@laci.net
Message-ID: <5ahupu$ip7@news1-alterdial.uu.net>
Source record: 99004

jeffd@coriolis.com (Jeff Duntemann) wrote:

>bjnash@connectnet.com (BJ Nash) wrote:

>>Aircraft radios should be a drug on the market because the new regs
>>mean a lot of them do not meet the 30ppm freq tolerance rule. Most
>>are 12 volt units with a freq range of 118.0 to 135.95 mc in tenth mc
>>steps, 5-10 watts output, AM. Transmit with carbon mikes. Some have
>>108.0 to 115.95 additional receivers built in to receive VOR and Loc.
>>stations. If interested, I have a list of some of them for sale. send
>>email to av@pdsig.com for an auto-response list.

>>BJ nash

>I'd be curious to know if anyone has successfully converted one of
>these to 2M (it can't be that big a leap) and if so what it takes. I
>assume they use synthesis of some sort.

>People dump on AM a lot but I kinda like it.

>Any thoughts out there?

>--73--

>--Jeff Duntemann KG7JF
> Scottsdale, Arizona

Some of the rigs are synthesized, but I remember some of the older ones, either hybrid tube and SS technology, all-tube, or all SS which used a multiple mix scheme with a bucket-full of crystals to cover the appropriate bands. Also might be nice to know that these are AM rigs.

Dale
KD5QI

55. Re: Rigorous analysis of Twin-T Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Jon Jenkins <academic@onthenet.com.au>
Message-ID: <32CD1BB8.51FB@onthenet.com.au>
Source record: 99005
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew

lbliao wrote:
>
> I am looking for any book that does the rigorous analysis of the twin T
> filter. Preferably, the book or paper should discuss all the modes of
> operation of the filter including those when the zeros are in the right
> half plane. Information on other filters that are either notch or peaking
> at a certain frequency with better performance or lower parts count, or
> allowing simple adjustment of the frequency is also welcome.
>
> Thanks a lot!
> lbliao

Have a look at RF to see if it can help you
visualaise the chansges to the circuit parameters
of TT filters. See http://www.onthenet.com.au/~academic
for details.

Jon

56. Weird speaker question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: yerke@csrlink.net
Message-ID: <5ai1n7$2eu$1@news3.microserve.net>
Source record: 99006

I recently bought some old radio stuff from an estate sale,including several speakers.One of the speakers a Jenson 12 incher,had quite a few 2 inch pieces of paper soda straw glued to the paper cone,about two inches up from the dustcover in a parallel circular pattern sort of like this ///// all around the paper cone.Does this somehow improve sound quality from the speaker? I think the guy who did this must have seen this in Popular Science or something.

--
Rick Yerke
42 Williams St.
P.O. Box 392
Moscow Pa. 18444 Phone (717)842-4857 yerke@csrlink.net
USA

57. High voltage, low inductance feedthru capacitors wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32cd8a16.107188482@news.santafe.edu>
Source record: 99007
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

I am looking for a source of feedthrough capacitors of a few hundred to 1000 pf capacitance at 10 kV. It is important that the capacitor be low inductance for use in decoupling power leads at 400 - 600 MHz. I recently purchased, from RF Parts, a 680 pf feedthrough capacitor rated at 6 kV, made by Sprague in 1977 that would be OK if only it were rated at 10 kV.

I have an alternative solution, making coaxial feedthrough capacitors using FEP teflon shrink tubing, but these are a bit bulky and, of course, have to be fabricated. I am looking for store bought alternatives.

Thanks,

Jim Potter

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

58. Feng Yung 2 line NASA telemetry data wanted of Japanese satellite

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Geert Pirens <pass@glo.be>
Message-ID: <01bbf933$165a8520$LocalHost@default>
Source record: 99008

Hello

I'm looking for the 2 line telemetry elements of the japanese satellite
FENG YUNG at 137.795 Mhz.

All information is welkom !

Thanks in advance

Geert Pirens ONL2057

59. Re: Please help with unknown bandwidth of Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Jan Axing <janax@algonet.se>
Message-ID: <32CCDBA4.2F90@algonet.se>
Source record: 99009

Richard Burden wrote:

> Murata "CFM455F" and "CFM455D"

These are ceramic filters.
CFM455F: 6 dB BW is 12 kHz, 60 dB BW is 24 kHz, stopband attentuation
~45 dB
CFM455D: 6 dB BW is 20 kHz, 60 dB BW is 40 kHz, stopband attentuation
~50 dB
Insertion loss is 3 dB for the D type and 6 dB for the F type.
Input/output impedance is 1.5 kohm (D) and 2 kohm (F).

Can't help you with the other filters...

Jan

60. DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: "Alan J. Richer" <alan_richer@crd.lotus.com>
Message-ID: <32CD098E.76FB@crd.lotus.com>
Source record: 99010

I must be getting old - I'm forgetting my mathematics...8*(

I just ran across a large number of programmable-channel cable TV head ends - the transmitters look really useful for ATV, s I bought them.

The thing is, they're +55DBm output. To me, that works out to about a watt or so - enough to push an amplifier without too much trouble.

Can somebody better-mathematically equipped than me confirm this?

Thanks, ajr/N1TWY

61. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970103142600.JAA15404@ladder01.news.aol.com>
Source record: 99011

In article <vwSW1JAzM5yyEw2S@ifwtech.demon.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> writes:

>>The size reduction is impressive given the size of the old
>>FP styles and early computer grades.
>>
>That's certainly true. You can tell the guys who were raised on big
>electrolytics - they're the ones with crossed fingers!
>
>
>73 from Ian G3SEK

When I looked into these capacitors a few years ago, I found the ripple current rating was not nearly correct for a capacitor input full wave supply.

I'll have to check into it again.

73 Tom

62. Re: 20, 30 or 40 M home brew reciever/transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <32cd2614.2144821@news.erols.com>
Source record: 99012

Virgil: If I were you I'd start out by building a simple monoband transmitter. Tackle a receiver or transceiver later. I found a very good Homebrew transmitter in the ARRL's QRP Classics book. It the VXO controlled 6 watter. Fun to build, works like a charm, very clean signal, works the world. Good Luck OM. 73 Bill N2CQR

63. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: jms@col.hp.com
Message-ID: <5aj5f1$mjr@nonews.col.hp.com>
Source record: 99013

Alan J. Richer (alan_richer@crd.lotus.com) wrote:
: I must be getting old - I'm forgetting my mathematics...8*(

: I just ran across a large number of programmable-channel cable TV head
: ends - the transmitters look really useful for ATV, s I bought them.

: The thing is, they're +55DBm output. To me, that works out to about a
: watt or so - enough to push an amplifier without too much trouble.

: Can somebody better-mathematically equipped than me confirm this?

: Thanks, ajr/N1TWY

Well, I get 316.23 watts for +55 dBm (50 ohm) or 210.82 watts for +55 dBm (75 ohms). Are you sure it's not rated for +55 dBv or 55 dBuv or something like that?

Mike, K0TER

64. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: jms@col.hp.com
Message-ID: <5aj672$muk@nonews.col.hp.com>
Source record: 99014

Alan J. Richer (alan_richer@crd.lotus.com) wrote:
: I must be getting old - I'm forgetting my mathematics...8*(

: I just ran across a large number of programmable-channel cable TV head
: ends - the transmitters look really useful for ATV, s I bought them.

: The thing is, they're +55DBm output. To me, that works out to about a
: watt or so - enough to push an amplifier without too much trouble.

: Can somebody better-mathematically equipped than me confirm this?

: Thanks, ajr/N1TWY

Well, I get 316.23 watts for +55 dBm. Are you sure it's not rated for +55
dBv or 55 dBuv or something like that?

Mike, K0TER

65. Q re custom radio transmitter design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: fletcher@hookup.net
Message-ID: <32d01da9.5039038@nnrp.ott.hookup.net>
Source record: 99015
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

I don't know much more than the basics about radio transmitters and electronic circuit design but hope someone out there can either help me or point me in the right direction. Here's what I'm looking for:

Can I buy/have made/make a transmitter that would send a regular radio burst that I could monitor within say a 1km radius. It would need to be able to carry information from an attached device which could be a voltage (for example, a thermistor) and I'd need to be able to decode it. I had hoped that some sort of capacitor would be able to discharge through a filter of some sort to send a pulse out. Ideally, it would be low power (able to recharge via a small solar panel) and withstand outside weather extremes (+100F to -40F).

If there are off the shelf products, I'd love to know where they can be found. If there aren't, I'd be interested in communicating with anyone who might be capable and interested in the possibility of designing and prototyping something that might do it.

I can and will check these newsgroups for a response but an email will get to me more reliably.

Eric Fletcher
fletcher@hookup.net

66. 28 ->50 MHz Transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: ari@ingfi1.ing.unifi.it
Message-ID: <5aj7mo$2h0@sirio.cineca.it>
Source record: 99016

Hi all,
Is there anyone who knows some info on 28->50 MHz transverter schematics?
If so please let me know.
Please don't post any commercial transverter links.
References to magazine's articles are also appreciated.
73 to all

IW5AHI
(Luigi)
E-mail: razzi@labtele.die.unifi.it

67. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <5aj7eo$emt@sjx-ixn10.ix.netcom.com>
Source record: 99017

In <19970103142600.JAA15404@ladder01.news.aol.com> w8jitom@aol.com writes:

>When I looked into these capacitors a few years ago, I found the
>ripple current rating was not nearly correct for a capacitor input
>full wave supply.
>
Tom, was this measured, or from the spec sheet?

The Rubycon caps that John Lockhart was referring to in his original post (he got them from me) are from their MXR line, 450 uF/450 V.

Their ripple current rating is 1.80 Arms/120 Hz @ 105 degrees C.

Regards,

- Jeff, WA6AHL

(John, by the way the rest of the specs are:

Operating Temp: -25 - +105 degrees C

Cap. Tolerance: +/- 20% (at 20 degrees C, 120 Hz)

Leakage current: I = 3root(CV), where I = uA, C = uF, V = rated voltage (from the data sheet this looks like 3 * sqrt(C*V), but it's ambiguous enough that it might be cube_root(C*V).

Dissipation Factor (Max): Tan delta = 0.15 (20 degrees, 120 Hz)

Enjoy 'em! - Jeff)

68. Re: QRP X MTR using the IC7400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <32CD2E99.CB0@emily.net>
Source record: 99018

In the "Hints and Kinks" column on page 84 of the November 1994 QST, Lew Smith describes an experimental 1/2 watt CW transmitter using a 74HC240 octal buffer. I expect that you could use the same techniques with many other devices such as the 74HC04 hex inverter.

73 from Lyle, K0LR

69. Help Svetlana 4CX1600B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Surubi <ness@century.com.ar>
Message-ID: <01bbf98d$8e897a60$024320c4@-ness>
Source record: 99019

Mr. Marv Gonsior, W6FR, built an linear amplifier using the Svetlana 4CX1600B. An
article was published in Communications Quarterly, winter 1995. I need a reprints of this article. OR a circuit with this valve. Design for 3-30 Mhz - 1 Kw power Output.
Sorry for my english is very bad; only QSO
Thanks in advance
Call signal: LU2BM
QRA: Nestor
QTH: Buenos Aires - ARGENTINA
EMAIL: ness@century.com.ar
73's

70. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: serley19@alliance.net
Message-ID: <5aj8sh$dej@informer.alliance.net>
Source record: 99020

Alan J. Richer (alan_richer@crd.lotus.com) wrote:
: I must be getting old - I'm forgetting my mathematics...8*(
: I just ran across a large number of programmable-channel cable TV head
: ends - the transmitters look really useful for ATV, s I bought them.
: The thing is, they're +55DBm output. To me, that works out to about a
: watt or so - enough to push an amplifier without too much trouble.
: Can somebody better-mathematically equipped than me confirm this?
: Thanks, ajr/N1TWY
You're starting from the wrong point.

CATV processors and modulators put out much less power that 1 watt.
The output is 55 dbmv - decibels referenced to milli-volts, and into
a 75 ohm load. 0 dbmv=1000 microvolts into 75 ohms.

55 dbmv works out a little under 100 milliwatts if I remember correctly.

Most CATV frequency-agile modulators are still lots of fun to play with,
with very clean outputs and good stability.

What brand/model are they? I may have the service manuals for them
lying around somewhere.

Steve Erley

71. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5aj9dd$5qo@hpcvsnz.cv.hp.com>
Source record: 99021

Alan J. Richer (alan_richer@crd.lotus.com) wrote:

: I just ran across a large number of programmable-channel cable TV head
: ends - the transmitters look really useful for ATV, s I bought them.

: The thing is, they're +55DBm output. To me, that works out to about a
: watt or so - enough to push an amplifier without too much trouble.

+55dBm?? Yes, that should be enough to push most any (legal) ham
amplifier. 0dBm is 1 milliwatt. Each 10dB multiplies the power
by 10. So +55dBm is 5dB above 100 watts, and 5dB below 1000 watts,
so it would be 316 watts. Think you can drive your amplifier with
that?? ;-)

--
Cheers,
Tom
tomb@lsid.hp.com

72. SUBSCRIBE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Surubi <ness@century.com.ar>
Message-ID: <01bbf98f$a4b9cc20$014320c4@-ness>
Source record: 99022

```
ADD HAM-HOMEBREW
```

73. 100watt dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: wb5rue@amsat.ORG
Message-ID: <01IDRVAOVR4YBY08Y5@ARWEN.UTHSCSA.EDU>
Source record: 99023

Charles.Mccurdy@1492.conchbbs.com (Charles Mccurdy) writes:

=Hi can any one give me any info on how to make a 100 watt dummy load?

=73s kc5cxu

The ARRL Handbook has a couple of excellent construction articles
on HF, VHF and UHF dummy antennas. Really all you need for a 100
watt dummy antenna is a 100 watt ceramic resistor. If you want
it to be a dry dummy load you should use a 150 or 200 watt resistor.
DON'T use a wire-wound resistor, you'll have problems with different
impedances at different frequencies.

Kevin, WB5RUE
I am Voltohm of Borg! Resistance is E/I, Power is EI, you will
be attenuated!

There are three kinds of people in the world, those who can
count and those who can't.

74. Re: 100watt dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32cd3c7a.33790561@news.santafe.edu>
Source record: 99024

Charles.Mccurdy@1492.conchbbs.com (Charles Mccurdy) wrote:

>Hi can any one give me any info on how to make a 100 watt dummy load?
>
Depends on the frequency. For up to 30 MHz you can put a bunch of 2W resistors together. You can stretch the power rating for brief tests by immersing the thing in a can of oil.

A better solution is a Carborundum bulk ceramic non-inductive resistor. You can buy those a number of places, including Surplus Sales of Nebraska, phone 402-346-4750, $49.

Or you can find a "Cantenna" from Heathkit. This was a 50 ohm 100 W resistor in a 1 gallon paint can that you filled with oil. Original cost as a kit was about $20.

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

75. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: john_marshall@nt.com
Message-ID: <john_marshall-0301971252010001@nntpm365.plaza.nt.com>
Source record: 99025

In article <32CD098E.76FB@crd.lotus.com>, "Alan J. Richer"
<alan_richer@crd.lotus.com> wrote:

> I must be getting old - I'm forgetting my mathematics...8*(
>
> I just ran across a large number of programmable-channel cable TV head
> ends - the transmitters look really useful for ATV, s I bought them.
>
> The thing is, they're +55DBm output. To me, that works out to about a
> watt or so - enough to push an amplifier without too much trouble.
>
> Can somebody better-mathematically equipped than me confirm this?
>
> Thanks, ajr/N1TWY

The power ratio represented by 55dB is antilog 55/10, which comes to
316227.766. Since dBm references one milliwatt, that would be roughly 316
watts. I bet you could even calculate this with 123 ;)
That would make a dandy ATV amp, if that's really the output.

John WA1UPB/4

76. Re: 100watt dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Uncle Ron <Myersr@infoave.net>
Message-ID: <32CD46DD.263D@infoave.net>
Source record: 99026

Kevin Muenzler WB5RUE wrote:
>
> Charles.Mccurdy@1492.conchbbs.com (Charles Mccurdy) writes:
>
> =Hi can any one give me any info on how to make a 100 watt dummy load?
>
> =73s kc5cxu
>
> The ARRL Handbook has a couple of excellent construction articles
> on HF, VHF and UHF dummy antennas. Really all you need for a 100
> watt dummy antenna is a 100 watt ceramic resistor. If you want
> it to be a dry dummy load you should use a 150 or 200 watt resistor.
> DON'T use a wire-wound resistor, you'll have problems with different
> impedances at different frequencies.
>
> Kevin, WB5RUE
> I am Voltohm of Borg! Resistance is E/I, Power is EI, you will
> be attenuated!
>
> There are three kinds of people in the world, those who can
> count and those who can't.
If you can't find a 100w 50 ohm resistor, 2 50w 100 ohm in parallel
work just fine. Use your head & the knowledge you indicated you had
when you passed your exam and put together a bunch of resistors so the
effective impedence is 50 ohms with a total of 100 watt dissapation.
KB4EG

77. Re: DBm to Watts?(I think I meant DBmv...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: "Alan J. Richer" <alan_richer@crd.lotus.com>
Message-ID: <32CD3DA0.2207@crd.lotus.com>
Source record: 99027

So I left out a lousy v on the end.......oops.

8*) 8*) 8*)

aj"Gotta sweat the details better...8*)"r

78. Re: mods Kenwood TS850S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: sam2316@america.com
Message-ID: <32c64ed0.3030065@news.america.com>
Source record: 99028

"Rene Jansen" <0jansen03@almere.flnet.nl> wrote:

>Who can tell me were to find
>some mods for my TS 850S
>on the www

Try this Page for Mods
ftp://ftp.cs.buffalo.edu/pub/ham-radio/mods/

73 KT4WI

79. Re: QRP X MTR using the IC7400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>
Message-ID: <32CD8534.C28@postoffice.worldnet.att.net>
Source record: 99029

Lyle Koehler wrote:
>
> In the "Hints and Kinks" column on page 84 of the November 1994 QST, Lew
> Smith describes an experimental 1/2 watt CW transmitter using a 74HC240
> octal buffer. I expect that you could use the same techniques with many
> other devices such as the 74HC04 hex inverter.
>
> 73 from Lyle, K0LR

Also same article in the '96 ARRL Handbook page 17.100

Tom, KC8DGU

80. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan3.224328.6949@ke4zv.atl.ga.us>
Source record: 99030
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

In article <32cb5685.10084050@news.ccnet.com> w6uv@ccnet.com writes:
>I thought the P3D power output and antenna gain is high enough to
>allow the use of omni antennas on the ground. Is this not true?

P3D will have more power, but from what I understand that power will
be used to have more than one mode active at the same time, IE the
power will be spread over more bandwidth. So you'll still need at
least a minimum Oscar 10 class receiving station for most activities
near apogee. At perigee it should kick butt, but it will spend a lot
more time out toward apogee so you should plan your station accordingly.

One big advantage will be the 3-axis stablization it will use.
That means the gain antennas will always be nadir pointing.
The problems we had with O10 and O13 due to poor squint angles
should be gone. It won't have to switch to its omni antennas at
perigee. And spin modulation shouldn't be an issue either. This
will lessen Earth station requirements somewhat. I don't know
if omni antennas will suffice, though. The receivers on P3D
won't be any better than those on O13, so you'll still need a
fair amount of uplink ERP even with gain antennas on the satellite.
I suppose you could use an amp into an omni, but it seems to me to
be better to use steerable beams for both up and down links.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

81. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <nua0yTAUCXzyEweJ@ifwtech.demon.co.uk>
Source record: 99031

Jeff Anderson wrote:
>In <19970103142600.JAA15404@ladder01.news.aol.com> w8jitom@aol.com
>writes:
>
>>When I looked into these capacitors a few years ago, I found the
>>ripple current rating was not nearly correct for a capacitor input
>>full wave supply.
>>
>Tom, was this measured, or from the spec sheet?
>
>The Rubycon caps that John Lockhart was referring to in his original
>post (he got them from me) are from their MXR line, 450 uF/450 V.
>
>Their ripple current rating is 1.80 Arms/120 Hz @ 105 degrees C.
>

Thanks for the information, Jeff.

Tom - please could you explain more about your reservations?
On the face of it, they look OK for a nominal 1A DC supply (at least for intermittent amateur use).

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

82. ! 25 CENTS.MIN INTERNATIONAL CALLING !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: flow@j51.com
Message-ID: <5ak543$641@tzlink.j51.com>
Source record: 99032

```
CALL WORLDWIDE FOR 25 CENTS PER MINUTE
THE PASSPORT (tm)

INTERNATIONAL DISCOUNT CALLING CARD
CALL:
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CARIBBEAN
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EUROPE
AFRICA
ANY OTHER COUNTRY

YOUR PASSPORT (tm) TO INTERNATIONAL SAVINGS
CALL 800-934-3652
```

83. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0301971716380001@port10.vcnet.com>
Source record: 99033

In article <19970102213900.QAA23850@ladder01.news.aol.com>,
w8jitom@aol.com wrote:

> Hi Rich,
>
> In article <measures-3112960244070001@port27.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
...snip...
>
> All current production Ameritron PA's include a method of adjusting
> voltage as well as a way of approximately determining when the PA filament
> is likely being operated at excessive voltage. I assume you didn't look
> very hard at all PA's.

One does not need to look very hard at an amplifier diagram to see whether
or not a rheostat is used to control filament voltage. Currently, none of
the MFJ/Ameritron amplifiers appear to have it.

> >This issue seems to boil down to two things: Are we going to believe the
> >statement on page 141 in Eimac's *Care and Feeding of Power Grid Tubes*?
>
> >Is the algebraic expression [E1/E2]^23.4 correct?
>
> I probably wasn't clear on two points. The formula does not contain
> descriptions of what E1 is, E2 is, where it came from, and what the result
> is (hours, days, percent, etc). ...snip...
>
Bzzzzzzzzzzzzzt. Looks like I'd better pick up some more smoke detector
batteries the next time I go to Price Club.

Mr. Rauch's original question is:
> I do wonder where Richard got the formula [E1/E2]^23.5. Is the answer in
> hours, percent, seconds, or ratio? Where does it come from?
>
Quoting from the first page of Richard's "The Nearly Perfect Amplifier" in
the January 1994 issue of QST:
"According to Eimac, every 3% rise in directly heated cathode filament
voltage results in a 50% decrease in life due to carbon loss."
"Expressed mathematically, cathode life is proportional to [E1/E2^23.4,
where E1 is the lowest filament voltage at which normal PEP output is
realized and E2 is the increased filament voltage. "

To me, two things appear to be clear.
1. The person who asked the original question most probably did not read
the first page of "The Nearly Perfect Amplifier"---or did not read Eimac's

Care and Feeding of Power Grid Tubes.
2. The person who asked the question probably does not understand that (every 3% rise in filament voltage decreases emissive life by half) can be expressed algebraicly. Briefly, [1/1.03]^X=0.5. Find the exponent "X". The solution is X=23.4

Tom did not answer these questions:
1. How far apart are the transformer taps (in Ameritron amplifiers)?
2. Are the taps switch-selectable---or is disassembly required to change taps as the electric-mains (line) voltage rises and falls?
3. Can the filament voltage be measured without disassembling the amplifier?
4. Is a separate filament transformer used?

I'm guessing that the most probable answers are:
1. The taps are farther apart than what is indicated by the science.
2. No switch is provided---i.e., disassembly is required.
3. Disassembly is required.
4. No separate filament transformer is used.

IMO, not using a separate filament transformer is *poor* electronic engineering practice for the following reasons:
1. A single, do-all transformer precludes the possibility of using a rheostat to accurately control filament voltage---which is quite clearly the most critical voltage in an amplifier.
2. During heavy current demand from a capacitive-type HV filter, a substantive peak voltage drop occurs in the power transformer. If the amplifier tube's filament is powered by the same transformer, a substantive drop in peak filament V occurs during heavy current demand on the HV supply.
The Heath SB-220 amplifier used a separate filament transformer. Anyone who is familiar with Heath-designs knows that Heath did not waste money on anything that was not justified. IMO, Heath used a separate filament transformer for reasons that seem to have been overlooked by the person who designed MFJ/Ameritron amplifiers. This raises questions about MFJ/Ameritron engineering. According to a recent posting by Carl, KM1H, on the top-band contesting reflector,
"Another interesting bit of trivia is that the MFJ 3KW tuner caught fire in the ARRL lab. Not just once, but the replacement unit too. At under 1KW. It should come as no surprise that that small fact was missing from the QST review. "
IMO, anyone who chooses Delrin for a coil form material is ignorant of the fact that Delrin has a relatively high dissipation (D) factor. In the presence of moderate RF voltages above 10MHz, Delrin makes a great charcoal-igniter for the barbeque.

RE: the accuracy of filament voltage measurements:
I use a John Fluke 8022A to measure filament V. Even though this instrument is not true-RMS, for measuring sinewaves, I found that Fluke's RMS-approximator circuit provided pretty accurate RMS readings when I checked the 8022A against a NBS-tracable Hewlett Packard AC/DC voltage calibrator at the metrology lab where I was employed. At an

electric-mains voltage of 240v, I measured 5.31v at the pins of the 3-500Zs in my 922. Numerous other 922 owners have reported similar measurements. I also used the 8022A to measure filament voltage in Henry amplifiers. However, when I can read a newspaper by the light from a 3-500Z filament, I don't need my Fluke to tell me there is a problem.

However, IMO, it is unnecessary for owners of commercially-built amplifiers to measure filament voltage if they have an unlimited, free supply of new tubes.

The reports of high heater-voltage measurements in Command amplifiers came from one owner and one repairer. Making this measurement reportedly requires lengthy disassembly to gain access to the tube sockets, so few owners seem to be aware of the problem. The first clue that such a problem might exist came from a friend in Florida who repairs amplifiers. He telephoned to ask me what could be the problem if PEP RF output is normal on SSB, but RF output started decreasing steadily on FM and RTTY as soon as the amplifier was keyed? I told him that the only thing I knew of that could cause such a thing was barium migration from the cathode to the grid, which is caused by using more than the rated heater voltage. He telephoned me a couple of hours later and reported that the (3CX800A7) heater voltage was close to 15v.

I have not been writing about vhf parasite issues lately because am waiting for some vhf-Q measurements on the Ni-Cr-Fe alloys we use in our vhf parasitic suppressor retrofit kits. IMO, this could very well be the key issue in this discussion. Mr. Rauch claims that such alloys have high resistance at 28MHz and low resistance at 100-150 MHz. If this proves to be true, I will humbly conceed that Mr. Rauch is indeed one of our "recognized amplifier experts", as he claimed in QST magazine.

I'm still trying to figure out why Mr. Rauch cancelled his post of 28 November 1996. Forunately, this post is in Will's archive in case anyone wants to read it and take a wild guess.

Here we are in January already, and we still don't know who Eimac's Mr. XXX is. However, we should soon be hearing from Mr. Joseph P. "Buzz" Miklos who reportedly disagrees completely with me, but whose CV seems to disagree with Eimac's personnel records of his past employment.
----
e-mail copy to Mr. Rauch.

--
--Rich-- ag6k, 805-386-3734

84. Need help with HW-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Gary Ritter <Highfrequency@msn.com>
Message-ID: <01bbf9ad$a39797a0$197b2299@default>
Source record: 99034

I am in the process of repairing mu Uncles rig...WB5GSG...I found several bugs
already ...receiver was very weak and meter was dead...found several resistors
burned through.
Still have two problems though.
The bias reads high but appears to be in the normal range using a voltmeter.
The major problem seems on 20M...Sidebands are out of whack...normally when tuning in a signal,I have the same rig but a newer version,sigs are tight
and narrow but on this one is very wide and can tune strong sigs. but weaker
sigs are tough to capture...by the time you tune it in the signal is very weak.
Heteradyne oscillator tunes fine,looking for .5 to 2.0 vdc, all tubes are good.
Can't find the cause...
Any assistance would be appreciated dearly...Uncle is retired and can't afford
to send the rig to former Heath tech.

Gary Ritter...N2EAL

85. Wanted: Plate Xfrmr for Gonset Linear Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Neil Preston <npreston@cctr.umkc.edu>
Message-ID: <32CDD8EB.3017@cctr.umkc.edu>
Source record: 99035

I'm looking for a source for a plate transformer for a Gonset GSB-101/Model 3262 linear amplifier. This is a table top linear using 4 811A's, and needs 3600vCT at over 600 mA in a very small size (4 x 5 x 6 1/2"). I do NOT have the original, so rewinding is out of the question.

Any ideas would be appreciated.

- -
Neil Preston, CET Instructor, Electronics Technology
Amateur Radio Station WB0DQW Herndon Technical School
Internet: npreston@cctr.umkc.edu Raytown, Mo.
"Never confuse motion with action." - Benjamin Franklin

86. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Paul Larson <plarson@xmission.com>
Message-ID: <32CDD281.2103@xmission.com>
Source record: 99036

Mike Stansberry wrote:
>
> Alan J. Richer (alan_richer@crd.lotus.com) wrote:
> : I must be getting old - I'm forgetting my mathematics...8*(
>
> : I just ran across a large number of programmable-channel cable TV head
> : ends - the transmitters look really useful for ATV, s I bought them.
>
> : The thing is, they're +55DBm output. To me, that works out to about a
> : watt or so - enough to push an amplifier without too much trouble.
>
> : Can somebody better-mathematically equipped than me confirm this?
>
> : Thanks, ajr/N1TWY
>
> Well, I get 316.23 watts for +55 dBm. Are you sure it's not rated for +55
> dBv or 55 dBuv or something like that?
>
> Mike, K0TER

Im sure he means +55dBMV; that is 55 dB above 1 millivolt at 75 ohms. The CATV amps and modulators are all rated in MV @ 75 ohms, although that can be easily converted to power at 75 ohms. Sorry, dont have my calculator handy.

Paul

87. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Joe Rocci <rocci@worldnet.att.net>
Message-ID: <32CDBE5C.1004@worldnet.att.net>
Source record: 99037

More likely 55dBmV, which is 55 dB above 1 mVrms, which is approximately 0.6Vrms. Cable TV people express everything in dBmV. They also use 75 ohm
as the termination impedance. Your box will deliver 0.6 Vrms into 75 ohms.

Joe
WA3CMQ

88. Re: Need help with HW-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Uncle Ron <Myersr@infoave.net>
Message-ID: <32CDC00F.4373@infoave.net>
Source record: 99038

Gary Ritter wrote:
>
> I am in the process of repairing mu Uncles rig...WB5GSG...I found several
> bugs
> already ...receiver was very weak and meter was dead...found several
> resistors
> burned through.
> Still have two problems though.
> The bias reads high but appears to be in the normal range using a
> voltmeter.
> The major problem seems on 20M...Sidebands are out of whack...normally
> when tuning in a signal,I have the same rig but a newer version,sigs are
> tight
> and narrow but on this one is very wide and can tune strong sigs. but
> weaker
> sigs are tough to capture...by the time you tune it in the signal is very
> weak.
> Heteradyne oscillator tunes fine,looking for .5 to 2.0 vdc, all tubes are
> good.
> Can't find the cause...
> Any assistance would be appreciated dearly...Uncle is retired and can't
> afford
> to send the rig to former Heath tech.
>
> Gary Ritter...N2EAL
It's a shot in the dark, but check the screen voltages. The high value
1/2 watt screen resistors of that era would go nearly open with no
visible sign, and the bypass caps would go short or leaky. ... KB4EG

89. Re: Pro & Cons on Cordless Telephone Headsets????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Rich Wall <richwall@asan.com>
Message-ID: <32CDDF62.7CC9@asan.com>
Source record: 99039
Cross-posted to: rec.radio,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

The pros are the obvious freedom of a cordless headset.

The cons are great, in my opinion.

1)You can be listened to by other cordless phones, scanners, baby monitors and other devices. This results in no privacy.

2) If you live in an appartment or densely populated community, you can hear other handsets or headsets using the same frequency or channel you are on.

3) The batteries in the cordless unit can die with little or no notice. Nicad batteries have a fast "drop-off" and the time spent off the charger is limited.

4) In some cases other handsets or headsets can capture your base unit's dial tone and dial out on your line. This problem has been resolved with the newer models using security codes.

These problems become more evident in apartment dwellings where the chances of other having a cordless close to yours is strong.

I hope this helps you with your concerns.

Rich

90. Re: Feng Yung 2 line NASA telemetry data wanted of Japanese satellite

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: Greg Feddema <Belasius@enetis.net>
Message-ID: <32CDDECD.5C6E@enetis.net>
Source record: 99040

Geert Pirens wrote:
>
> Hello
>
> I'm looking for the 2 line telemetry elements of the japanese satellite
> FENG YUNG at 137.795 Mhz.
> All information is welkom !

Hi Geert - you might try starting at
"http://www.ozemail.com.au/~dcottle/pages/satellite_link.html"

73 de Greg, KC7KUP

91. WTB R-392

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-03 00:00:00 UTC
From: "Edwin G. Buttell" <edd.b@mail.snet.net>
Message-ID: <32CCD3EC.2E29@mail.snet.net>
Source record: 99041
Cross-posted to: rec.radio.amateur.boatanchors,,rec.,radio.swap,rec.,ham-radio,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I am looking for a clean,working,R-392 in the N.E.or N.Y.area.
The connecting cables,audio and power are a big plus.
Let me know what you have and what price you are asking.
de W1AFA Edd.B.

92. New 3-500Z sockets for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5ak99r$f8m$1@news3.microserve.net>
Source record: 98943

Hello,

I have for sale or trade six (6) new in the box Eimac SK-410 sockets for use with the popular 3-500Z amplifier tube. Richardson's price for these units is $69.00 each, I would like to sell them but would also trade for microwave goodies (MMICs, board assys, etc...) Please e-mail with your offers!

Steven Kerns N3FTI
skerns@mail.talon.net

93. WTB B&W 850 tank circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: bigjim@voicenet.com
Message-ID: <5akcoe$olf@news1.voicenet.com>
Source record: 98944
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I am in search of a B&W tank circuit that is rated at around 2000 watts and covers 160 meters, I think it is an 850A or 850-160. Also could be interested in the one that doesnt cover 160. If you have one you want to get rid of drop me a line, Thanks Jim KA3JSO

94. Re: Need help with HW-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: arm@intr.net
Message-ID: <5akkkd$gmj@news.intr.net>
Source record: 98945

1) Check 6146's for being gassy. That can affect bias.

2) Mistuning of the coil slugs on 20m can create several different
problems that resemble your complaint. Also, check for
self-oscillation in one of the stages, e.g. RF amp. Make sure
all the tubes that are supposed to be reverse biased during
receive are actually off.

-- Andy

Gary Ritter (Highfrequency@msn.com) wrote:
: I am in the process of repairing mu Uncles rig...WB5GSG...I found several
: bugs
: already ...receiver was very weak and meter was dead...found several
: resistors
: burned through.
: Still have two problems though.
: The bias reads high but appears to be in the normal range using a
: voltmeter.
: The major problem seems on 20M...Sidebands are out of whack...normally
: when tuning in a signal,I have the same rig but a newer version,sigs are
: tight
: and narrow but on this one is very wide and can tune strong sigs. but
: weaker
: sigs are tough to capture...by the time you tune it in the signal is very
: weak.
: Heteradyne oscillator tunes fine,looking for .5 to 2.0 vdc, all tubes are
: good.
: Can't find the cause...
: Any assistance would be appreciated dearly...Uncle is retired and can't
: afford
: to send the rig to former Heath tech.

: Gary Ritter...N2EAL

--
Andy Mitz (WA3LTJ)
arm@helix.nih.gov

95. Microwave Data Sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: sutin@sol.ucolick.org
Message-ID: <5akhk5$71m@darkstar.ucsc.edu>
Source record: 98946

I am searching for data sheets for any of the following microwave devices:

Varian VDX1080A X-band T/R
Varian V-262 X-band Klystron
Western Electric 723 A/B 2K25 X-band Klystron
Japan Radio Co. TL368A X-band T/R
Sylvania CHS-724B X-band T/R
Sylvania 1N21B microwave diode
Sylvania 1N23A microwave diode
Alpha Industries 1N23E microwave diode
Alpha Industries 1N23ER microwave diode
Alpha Industries 1N415E microwave diode

Any data or tips about where to find it appreciated!

Brian Sutin *** UCO/Lick Observatory *** Santa Cruz, CA 95064 *** KD6TLA
Boruch bn Michael bn Lion bn Benjamin bn Moishe bn Nachum Sutin Ha'Levi
Fred: "May I rescue you?" `Top Hat'
Ginger: "No, thank you. I prefer being in distress." RKO 1935

96. FM broadcast in phone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: goldwing@iquest.net
Message-ID: <5aks86m1@news.iquest.net>
Source record: 98947

My friends have just moved into an apartment complex right next door
to a comercial FM radio station and are getting said FM signals in
thier telephones.

Any ideas on either a commercial filter or perhaps a homebrew ???

Thanks & 73's .... Roger N9PMC

97. CD-R Media for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: tccs@sprintmail.com
Message-ID: <5aksh6$i8i@newsfep3.sprintmail.com>
Source record: 98948

We have the following CD-R media for sale.

Brand: Pioneer
Type: Printable Media (Surface is blank for printing or labels)
Size: 74 min (650 mb)
Price: 6.99
Minimum Order: 10

Brand: Pioneer
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Maxell
Type: Gold on Gold
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: TDK
Type: Gold on Gold
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Hewlett Packard
Type Gold on Gold
Size: 74 min (650 mb)
Price: 7.15
Minimum Order: 10
Lifetime Warranty

The Copy Cat Shop has all your CD duplication, replication, recorders,
software, and media needs.

If you have any questions or comments feel free to call.

Cordially,

The Copy Cat Shop
213-650-1680
213-650-9110 Fax

98. Re: Pro & Cons on Cordless Telephone Headsets????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: james o'brien <kd4cdb@bellsouth.net>
Message-ID: <32CE2D13.7F2C@bellsouth.net>
Source record: 98949
Cross-posted to: rec.radio,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Rich Wall wrote:
>
> The pros are the obvious freedom of a cordless headset.
>
> The cons are great, in my opinion.
>
> 1)You can be listened to by other cordless phones, scanners, baby
> monitors and other devices. This results in no privacy.
>
> 2) If you live in an appartment or densely populated community, you can
> hear other handsets or headsets using the same frequency or channel you
> are on.
>
> 3) The batteries in the cordless unit can die with little or no notice.
> Nicad batteries have a fast "drop-off" and the time spent off the
> charger is limited.
>
> 4) In some cases other handsets or headsets can capture your base unit's
> dial tone and dial out on your line. This problem has been resolved with
> the newer models using security codes.
>
> These problems become more evident in apartment dwellings where the
> chances of other having a cordless close to yours is strong.
>
> I hope this helps you with your concerns.
>
> Rich

hello from Jim in Atlanta. All previous points correct,I've got some
experience with those too. I have found that the 900 mhz that use
spreadspectrum encryption work real well. You can be on hf running a k
with no rfi. The range is great,has the same charecteristics as our band
close by. Can be monitored,but they have to work for it! In my opinion
worth the expense. Good Luck KD4CDB

99. Re: Weird speaker question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: dtmiller@dsmnet.com
Message-ID: <09970004032730.OUI84.dtmiller@dsmnet.com>
Source record: 98950

Hi Rick,

In article <5ai1n7$2eu$1@news3.microserve.net>, From yerke@csrlink.net
(Rick Yerke), the following was written:
> ,had quite a few 2 inch
> pieces of paper soda straw glued to the paper cone,about two inches up
> from the dustcover in a parallel circular pattern sort of like this
> ///// all around the paper cone.Does this somehow improve sound
> quality from the speaker?

That depends on what kind of sound you want.<g> The straws are
stiffeners that prevent breakup of that area of the cone. This improves
low freq response (keeps all parts of the cone in phase) at the possible
expense of muddy mid frequencies.

100. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: macino@ibm.net
Message-ID: <5akq86$o64$1@news-s01.ca.us.ibm.net>
Source record: 98951

```
In <5act14$23j8$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) writes:
>In message <32C3C9CA.2572@star.enet.dec.com> - "L.Mark Pilant"
><pilant@star.enet.dec.com>Fri, 27 Dec 1996 08:06:19 -0500 writes:
>:>
>:>
>:>If anyone wants to ask me questions about this software, feel free to
>:>send me E-mail: pilant@seesaw.enet.dec.com.
>:>
>:>I apologize for being so long winded, but there are probably some folks
>:>that would benefit from these CDs; crude as they are (at the moment).
>:>
>
>In this day and age why would anyone publish what is exxentially a
>database or infromation retrieval product that *required* its users
>to use a specific operating environment? Particularly, when there are
>at least three four other operating environments (DOS, Macintosh, Unix,
>OS/2) in use among the product's target audience?
>
>Everything that is done with the Windows database could have been done
>just as easily, perhaps more easily, with HTML coding ... then the CD
>ROMS would have been operating system independent. The user would only
>need to furnish an appropriate HTML engine (aka Web Browser) for his
>particular system.
>
>HTML retrieval and display systems are here, more importantly they will
>be around for quite some time ... and are platform independent.
>
>As it is, I'm waiting on the OS/2 version of the QST CDROMS for my
>personal system and the Macintosh version for my wife's system.
>
>--
>=========================================================================
>Joe Subich, W8IK ex-AD8I
> <W8IK@IBM.NET>
> <W8IK@AMSAT.ORG>
> <subich@ibm.net>
> <71350.1204@compuserve.com>
>=========================================================================
>

Better yet, why would a CD-ROM that costs about $.04 to make cost, what $20
more than the hard copy than the hard copy? Take a hard look at the 96 and 97
versions of the Handbook. Close enough that I'll save the bucks. The books are
probably within 5 pages of each other.
```

Your other point of the ARRL being infected with Windozitus also is true. There are a lot of DOS, Linux, and OS/2 users that just can't suck up that way.

Jim W9LZ

101. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: wessel@via.nl
Message-ID: <5alkuc$qaf@news.via.nl>
Source record: 98952

Paul Larson <plarson@xmission.com> wrote:

>Im sure he means +55dBMV; that is 55 dB above 1 millivolt at 75 ohms. The
[SNIP]

One thing that really bothers me is the misspelling of milliVolt as MV.
MV is 10^6 Volt, mV is 10^-3 Volt. It is only a 180 dB difference!

And of course the 75 ohm could just as well be 600 ohms....

Bart.

102. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: Joe Rocci <rocci@worldnet.att.net>
Message-ID: <32CE6133.5438@worldnet.att.net>
Source record: 98953

Joe Rocci wrote:
>
> More likely 55dBmV, which is 55 dB above 1 mVrms, which is
> approximately
> 0.6Vrms. Cable TV people express everything in dBmV. They also use 75
> ohm
> as the termination impedance. Your box will deliver 0.6 Vrms into 75
> ohms.
>
> Joe
> WA3CMQ

Alan:
More to the point:
55dBmV is 562mV. Power into the rated 75 ohm load is (E^2) / R, which
equals (.562)^2 / 75 = 4.2 milliwatts. This is considered high power
in the world of Cable TV.
You'll need lots of gain to get to the several watt level...about 30 dB!
Design for stability, shield well and, and good luck!

PS: Sorry I didn't take it to the final conclusion in my original post.
Joe
WA3CMQ

103. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: David Lawson <dlawson@ime.net>
Message-ID: <01bbfa52$52e93ca0$671029cf@maine.ime.net>
Source record: 98954

Bart Wessel <wessel@via.nl> wrote in article <5alkuc$qaf@news.via.nl>...
> Paul Larson <plarson@xmission.com> wrote:
>
> >Im sure he means +55dBMV; that is 55 dB above 1 millivolt at 75 ohms.
The
> [SNIP]
>
> One thing that really bothers me is the misspelling of milliVolt as MV.
> MV is 10^6 Volt, mV is 10^-3 Volt. It is only a 180 dB difference!
>
> And of course the 75 ohm could just as well be 600 ohms....
>
> Bart.
>
>
well, that sure added to the discussion.

104. MANY TUBES WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: Kevin@UPSCALEaudio.com
Message-ID: <5alss5$s5o@nnrp1.news.primenet.com>
Source record: 98955

Hi there-

These are the tubes I m looking for. Most tubes would need to be new old stock, but some used types are OK when noted. n for new, u for used.

As far as pricing, depends on the brand/condition. This way I can pay top dollar and get the best stuff. Since I am looking for certain things to fill in holes in inventory, it will be substantially higher than what you will get from other dealers. Especially audio tubes. From 10% to double what Antique Electronic Supply and others will pay.

Or, I can trade if it makes sense. I also pay finders fees if you know where a stash is.....

Kevin Deal (909) 931-9686 Upscale Audio
Fax (909) 985-6968

6DJ8/ECC88 n Amperex, Mullard, Telefunken
6922/E88CC n any gold pin
7308/E188CC n most gold pin.
12AT7/ECC81 n Amperex, Mullard, Telefunken, some RCA
12AU7/ECC82 same as above
12AX7/ECC83 same as above
7025/12AX7 Amperex, Mullard, Tung-sol
12BH7 most new only
ECC801S any new or used
ECC802S any new or used
ECC803S any new or used
ECC808 any new or used
5691 most new or used
5692 most new or used
7199 any new
7316 any new
7591A any new
8417 any new
EL34 most new or like new
EL37 any new or used
6L6GC RCA
KT66, KT77, KT88 any British made new or used
6550 any st shaped glass (shoulders on top), some used
5AR4/GZ34 any new
2A3 any new
45 new
45/VT52 new or used
50 new or used
845 new

211 new
300A/B new/used
350B new/used
6KD6 new
6LF6 new
6LQ6/6JE6C new
6MJ6 new
6JS6C new
20LF6 new
8950 new
VF 14 any
AC701 any
7728 any
7729 any
7730 any

Best Regards,

Kevin Deal Fine Tube Components, Home Theater,
UPSCALE and Vintage Tubes from Telefunken,
Audio/Home Theater/Rare Tubes Mullard, Amperex, etc. Showroom
1410 Lemonwood Dr West Open 7 Days By Appointment.
Upland, CA 91786 (909) 931-9686

105. Seeking source for Spectral Dynamics manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: Kevin@UPSCALEaudio.com
Message-ID: <5alsu2$s80@nnrp1.news.primenet.com>
Source record: 98956

I have a Spectral Dynamics SD-375II FFT analyzer and need a manual. If you know of a source, please let me know.

Best Regards,

Kevin Deal Fine Tube Components, Home Theater,
UPSCALE and Vintage Tubes from Telefunken,
Audio/Home Theater/Rare Tubes Mullard, Amperex, etc. Showroom
1410 Lemonwood Dr West Open 7 Days By Appointment.
Upland, CA 91786 (909) 931-9686

106. test post

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: "R.E. Dodson" <rdodson@worldnet.att.net>
Message-ID: <32CE839E.4C9F@worldnet.att.net>
Source record: 98957

xxxx

107. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0401970900330001@port10.vcnet.com>
Source record: 98958

In article <19970102213900.QAA23851@ladder01.news.aol.com>,
w8jitom@aol.com wrote:

...snip...
> Arguing optimum ESD protection in unknown systems is like arguing the
> number of angels on the head of a pin. There are too many variables.
>
> The only safe thing is to bleed off any static charge during
> non-threatning weather, and unhook everything during threatning weather.
> Anything else is a wild guess as to how much it helps.
>
Amen to that, Tom. I would toss the coax out the window onto the ground
at least ten feet from the house. Lightning travels on the *outside* of
coax. Since a lightning strike typically has many megavolts and many
kiloamperes, simply unplugging the coax may not be safe if the coax is
left inside the house.

--
--Rich-- ag6k, 805-386-3734

108. Fen Yung

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: burkebp@juno.COM
Message-ID: <19970104.111551.10134.2.burkebp@juno.com>
Source record: 98959

I think its a Chinese (not Japanese) satellite, and the wx images are unusual because they are in color (not gray scale). Use your search engine for TKelso or Dallas Remote Imaging Group (DRIG). Either one will have the keps.
Brian/N0iMD

109. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970104184800.NAA25215@ladder01.news.aol.com>
Source record: 98960

In article <measures-0401970900330001@port10.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>> The only safe thing is to bleed off any static charge during
>> non-threatning weather, and unhook everything during threatning
weather.
>> Anything else is a wild guess as to how much it helps.
>>
>Amen to that, Tom. I would toss the coax out the window onto the ground
>at least ten feet from the house. Lightning travels on the *outside* of
>coax. Since a lightning strike typically has many megavolts and many
>kiloamperes, simply unplugging the coax may not be safe if the coax is
>left inside the house.
>
>

And only hope your are home when threatening weather appears?
I have 15 coax lines coming into the shack, through the floor!

The safest bet is to properly ground the tower, provide tranverse voltage
lightning protection across HF antenna lines, and to ground all coax
cables at a COMMON point ground -- preferably at the AC service
entrance ground rod, before the cables enter the house, and at the
base of the (properly grounded tower). . This isn't
magic, it is part of the NEC. I also maintain a secondary common point
ground panel inside the shack, which is directly grounded to two outdoor
ground rods spaced 15 feet apart, which directly enter the first floor
shack
via #2 copper cables. All AC line protection devices, coax
shields (thru-panel barrel fittings) and phone line protection devices
are on this one panel. I also have a main breaker relay panel that
completely disconnects the AC power feed to the radios, ties all leads
together, and grounds them.

The trick is avoid any sort of a current path through the equipment in
the event of a nearby lightning strike. What is Voo-Doo and magic
is the copper bus bar being sold in the various ham magazines! IMO
such a device invites damage by encouraging a surge on the power line,
phone line, or AC service by forcing the return path THROUGH
the equipment the ground bus is supposed to protect!

Nothing is going to provide 100% protection in case of a direct hit,
but common point grounding can substantial avoid or reduce damage.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine

"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

110. Re: Aviation Radios Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32CEF685.1464@izzy.net>
Source record: 98961

Dale LeDoux wrote:

> >I'd be curious to know if anyone has successfully converted one of
> >these to 2M (it can't be that big a leap) and if so what it takes. I
> >assume they use synthesis of some sort.
>
> >People dump on AM a lot but I kinda like it.
>
> >Any thoughts out there?
>
> >--73--
>
> >--Jeff Duntemann KG7JF
> > Scottsdale, Arizona

I'm sure you could, with enough effort get one to occilate on 144 MHz.
But why?
While AM was the first voice mode used on 2m (me thinks) I have not EVER
heard it on 2m and I've been listening 17 years. Who would you talk to?

73,

Tim

111. Re: Wanted: Tips for constructing water cooled load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32cee687.680502@news.santafe.edu>
Source record: 98962
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

inet@intellisys.net (brian whatcott) wrote:

>In my view, the inductance of a dummy 8kw load at 300 kHz is the
>LEAST of your worries. But perhaps he meant 300 MHz?

No, I meant 300 kHz. Yes, the inductance matters.

Jim Potter

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

112. Detailed dimensions for 1-5/8" EIA coax flange

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32cfe700.801635@news.santafe.edu>
Source record: 98963
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

I am looking for the detailed dimensions of the mating face of a 1-5/8" EIA coax flange. In particular, the ID, OD and step height of the inner ring where contact is made. I have all of the other basic dimensions but these. I found the info by searching the net but so far haven't turned up the three numbers I mentioned.

I am also interested in buying small quantities of 7/8", 1-5/8". and 3-1/8" EIA coax hardware, hard line, flex line, el, flanges, unflanged couplers, directional couplers, etc. This would be for power test setups, so it doesn't need to look like new (but, it's ok if it does.)

Jim Potter
James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

113. Re: Disc Capacitor Markings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: d888888@juno.com
Message-ID: <5amqam$8b2@tracy.protocom.com>
Source record: 98964

mhorowit@erols.com (Michael Horowitz) wrote:

>Curious about the relationship between the markings on disc capacitors
>and their values, I cruised the shelves the other day. Found the
>following: '103k' on a box of .01uf, '47p' on a box marked 47pf,
>'224k' on a box marked .22uf. The latter made me think the
>relationship between the value and the markings was shaky.
>Can anyone shed any light on what I was seeing? - Mike

The markings are in PicoFarad. 103k would be 10,000 PF = .0
1 uFd.

224k would be 22 with 4 zeros = 220,000PF = .22 uFd.

The third digit is the number of zeros to add after the first 2
digits.

remember .1 uFd = 100,000 PF

114. Air Flow Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: Dan Bryden <bryden@deltanet.com>
Message-ID: <32CEF602.7F4C@deltanet.com>
Source record: 98965

A question for an experienced power amplifier builder. When using the 3-500z toward its maximum dissipation limit, Eimac requires a chimney assembly and and forced air cooling. If the CFM airflow is specified, how do you measure the airflow in CFM. Blowers are rated at some CFM, but I assume that is with no back pressure unlike the situation you would find forcing air around a tube. Is it better to measure tube envelope temperature directly since that is the parameter of interest. ?? Thanks, Dan

115. Re: 100watt dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <77c_9701042041@conchbbs.com>
Source record: 98966

Hi thanks ill try that next project.

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

116. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: Paul Larson <plarson@xmission.com>
Message-ID: <32CF395C.307A@xmission.com>
Source record: 98967

Bart Wessel wrote:
>
> Paul Larson <plarson@xmission.com> wrote:
>
> >Im sure he means +55dBMV; that is 55 dB above 1 millivolt at 75 ohms. The
> [SNIP]
>
> One thing that really bothers me is the misspelling of milliVolt as MV.
> MV is 10^6 Volt, mV is 10^-3 Volt. It is only a 180 dB difference!
>
> And of course the 75 ohm could just as well be 600 ohms....
>
> Bart.

Sorry Bart, 75 ohms is the CATV standard. And I did spell out the word "millivolt", which does mean 1 X 10-3 in case you did not understand.

Paul

117. Re: Air Flow Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: Dan Bryden <bryden@deltanet.com>
Message-ID: <32CF2AA5.644@deltanet.com>
Source record: 98968

w8jitom@aol.com wrote:
>
> In article <32CEF602.7F4C@deltanet.com>, Dan Bryden <bryden@deltanet.com>
> writes:
>
> >A question for an experienced power amplifier builder. When using the
> >3-500z toward its maximum dissipation limit, Eimac requires a chimney
> >assembly and and forced air cooling. If the CFM airflow is specified,
> >how do you measure the airflow in CFM. Blowers are rated at some CFM,
> >but I assume that is with no back pressure unlike the situation you
> >would find forcing air around a tube. Is it better to measure tube
> >envelope temperature directly since that is the parameter of interest.
> >?? Thanks, Dan
> >
> >
>
> The best way is to measure the seal temperature.
>
> There are various crayons, paints, and instruments available. If I can
> help you with details let me know.
>
> 73 Tom
Thanks for the info Tom, I understand about the temp measurements but I
would want to be in the ball park as far a air flow before checking for
temperature. Is there a rule of thumb for initil airflow before powering
up the amplifier and making temp measurements. I would like to be close
as far as cooling goes initally. Wouldnt want to smoke the tubes :-)
thanks Dan

118. Re: FM broadcast in phone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: Tim Hunt <WA6TNW@LVNEXUS.NET>
Message-ID: <32CE6672.3218@LVNEXUS.NET>
Source record: 98969

goldwing@iquest.net wrote:
>
> My friends have just moved into an apartment complex right next door
> to a comercial FM radio station and are getting said FM signals in
> thier telephones.
>
> Any ideas on either a commercial filter or perhaps a homebrew ???
>
> Thanks & 73's .... Roger N9PMC

Rodger,

Check with K-Com (330-325-2110). Besides making phone filters to cover the Ham bands, they also make very effective ones for the AM & FM bands. I have been using them for years at our stations very effectively. If you are next door to the FM, you might want to contact their Engineer. You more than likely will be within their "Blanking contour". They may supply you with a filter free. At all our stations, we do this to keep the natives happy. It does a lot for public relations.
73
Tim - WA6TNW

119. BUILD ANT. & MORE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-04 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <32CE2660.19C7@mailhost.cyberramp.net>
Source record: 98970

http://www.cyberramp.net/~johnf

120. Re: HELP! Need Pinouts re:MRF901 Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19970105151500.KAA23262@ladder01.news.aol.com>
Source record: 98892

In article <5anp1j$174@dfw-ixnews9.ix.netcom.com>, forensi1@ix.netcom.com
writes:

>Subject: HELP! Need Pinouts re:MRF901 Transistor
>From: forensi1@ix.netcom.com
>Date: Sun, 05 Jan 1997 11:33:21 GMT
>
>Please help:
>I can't find pinouts for the MRF901 bipolar npn uhf/microwave
>transistor I'm using in a porject. Currently I have no access to
>handbooks, and have had no success on the web. The transistor looks
>like this:
> | (top view) ___
> | ____|. _ . |____
> ----------( )---------
> |
> | (side view)
> |
> |
>
>I can't figure which is Emitter, Base, or Collector - I only need
>three points out of four to use. Please help. THX KB5YOK (Scott)

Ok, Scott. Here you go. The longest pin is the collector. The pin
opposite it is the base. The other two at 90 degree angles are the
emitters. See the drawing mod below. Are these still being made, or did
you just get a group of them surplus?

John...
WB4LNM
WB4LNM@aol.com

<< Subject: HELP! Need Pinouts re:MRF901 Transistor
From: forensi1@ix.netcom.com
Date: Sun, 05 Jan 1997 11:33:21 GMT

Please help:
I can't find pinouts for the MRF901 bipolar npn uhf/microwave
transistor I'm using in a porject. Currently I have no access to
handbooks, and have had no success on the web. The transistor looks
like this:
B | (top view) ___
| ____|. _ . |____
E ----------( )--------- E
|
| (side view)

|
| C

I can't figure which is Emitter, Base, or Collector - I only need
three points out of four to use. Please help. THX KB5YOK (Scott)

>>

121. Stornophone 6114 (pmr set)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: Colin Birch <cbirch@dog-house.demon.co.uk>
Message-ID: <32D03589.3561@dog-house.demon.co.uk>
Source record: 98893

Help wanted with programming a Stornophone 6114 - memory maps, details
of how to set up duplex channels and anything else that you can tell me.

122. Thanks from DXER.COM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <32cfd671.3988488@news.primenet.com>
Source record: 98894

We at DXER.COM would like to thank all
of you for your comments and support for
the site. And invite you back to check
out the updates. New sites are being added
weekly.

40 new links have been added with more to come.
Check out the new "Shortwave Listening" index

"http://www.dxer.com"

"Your Ham Radio Resource Site"

73 de KB7UB & K0OK

123. Vacuum Tube QRP Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: Haze Hutmacher <hazeh@access.usa.net>
Message-ID: <32CFD604.4160@access.usa.net>
Source record: 98895

My daughter and I would like to build a 3-7 tube, monoband, QRP CW rig as a starting project in getting her license. Rather than re-invent the wheel, I am looking for a proven project from an old ARRL Handbook, CQ, QST, etc. Any help???

73 - N0KIB

124. Re: Wanted: Tips for constructing water cooled load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32cfd691.26016487@news.santafe.edu>
Source record: 98896
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

inet@intellisys.net (brian whatcott) wrote:

>Let's say your dummy load runs to a couple of micro Henries.
>That 3 or 4 ohms @ 300kHz. Out of your 250 ohm load??
>
>This doesn't add up - or haven't you told us something?

I didn't really look closely at the inductance issue. It may well be less of a problem than I thought. Although my output has fast rising edges the resulting ringing from a moderately inductive load won't significantly affect its ability to absorb energy. The real problem with heaters as a load is the change in resistance with temperature/power. My air cooled 2 kW load resistance increases 20% at full power (6 300W Carborundum resistors) abdt he power level drops 20%. This has been a problem, hence my interest in water cooled loads.

Thanks to all for their input.

Jim Potter

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

125. Re: HELP! Need Pinouts re:MRF901 Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970105172100.MAA26608@ladder01.news.aol.com>
Source record: 98897

Hi Scott--

The long lead is the collector (output end). The two leads 90-degrees either side of the long lead are both tied to the emitter (ground). The short lead opposite the collector is the base (input end). Hope this helps!

73

Rick K1BQT

126. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32cfed07.1195016@news.airmail.net>
Source record: 98898

measures@mail.vcnet.com (R. L. Measures) wrote:
> Do the 1 and 5 KW MW transmitters have a step-start circuit?

No. And yes. The filament transformers were designed to be low capacity (like the heater transformer in the 30S-1) and to stand off 20 KV which meant that they were fairly high impedance devices. The starting current was usually less than twice the operating current.

>Did you try a different rheostat manufacturer after you became aware of
>the high rate of failure?

No. We've seen similar things in all devices which use carbon brushes and are not moved around (over their entire rotation) regularly. As another for-instance, there's the case of the variac brushes. We simply cannot use variacs for filament control unless the brushes are rated for at least twice the operating current. And Superior says that the brushes are already doubly rated. This doesn't seem to be true when the load is commutating--we can use variacs up to their rated current--but it is true when the load is resistive. No one has yet determined why the load characteristic makes a difference in brush survival.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

127. THX For Help with MRF901 Pinouts!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: forensi1@ix.netcom.com
Message-ID: <5aoq8d$sap@dfw-ixnews3.ix.netcom.com>
Source record: 98899

Thank you very much for your responses to my "pinout quandry" question
on the MRF901. I can now breadboard my project. Particular thanks to
John (WB4LNM) and Tom Sefranek.
Thanks again homebrew guys!

128. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32cfef82.1830366@news.airmail.net>
Source record: 98900

measures@mail.vcnet.com (R. L. Measures) wrote:

>Virtually all commercial amplifiers use a rheostat or a Variac to
>continuously adjust filament voltage.
That is not correct as indicated in a previous post. Taps are used.

>Commercial amplifiers rather typically have, a dedicated filament
>voltmeter with colored marks on the scale indicating the safe filament
>voltage range.
That's not true for broadcast or short wave transmitters. In thirty
years working on same I've never seen a safe-limits range indicated
with one exception--one TMC transmitter had a "normal" range
indicated.

>Flames are needed to light charcoal. Delrin plus RF =s flames.
Well, again that's not true. There are instances where the mechanical
strength of Delrin makes it the material of choice. The bandswitch
drive rods on our 100KW HF transmitter all all made of delrin. We
have never experienced a failure of the drive rods themselves unless
another fault induced excessive voltage on the rod. We've made over
100 of these transmitters and have had two or three rod failures over
twenty years.

>I rest my case.
I find it's best to make your case before you rest it. You can add
the suffix Esquire to my name if it helps even though I'm not licensed
to practice law on the internet--only in Louisiana and West Virginia.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

129. Re: Building a Radio (HELP)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32CFF13E.517E@wco.com>
Source record: 98901

Scott Peters wrote:
>
> I am looking to build a radio. It only has to transmit about 200 feet,
> 2-way. Any help with this would be appreciated. It needs to be as compact
> and light as possible. perhaps it could be made out of a old walkman?
> --
> Slither

If you only need a range of 200 feet, why not just get those $9.95/pr
49 Mhz toys at Toys R Us?

Jim..

130. need dial and drive

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: "JEFFREY W. METLER" <jmetler@frontiernet.net>
Message-ID: <32CFFD10.68DA@frontiernet.net>
Source record: 98902

Looking for vernier drive and dial mechanism for home brew xmrtr.

Would prefer dial and gear box from HRO-50.

Any leads appreciated

tnx.

73's

WT2L

131. Re: QRP X MTR using the IC7400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: Jerry Gaffke <jryg@teleport.com>
Message-ID: <5ap0n2$3p8$1@nadine.teleport.com>
Source record: 98903

In rec.radio.amateur.homebrew Thomas Isgro <kc8dgu@postoffice.worldnet.att.net> wrote:
: Lyle Koehler wrote:
: > In the "Hints and Kinks" column on page 84 of the November 1994 QST, Lew
: > Smith describes an experimental 1/2 watt CW transmitter using a 74HC240
: > octal buffer. I expect that you could use the same techniques with many
: > other devices such as the 74HC04 hex inverter.

I beleive the 74HC240 is built to provide more drive than a 74HC04,
and thus a better choice

jryg@teleport.com Jerry Gaffke Portland, OR USA

132. Re: Headset mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: cpierce@usit.net
Message-ID: <cpierce-0501971355400001@col-max90.dynamic.usit.net>
Source record: 98904

Check your price, It is listed at $9.95 not $7.95

In article <5aoebe$6dn@news.icanect.net>, fsimonds@icanect.net (Terry
Simonds) wrote:

> wd5hmm@aol.com (WD5HMM) wrote:
>
> ->I need copy of article in Jan 93 QST on building headset mic.
> ->Can anyone help please?
> ->Jim , N5QL ex WD5HMM
> ->PO Box 333
> ->Cleburne, TX 76033
> ->WD5HMM@aol.com
>
> Jim- - Take a look at http://www.jscs.com/more10.htm
> They have stereo headset w/boom mic for $7.95! Why build?
>
> I have several of these things. Not built to MIL Spec (!) but they
> work!!
>
>
> 73--Terry/WB4FXD in Ft. Lauderdale, FL
> fsimonds@icanect.net

133. Re: Vacuum Tube QRP Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: Schiwapew Woapalanne <willi6@erols.com>
Message-ID: <32D03612.6AC3@erols.com>
Source record: 98905

Haze Hutmacher wrote:
>
> My daughter and I would like to build a 3-7 tube, monoband, QRP CW rig
> as a starting project in getting her license. Rather than re-invent the
> wheel, I am looking for a proven project from an old ARRL Handbook, CQ,
> QST, etc. Any help???
>
> 73 - N0KIB

==========

Although I'm an avid QRP, Homebrew, and Vacuum Tube buff, I'm not sure this
is the path I would recommend for an early project. Often times, the need
for a "unique" coil or capacitor will drive you crazy. Trying to find the
required power transformer and choke at a reasonable price can also be a
challenge. Likewise, there is some "buy-in" required to the world of
chassis construction; e.g., a decent drill (read "drill press") and some chassis
punching gear. VFO vs. XTAL also adds come complexities. And the legal
"Oh, by the way....." - some early rigs are a little "dirtier" than current
specifications recommend.

That said, grab any ARRL handbook from the late 50's or early 60's. The first
couple rigs in the High-Frequency Transmitter chapter are usually the simple
novice/QRP types. One of my favorites is the 6AG7 two-band rig in the 1957
Handbook. Uses a 5Y3 recifier. Perhaps, let yourselves be steered by the type
of parts you might have access to.

Barring that, TenTec and MFJ (as well as others) have some decent QRP XMTR
and RCVR kits on the market now. The TenTec $59.00 multiband regen receiver
is pretty decent and a nice heavy-duty construction kit.

Have fun - Dave K7HMP

134. Re: HELP! Need Pinouts re:MRF901 Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: alan@g3kfn.avel.co.uk
Message-ID: <32d0077c.19436285@news.avel.net>
Source record: 98906

forensi1@ix.netcom.com said through the grapevine:

>Please help:
>I can't find pinouts for the MRF901 bipolar npn uhf/microwave
>transistor I'm using in a porject. Currently I have no access to
>handbooks, and have had no success on the web. The transistor looks
>like this:
> | (top view) ___
> | ____|. _ . |____
> ----------( )---------
> |
> | (side view)
> |
> |
>
>I can't figure which is Emitter, Base, or Collector - I only need
>three points out of four to use. Please help. THX KB5YOK (Scott)
>
The Pinouts are as follows

1

I
|
|
|
4 ------------( )------------ 2
I
I
I

3

Pin 1 Collector
Pin 2 Emitter
Pin 3 Base
Pin 4 Emitter

It is a NPN Silicon High Frequency Transistor 2.5 dB at 1.0GHz
Hope this helps 73 Alan.

--
73 Alan

Alan Baker, G3KFN
Plymouth, England
email: alan@g3kfn.avel.co.uk

135. Re: Good source for ampli

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32d0109b.1040626@news.airmail.net>
Source record: 98907

don.phelps@infoway.com (Don Phelps) wrote:
>What measures are used to test for parasitics in a less
>destructive fashion?
You don't say what the nature of the output network is. I ain't sure you got a parasitic but it sounds like you need a better HV fuse. Maybe the tube is gassy and is arcing over at 6 KV--or maybe something else is arcing--something like the blocking or bypass cap. (Sometimes they arc over inside the ceramic where you can't see it. Usually a big bang will knock a chunk of ceramic out, though.) The violence of the event makes me doubt that it's a parasitic at all.

If I'm wrong and it really is a parasitic, one of the first steps is to sweep the anode circuit with a grid dip or an RF analysist to see where the spurious resonances are. Since output-to-input feedback is required for an unwanted oscillation, you shouldn't overlook the possiblity of coupling across the antenna switching relay(s) you're using.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

136. Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: Robert Bernstein <rdb@silcom.com>
Message-ID: <32D00252.4C84@silcom.com>
Source record: 98908
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

I have a Tektronix Type 551 oscilloscope from a yard sale...

And it has a mighty weird 16-Pin power connector; it looks like a
rack-mount connector.

The back of the oscilloscope is marked "Wired for 117V".

Does anyone have any idea whether I can just apply 117V power to
some pins of this connector. And, if so, which pins it would be?

Any help or related information would be much appreciated. Thanks!

Robert Bernstein
rdb@silcom.com

137. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: carlisle@mail.north.island.net
Message-ID: <5apcah$249@cliff.island.net>
Source record: 98909
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

In article <32D00252.4C84@silcom.com>,
Robert Bernstein <rdb@silcom.com> wrote:
>I have a Tektronix Type 551 oscilloscope from a yard sale...
>
>And it has a mighty weird 16-Pin power connector; it looks like a
>rack-mount connector.
>
>The back of the oscilloscope is marked "Wired for 117V".
>
>Does anyone have any idea whether I can just apply 117V power to
>some pins of this connector. And, if so, which pins it would be?
>
>Any help or related information would be much appreciated. Thanks!
>
>Robert Bernstein
>rdb@silcom.com

Check with Stan Griffiths (W7NI) at w7ni@teleport.com. He is a TEK
specialist. If he doesnt know, chances are no-one does.

Steve

138. Re: "Square Law" detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: johnmars@mindspring.com
Message-ID: <johnmars-0501972055590001@user-37kb9jg.dialup.mindspring.com>
Source record: 98910

In article <5aebbo$1f9m@usenetw1.news.prodigy.com>, BSRQ97A@prodigy.com (Vernon Van zandt) wrote:

> Greetings.
>
> I would like to hear from anyone who has built the square law detector
> described in Hayward and Demaw's book, "Solid State Design for the Radio
> Amateur" (page 147&8). I would like to hear about your experiences with
> the device, components used, and if you made any significant design
> changes. If you are interested in "comparing notes" please reply here or
> via e-mail to:
>
> BSRQ97A@PRODIGY.COM
>
> Thanks.
> 73's de N7GTB
> -Vern
> Richland, Wa.

Hi Vern,

I have built several of these and find them very useful around the shack. Since building the first one back in '78 or '79 I've acquired a couple of HP430's which have wider bandwidth and which don't give incorrect results with nonsinusoidal waveforms, but for general use I still rely on the square law detector.

I haven't really made any significant changes to the circuit. I have built them with chip or unencapsulated ceramic disc caps and better resistors for the input termination, to improve the response and match at VHF/UHF, and I've built them with slightly different biasing arrangements, but basically it's the same 20 year old circuit.

Instead of trying to increase the sensitivity of the detector, I just precede it with a broadband amplifier. Add a step attenuator and return-loss bridge and we're in measurement heaven!

John WA1UPB/4

139. cash

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: Del Buon <bun@image.dk>
Message-ID: <01bbfb2d$5e480960$7239eac2@delbuon>
Source record: 98911

This is the fairest, most honest way I have seen to share in the wealth of the world.!

Take five minutes to read this and it WILL change your life. If you want to know how to make thousands of dollars quickly, legally, and with NO CATCH, then keep reading.

The Internet has grown tremendously. It doubles in size every 4 months. Think about it. You see those 'Make Money Fast' posts more and more. That's ... because it WORKS ! So I thought, all those new users might make it work. And I decided to try it out, a few months ago. Besides, what's $5.00, I spend more than that in the morning on my way to work on coffee and cigs for the day. So I sent in my money and posted. Everyone was calling it a scam, but there are SO many new users from AOL, Netcom, etc. they will join in and make it work for you.

Well, two weeks later, I began receiving bucks in the mail! I couldn't believe it! Not just a little, I mean big bucks! At first only a few hundred dollars, then a week later, a couple of thousand, then BOOM. By the end of the fourth week, I had received nearly $47,000.00. It came from all over the world. And every bit of it perfectly legal and on the up and up. I've been able to pay off all my bills and still had enough left over for a nice vacation for me and my family.

Not only does it work for me, it works for other folks as well. Markus Valppu says he made $57,883 in four weeks. Dave Manning claims he made $53,664 in the same amount of time. Dan Shepstone says it was only $17,000 for him. Do I know these folks? No, but when I read how they say they did it, it made sense to me. Enough sense that I'm taking a similar chance with $5 of my own bucks. Not a big chance, I admit--but one with incredible potential, because $5 is all anyone ever invests in this system. Period. That's all Markus, Dave, or Dan invested, yet their $5 netted them tens of thousands of dollars each, in a safe, legal, completely legitimate way. Here's how it works in 3 easy steps:

STEP 1.
Invest your $5 by writing your name and address on five separate pieces of paper along with the words: "PLEASE ADD ME TO YOUR MAILING LIST." (In this way, you're not just sending a dollar to someone; you're paying for a legitimate service.) Fold a $1 bill inside each paper, and mail them by standard U. S. Mail to the following five addresses:

1. Brian Truter - 101 N. Park Avenue - Springfield, IL 62702

2. J. Campbell - 1040 C Winners Circle - Bowling Green, KY 42104

3. Joost Walter - P.O. Box 259 - 2870-AG Schoonhoven The Netherlands

4. S. Thomas - P.O. Box 4945 - Tampa, FL 33677-4945

5. G. Del Buon - Horsekildevej 43 3 th - 2500 Valby - Denmark

STEP 2.
Now remove the top name from the list, and move the other names up. This way, #5 becomes #4 and so on. Put your name in as the fifth one on the list.

STEP 3.
Post the article to at least 250 newsgroups. There are at least 19000 newsgroups at any given moment in time. Try posting to as many newsgroups as you can. Remember the more groups you post to, the more people will see your article and send you cash!

STEP 4.
You are now in business for yourself, and should start seeing returns within 7 to 14 days! Remember, the Internet is new and huge. There is no way you can lose.

Now here is how and why this system works:

Out of every block of 250 posts I made, I got back 5 responses. Yes, that's right, only 5. You make $5.00 in cash, not checks or money orders, but real cash with your name at #5.

Each additional person who sent you $1.00 now also makes 250 additional postings with your name at #4, 1000 postings. On average then, 50 people will send you $1.00 with your name at #4,....$50.00 in your pocket!

Now these 50 new people will make 250 postings each with your name at #3 or 10,000 postings. Average return, 500 people= $500.

They make 250 postings each with your name at #2= 100,000 postings=5000 returns at $1.00 each=$5,000.00 in cash!

Finally, 5,000 people make 250 postings each with your name at #1 and you get a return of $60,000 before your name drops off the list. And that's only if everyone down the line makes only 250 postings each! Your total income for this one cycle is $55,000.

>From time to time when you see your name is no longer on the list, you take the latest posting you can find and start all over again.

The end result depends on you. You must follow through and repost this article everywhere you can think of. The more postings you make, the more cash ends up in your mailbox. It's too easy and too cheap to pass up!!!

So that's it. Pretty simple sounding stuff, huh? But believe me, it works. There are millions of people surfing the net every day, all day, all over the world. And 100,000 new people get on the net every day. You know that, you've seen the stories in the paper. So, my friend, read and follow the simple instructions and play fair. That's the key, and that's all there is to it. Print this out right now so you can refer back to

this article easily. Try to keep an eye on all the postings you made to make sure everyone is playing fairly. You know where your name should be.

If you're really not sure or still think this can't be for real, then don't do it. But please print this article and pass it along to someone you know who really needs the bucks, and see what happens.

REMEMBER....HONESTY IS THE BEST POLICY. YOU DON'T NEED TO CHEAT THE BASIC IDEA TO MAKE THE BUCKS! GOOD LUCK TO ALL, AND PLEASE PLAY FAIR AND YOU WILL WIN AND MAKE SOME REAL INSTANT FREE CASH!

*** By the way, if you try to deceive people by posting the messages with your name in the list and not sending the bucks to the people already included, you will not get much. I know someone who did this and only got about $150 (and that's after two months). Then he sent the 5 bills, people added him to their lists, and in 4-5 weeks he had over $10,000!

140. Re: Vacuum Tube QRP Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: kresl@elknet.net
Message-ID: <MPG.d3a488e18b25f47989680@news.elknet.net>
Source record: 98912

Why Tubes? Building a TUNABLE tube rig is not something I would dive into as a beginner project. Power and thermal stability requirements will keep you very busy. Kit designers like HEATHKIT did make that an easy alternative, but this is NOW.

The HANDBOOK or QRP resource books will provide theory and plans on low power receiver and transmitter designs (as well transceivers). I have built several over the years, and my personal preference is for HARMONIC MIX transceivers that were popular a decade or more ago. DIRECT CONVERSION systems are cheap and fun, but prone to microphonic and hum pickup due to the high gain audio stages. Avoid.

The availabilty of NE-604 chip mixers make the possibility of good performing transceivers a reality, check the designs of Rich-K1BQT. The MFJ QRP rigs are his design, and having built my own version of it, provide a stable and affordable monoband transceiver (CW+SSB).

Wm Kresl
WB9BBC
--
In article <32CFD604.4160@access.usa.net>, hazeh@access.usa.net says...
> My daughter and I would like to build a 3-7 tube, monoband, QRP CW rig
> as a starting project in getting her license. Rather than re-invent the
> wheel, I am looking for a proven project from an old ARRL Handbook, CQ,
> QST, etc. Any help???
>
> 73 - N0KIB
>

141. Re: Wanted: Tips for constructing water cooled load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970105003200.TAA04751@ladder01.news.aol.com>
Source record: 98971

In article <32cee687.680502@news.santafe.edu>, jpotter@jpaw.com (Jim Potter) writes:

>>In my view, the inductance of a dummy 8kw load at 300 kHz is the
>>LEAST of your worries. But perhaps he meant 300 MHz?
>
>No, I meant 300 kHz. Yes, the inductance matters.
>
>Jim Potter
>
>

IMO the inductance would be the least of my concerns. Assuming the frequency was a constant 300kHz, the inductance could be easily measured and compensated for with a single capacitor. I would be more worried with some of the other suggestions regarding the use of heating elements for the load -- these might exhibit a large shift in resistance when heated.
I have seen AM BCB transmitter loads constructed using wire elements in a "toaster-like" configuration. They probably use reverse "windings" to cancel the inductive effects.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

142. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970105011700.UAA05885@ladder01.news.aol.com>
Source record: 98972

In article <nua0yTAUCXzyEweJ@ifwtech.demon.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> writes:

>Thanks for the information, Jeff.
>
>Tom - please could you explain more about your reservations?
>On the face of it, they look OK for a nominal 1A DC supply (at least for
>intermittent amateur use).
>
>73 from Ian G3SEK

Yes, that number looks ok for low current supplies Ian. I've asked for
data, and will look again.

Last time I looked was years back when the small caps first cap out. They
had shorter life specs than the type I favored using. I usually only look
at things when there is a reason, I hate changing to "better parts" if the
old ones never fail, hi. An unnecessary change has bit me rather hard on
the rear quarters more than once in my life.

My dad drove a tractor, he told me there was one important lever.
Leave-her B.

73 Tom

143. Re: Air Flow Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970105024800.VAA08380@ladder01.news.aol.com>
Source record: 98973

In article <32CEF602.7F4C@deltanet.com>, Dan Bryden <bryden@deltanet.com>
writes:

>A question for an experienced power amplifier builder. When using the
>3-500z toward its maximum dissipation limit, Eimac requires a chimney
>assembly and and forced air cooling. If the CFM airflow is specified,
>how do you measure the airflow in CFM. Blowers are rated at some CFM,
>but I assume that is with no back pressure unlike the situation you
>would find forcing air around a tube. Is it better to measure tube
>envelope temperature directly since that is the parameter of interest.
>?? Thanks, Dan
>
>

The best way is to measure the seal temperature.

There are various crayons, paints, and instruments available. If I can
help you with details let me know.

73 Tom

144. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970105011700.UAA05883@ladder01.news.aol.com>
Source record: 98974

Hi Rich,

This newsgroup is chartered for the exchange of technical information, so I'll respond to the things that may be of general technical interest. I'll ignore the pathological non-technical comments.

In article <measures-0301971716380001@port10.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>1. How far apart are the transformer taps (in Ameritron amplifiers)?

I'm going to assume you mean in volts, or percent. It depends on the PA. The AL-8 series (AL-800, 811, 80B, etc) allows the selection of 10% step taps in the less expensive amplifiers (like the 811).

When this series is used with more expensive tubes like 3CX800's, voltage is adjustable in 4% steps. The 3CX800 is rated at 13.5 volts + - .6 volts, that's about 9% allowable delta. This allows the customer to pick a voltage close to the center of the normal rating.

>2. Are the taps switch-selectable---or is disassembly required to change
>taps as the electric-mains (line) voltage rises and falls?
>3. Can the filament voltage be measured without disassembling the amplifier?

Two and three are the same question. No, there is no external control. I think an external rheostat is a bad idea, even though it is cheaper than adding windings.

>4. Is a separate filament transformer used?

It depends on the PA and the tube requirements.

>I'm guessing that the most probable answers are:

I think it is wrong to publicly "guess" something, and then leap to a conclusion your guess is a fact. But I'll answer anyway.

>1. The taps are farther apart than what is indicated by the science.

It appears not, when I review the data. So far as service history, and to the best of my knowledge, the only PA's ever received with low emission tubes had YOUR modifications in them.

Again I ask, how many readers have had tubes go flat from excessive filament voltage? So far Rich, we have ZERO reports of emission related failures in the Command, Ten Tec, and Kenwood amplifiers you are bashing.

>2. No switch is provided---i.e., disassembly is required.
>3. Disassembly is required.

Two and three are the same. I don't like your idea because it makes it possible for someone to accidently crank the filament voltage up or down too much from the outside. A rheostat also could fail, and cause the immediate loss of metal oxide cathode tubes. The general rule is to NOT add complexity unless advantages outweigh potential problems.

Since you offer no emission failure case history data, and since my direct experience with the sale of over 30,000 amateur PA's and several thousand commercial PA's indicates emission life is NOT a problem for amateurs, I feel your suggestion is ill-advised.

Nearly every amateur (and many commercial) user is not equipped to determine the proper filament voltage setting. Most customers are best left with fewest number of adjustments possible.

>4. No separate filament transformer is used.

Incorrect.

> IMO, anyone who chooses Delrin for a coil form material is ignorant of
>the fact that Delrin has a relatively high dissipation (D) factor.

I agree. That was an idiotic choice of materials.

>In the
>presence of moderate RF voltages above 10MHz, Delrin makes a great
>charcoal-igniter for the barbeque.

That is not true at all.

>However, when I can read a newspaper by the light from a
>3-500Z filament, I don't need my Fluke to tell me there is a problem.

That certainly sounds colorful, but it is a needless and meaningless story.

>The reports of high heater-voltage measurements in Command amplifiers came
>from one owner and one repairer.

That's second hand information and is totally dependent on a unknown person's equipment and skill. If it is true, Commander needs to address that problem.

But we should ALL be cautious in accepting data relayed from a source who has proven himself unreliable several times. I have no opinion one way or another until I can hear or see such information presented by a reliable source.

> I have not been writing about vhf parasite issues lately because am
>waiting for some vhf-Q measurements on the Ni-Cr-Fe alloys we use in our
>vhf parasitic suppressor retrofit kits. IMO, this could very well be the
>key issue in this discussion. Mr. Rauch claims that such alloys have

high
>resistance at 28MHz and low resistance at 100-150 MHz.

I never claimed the allows have a high ressistance at HF, and a low
resistance at VHF. I simply claimed your low Q VHF nichrome suppressors
mainly reduce HF Q.
I said the change in VHF Q by adding nichrome was unimportant, because the
resistor dominates the system at VHF, not inductor losses.

Please post a copy of where I said "such alloys have high resistance at
28MHz and low resistance at 100-150 MHz." If I said that, I will correct
it.

>If this proves to
>be true, I will humbly conceed that Mr. Rauch is indeed one of our
>"recognized amplifier experts", as he claimed in QST magazine.

I never called myself that in QST, so your claim is untrue..

QST did "call" SEVERAL people experts however. I guess I was mentioned by
them.

73
Tom

145. Building a Radio (HELP)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: Scott Peters <jude@mail.island.net>
Message-ID: <01bbfabc$91246de0$542aefcc@temp.nanaimo.island.net>
Source record: 98975

I am looking to build a radio. It only has to transmit about 200 feet,
2-way. Any help with this would be appreciated. It needs to be as compact
and light as possible. perhaps it could be made out of a old walkman?
--
Slither

146. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32cf2c6e.19657531@news.airmail.net>
Source record: 98976

w8jitom@aol.com wrote:
>an external rheostat is a bad idea, even though it is cheaper than
>adding windings.
---snip---
> A rheostat also could fail, and cause the
>immediate loss of metal oxide cathode tubes.

Variable rheostats were used on our 1 and 5 KW MW transmitters which used thoriated tungsten filament tubes. The Rheosats (as you would expect in commercial equipment of this calibre) were adequately rated with a 2:1 safety factor on current rating. Our field failure rate was quite high after the transmitters had been in service a few years. The carbon contact point just ate the rheostat winding over time which, in turn, would open the filament primary circuit and take the transmitter off the air. It is more difficult--and more expensive--to use tapped filament and power transformers. (You can easily double the cost of a transformer in providing 2% taps.) But that's all we use now. One interesting approach would be to use SCR control on the filament/heater voltage. The only problem is that such complexity doesn't make economic sense in amplifiers with the tubes of the size we're discussing here.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

147. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32cf2f06.20322332@news.airmail.net>
Source record: 98977

w8jitom@aol.com wrote:
>an external rheostat is a bad idea, even though it is cheaper than
>adding windings.
---snip---
> A rheostat also could fail, and cause the
>immediate loss of metal oxide cathode tubes.

Variable rheostats were used on our 1 and 5 KW MW transmitters which used thoriated tungsten filament tubes. The Rheosats (as you would expect in commercial equipment of this calibre) were adequately rated with a 2:1 safety factor on current rating. Our field failure rate was quite high after the transmitters had been in service a few years. The carbon contact point just ate the rheostat winding over time which, in turn, would open the filament primary circuit and take the transmitter off the air. It is more difficult--and more expensive--to use tapped filament and power transformers. (You can easily double the cost of a transformer in providing 2% taps.) But that's all we use now. One interesting approach would be to use SCR control on the filament/heater voltage. The only problem is that such complexity doesn't make economic sense in amplifiers with the tubes of the size we're discussing here.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

148. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32cf2f84.20447987@news.airmail.net>
Source record: 98978

w8jitom@aol.com wrote:
>an external rheostat is a bad idea, even though it is cheaper than
>adding windings.
---snip---
> A rheostat also could fail, and cause the
>immediate loss of metal oxide cathode tubes.

Variable rheostats were used on our 1 and 5 KW MW transmitters which used thoriated tungsten filament tubes. The Rheosats (as you would expect in commercial equipment of this calibre) were adequately rated with a 2:1 safety factor on current rating. Our field failure rate was quite high after the transmitters had been in service a few years. The carbon contact point just ate the rheostat winding over time which, in turn, would open the filament primary circuit and take the transmitter off the air. It is more difficult--and more expensive--to use tapped filament and power transformers. (You can easily double the cost of a transformer in providing 2% taps.) But that's all we use now. One interesting approach would be to use SCR control on the filament/heater voltage. The only problem is that such complexity doesn't make economic sense in amplifiers with the tubes of the size we're discussing here.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

149. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32cf30d6.20786338@news.airmail.net>
Source record: 98979

w8jitom@aol.com wrote:
>an external rheostat is a bad idea, even though it is cheaper than
>adding windings.
---snip---
> A rheostat also could fail, and cause the
>immediate loss of metal oxide cathode tubes.

Variable rheostats were used on our 1 and 5 KW MW transmitters which used thoriated tungsten filament tubes. The Rheosats (as you would expect in commercial equipment of this calibre) were adequately rated with a 2:1 safety factor on current rating. Our field failure rate was quite high after the transmitters had been in service a few years. The carbon contact point just ate the rheostat winding over time which, in turn, would open the filament primary circuit and take the transmitter off the air. It is more difficult--and more expensive--to use tapped filament and power transformers. (You can easily double the cost of a transformer in providing 2% taps.) But that's all we use now. One interesting approach would be to use SCR control on the filament/heater voltage. The only problem is that such complexity doesn't make economic sense in amplifiers with the tubes of the size we're discussing here.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

150. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32cf334f.21419409@news.airmail.net>
Source record: 98980

w8jitom@aol.com wrote:
>an external rheostat is a bad idea, even though it is cheaper than
>adding windings.
---snip---
> A rheostat also could fail, and cause the
>immediate loss of metal oxide cathode tubes.

Variable rheostats were used on our 1 and 5 KW MW transmitters which used thoriated tungsten filament tubes. The Rheosats (as you would expect in commercial equipment of this calibre) were adequately rated with a 2:1 safety factor on current rating. Our field failure rate was quite high after the transmitters had been in service a few years. The carbon contact point just ate the rheostat winding over time which, in turn, would open the filament primary circuit and take the transmitter off the air. It is more difficult--and more expensive--to use tapped filament and power transformers. (You can easily double the cost of a transformer in providing 2% taps.) But that's all we use now. One interesting approach would be to use SCR control on the filament/heater voltage. The only problem is that such complexity doesn't make economic sense in amplifiers with the tubes of the size we're discussing here.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

151. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32cf31d3.21038597@news.airmail.net>
Source record: 98981

w8jitom@aol.com wrote:
>an external rheostat is a bad idea, even though it is cheaper than
>adding windings.
---snip---
> A rheostat also could fail, and cause the
>immediate loss of metal oxide cathode tubes.

Variable rheostats were used on our 1 and 5 KW MW transmitters which used thoriated tungsten filament tubes. The Rheosats (as you would expect in commercial equipment of this calibre) were adequately rated with a 2:1 safety factor on current rating. Our field failure rate was quite high after the transmitters had been in service a few years. The carbon contact point just ate the rheostat winding over time which, in turn, would open the filament primary circuit and take the transmitter off the air. It is more difficult--and more expensive--to use tapped filament and power transformers. (You can easily double the cost of a transformer in providing 2% taps.) But that's all we use now. One interesting approach would be to use SCR control on the filament/heater voltage. The only problem is that such complexity doesn't make economic sense in amplifiers with the tubes of the size we're discussing here.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

152. Webpage Updated

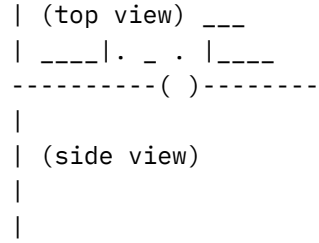
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: glenn schultz <glenn@spacestar.net>
Message-ID: <01bbfacf$0a89d500$ede691ce@spacestar.spacestar.net>
Source record: 98982

```
The IPL webpages have been updated with a new look and feel. It is easier
to read, with the info better organized.
--
Glenn Schultz
10X 68391
N0VYK

interNET ==>> glenn@spacestar.net
packetNET ==>> n0vyk@n0vyk.ampr.org

Check out the Ionospheric Protection League
Amateur and Antique Radio Homepage
==>> http://www.spacestar.net/users/glenn/index.html
```

153. HELP! Need Pinouts re:MRF901 Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: forensi1@ix.netcom.com
Message-ID: <5anp1j$174@dfw-ixnews9.ix.netcom.com>
Source record: 98983

Please help:
I can't find pinouts for the MRF901 bipolar npn uhf/microwave
transistor I'm using in a porject. Currently I have no access to
handbooks, and have had no success on the web. The transistor looks
like this:



I can't figure which is Emitter, Base, or Collector - I only need
three points out of four to use. Please help. THX KB5YOK (Scott)

154. Re: Wanted: Tips for constructing water cooled load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: inet@intellisys.net
Message-ID: <5ancjj$dq9@clark.zippo.com>
Source record: 98984
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <32cee687.680502@news.santafe.edu>, jpotter@jpaw.com says...
>
>inet@intellisys.net (brian whatcott) wrote:
>
>
>>In my view, the inductance of a dummy 8kw load at 300 kHz is the
>>LEAST of your worries. But perhaps he meant 300 MHz?
>
>No, I meant 300 kHz. Yes, the inductance matters.
>
>Jim Potter

I don't see it, Jim.

Let's say your dummy load runs to a couple of micro Henries.
That 3 or 4 ohms @ 300kHz. Out of your 250 ohm load??

This doesn't add up - or haven't you told us something?

Regards
brian whatcott ,inet@intellisys.net>
altus OK

155. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0501970116000001@port78.vcnet.com>
Source record: 98985

In article <19970105011700.UAA05883@ladder01.news.aol.com>,
w8jitom@aol.com wrote:

...snip...

> In article <measures-0301971716380001@port10.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
snip...

> ...snip... I
> think an external rheostat is a bad idea, even though it is cheaper than
> adding windings.

**Virtually all commercial amplifiers use a rheostat or a Variac to
continuously adjust filament voltage. If a commercial amplifier
manufacturer produced an amplifier without a means of continuously
adjusting filament voltage, it is unlikely that any knowledgeable engineer
would recommend purchasing such an amplifier.

> >4. Is a separate filament transformer used?
>
> It depends on the PA and the tube requirements.

Which Ameritron amplifiers use a separate filament transformer?

> >I'm guessing that the most probable answers are:
>
> I think it is wrong to publicly "guess" something, and then leap to a
> conclusion your guess is a fact. But I'll answer anyway.
>
When you don't answer, I guess.

> >1. The taps are farther apart than what is indicated by the science.
>
> It appears not, when I review the data. So far as service history, and to
> the best of my knowledge, the only PA's ever received with low emission
> tubes had YOUR modifications in them.

Bzzzzzzzzzzzzzzzzzzzzzzzzzzzzt. Good thing I picked up some more batteries.

In the various notes that come with the low VHF Q parasitic suppressor
retrofit kits, I advise owners to measure filament voltage while they have
their amplifiers apart. If the measured voltage is not within Eimac's
rated filament voltage range, corrective steps need to be taken. IMO,
5.9v on a 3-500Z or 8877 filament (Eimac rating: 4.75v-5.25v) is not good
engineering practice---and yet there are at least four such amplifiers.
Of course, if you have a different opinion, Mr. Rauch, I support your

right to that opinion.

> Again I ask, how many readers have had tubes go flat from excessive
> filament voltage? So far Rich, we have ZERO reports of emission related
> failures in the Command, Ten Tec, and Kenwood amplifiers you are bashing.

To the best of my knowledge, Ten Tec has no such problems. Command and
Kenwood do. Translation: "bashing"=s telling the truth about the
measured filament voltage. // "Failures" are not caused by excessive
filament voltage. Loss of emission is basicly a slow---or not so
slow---process. Even with 6v on a 5.25v-rated max. filament, the tube
should last a few hundred hours. However, for most hams, this would still
be more than the typical 12 month warranty period on ham amplifiers.
>
> >2. No switch is provided---i.e., disassembly is required.
> >3. Disassembly is required.
>
> ...snip... I don't like your idea because it (a rheostat) makes it
> possible for someone to accidently crank the filament voltage up or down
> too much from the outside. ...snip...

ROFL. Maybe we shouldn't have bandswitches because we can accidentally
set them on the wrong band. Are customers drooling idiots?

> Since you offer no emission failure case history data, and since my direct
> experience with the sale of over 30,000 amateur PA's and several thousand
> commercial PA's indicates emission life is NOT a problem for amateurs, I
> feel your suggestion is ill-advised.
>
> Nearly every amateur (and many commercial) user is not equipped to
> determine the proper filament voltage setting. Most customers are best
> left with fewest number of adjustments possible.

Commercial amplifiers rather typically have, a dedicated filament
voltmeter with colored marks on the scale indicating the safe filament
voltage range. (See ** above.)

> >4. No separate filament transformer is used.
>
> Incorrect.
>
Does Mr. Rauch tell us which models have a separate filament transformer?
Hmmm. How many times did I ask Mr. Rauch whether or not the AL-1500
(8877) amplifier uses a VHF parasitic oscillation suppressor?

> >In the
> >presence of moderate RF voltages above 10MHz, Delrin makes a great
> >charcoal-igniter for the barbeque.
>
> That is not true at all.

Flames are needed to light charcoal. Delrin plus RF =s flames. Nylon and
vinyl work even better.

> >However, when I can read a newspaper by the light from a
> >3-500Z filament, I don't need my Fluke to tell me there is a problem.
>
> That certainly sounds colorful, but it is a needless and meaningless
> story.

With 6 volts on a 3-500Z's filament, the light therefrom is sufficient to
read a newspaper. Is loosing 99% of a tube's potential emissive life
meaningless?

...snip...

> >If this proves to
> >be true, I will humbly conceed that Mr. Rauch is indeed one of our
> >"recognized amplifier experts", as he claimed in QST magazine.
>
> I never called myself that in QST, so your claim is untrue..
>
Mr. C. Tom Rauch, Jr. is currently employed by MFJ/Ameritron.

Quoting Mr. Rauch from page 71 in the September 1994 issue of QST magazine:
"...are not supported by design theory or the experience of recognized
experts in the amplifier community that include Eimac, Siemens, ETO,
Henry, and Ameritron."

I rest my case.
---
e-mail copy to Mr. Rauch

--
--Rich-- ag6k, 805-386-3734

156. Re: WTB B&W 850 tank circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: Stephen Aug <augs.w3def@worldnet.att.net>
Message-ID: <5ao8k8$h15@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 98986
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

B&W is still in Business in Bristol, Pa. The telephone number, as of a few months ago, was 215-788-5581. The catalog does list alot of coils, including a couple of tank circuits, one of which will handle a thousand watts, although I do not see a model 850.

W3DEF

157. Re: What are tiny tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0501970544460001@port24.vcnet.com>
Source record: 98987
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <n7ws.232.0015B770@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) wrote:

> >Steve McAllister wrote:
> >>
> >> I'm fairly new to working with vacuum tube radios. Recently, I bought
> >> box of tubes to use and there were about 60-70 tiny little tubes --
> >> about 5/16 - 3/8" in diameter and about 1 - 1 1/4" long. ...snip...
> >
> The first air-to-air missile, the Falcon, was full of them. They were held
> onto circuit boards with springy metal clips (similar to large fuse clips) and
> hard-wired in.
>
When I went to work for Raytheon in 1963, the Sparrow missle used subminature tubes with wire leads, mounted in spring clips. The wire leads were hand-soldered to the circuit board. A few years later, the Sparrow missle was converted to use transistors. It was rather difficult to design transistor circuits that would operate at the required temperatures. However, the old subminiture tubes had no such problems. At one point, Joe Reisert, the chief engineer said that if we had been using transistors all along, and some salesman came in and demonstrated a new high-temperature environment amplifying device called the subminature electron tube, it would have been hailed as a technological breakthrough.

--
--Rich-- ag6k, 805-386-3734

158. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0501970605530001@port24.vcnet.com>
Source record: 98988

In article <32cf2c6e.19657531@news.airmail.net>, jfriley@iadfw.net (J. Fred Riley) wrote:

> w8jitom@aol.com wrote:
> >an external rheostat is a bad idea, even though it is cheaper than
> >adding windings.
> ---snip---
> > A rheostat also could fail, and cause the
> >immediate loss of metal oxide cathode tubes.
>
> Variable rheostats were used on our 1 and 5 KW MW transmitters which
> used thoriated tungsten filament tubes. The Rheosats (as you would
> expect in commercial equipment of this calibre) were adequately rated
> with a 2:1 safety factor on current rating. Our field failure rate
> was quite high after the transmitters had been in service a few years.
> The carbon contact point just ate the rheostat winding over time
> which, in turn, would open the filament primary circuit and take the
> transmitter off the air. It is more difficult--and more expensive--to
> use tapped filament and power transformers. (You can easily double
> the cost of a transformer in providing 2% taps.) But that's all we
> use now. One interesting approach would be to use SCR control on the
> filament/heater voltage. The only problem is that such complexity
> doesn't make economic sense in amplifiers with the tubes of the size
> we're discussing here.
>
>
> Fred, W8OY
>
Fred: Do the 1 and 5 KW MW transmitters have a step-start circuit?

I use a rheostat to control the filament voltage in my 8169 Class AB1 amplifier. I have experienced no such failures in this 9 year old amplifier. The safety factor on the rheostat is less than 50%. The brush material is graphite. The resistance material is nichrome wire.

Did you try a different rheostat manufacturer after you became aware of the high rate of failure?

--
--Rich-- ag6k, 805-386-3734

159. Re: FAREWELL TO THE "SHIP OF THE MIND", AND TO ITS MASTER, DR. CARL SAGAN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: singtech@teleport.com
Message-ID: <singtech-0501970618100001@news.teleport.com>
Source record: 98989
Cross-posted to: alt.fan.art-bell,alt.sci.physics.relativity,sci.astro,sci.astro.amateur,sci.physics,rec.radio.amateur.homebrew,rec.radio.amateur.antennas

In article <5a1j8a$f28@dfw-ixnews5.ix.netcom.com>, cpwinter@ix.netcom.com (Christopher P. Winter) wrote:

>Ah, the universe itself is life. Nothing conjectural about that; not
>a bit of it.

I would be pleased if you were able to see that. On the other hand I wonder if you are actually able to see that as clearly as we are able to see how disingenuous you are?

>And thanks for setting us straight about Dr. Sagan. I guess we were
>all deluded by the more than 200 scientific papers, the decades of
>productive work on the Pioneer and Voyager missions, and the teaching
>at Cornell.

You are welcome. Yes, this much is evident. When you don't love the truth you are easily deluded. Sagan and others are (were) richly rewarded by the prince of this world for leading many astray.

--
C. Cagle
SingTech

160. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: wessel@via.nl
Message-ID: <5aod4p$ekl@news.via.nl>
Source record: 98990

>> And of course the 75 ohm could just as well be 600 ohms....
>Sorry Bart, 75 ohms is the CATV standard.
I stand corrected at the 75 ohms.

> And I did spell out the word
>"millivolt", which does mean 1 X 10-3 in case you did not understand.
Okay. I over-reacted. And I *do* understand that 10^-3 Volt is a mV.
I just get frustrated by that fact that it is misspelled so often.
I'll try and behave from now on...

Bart.

161. Re: Headset mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-05 00:00:00 UTC
From: fsimonds@icanect.net
Message-ID: <5aoebe$6dn@news.icanect.net>
Source record: 98991

wd5hmm@aol.com (WD5HMM) wrote:

->I need copy of article in Jan 93 QST on building headset mic.
->Can anyone help please?
->Jim , N5QL ex WD5HMM
->PO Box 333
->Cleburne, TX 76033
->WD5HMM@aol.com

Jim- - Take a look at http://www.jscs.com/more10.htm
They have stereo headset w/boom mic for $7.95! Why build?

I have several of these things. Not built to MIL Spec (!) but they
work!!

73--Terry/WB4FXD in Ft. Lauderdale, FL
fsimonds@icanect.net

162. Re: Wanted: Plate Xfrmr for Gonset Linear Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5aplk5$1ub0$1@news-s01.ny.us.ibm.net>
Source record: 98913

In message <32CDD8EB.3017@cctr.umkc.edu> - Neil Preston
<npreston@cctr.umkc.edu>Fri, 03 Jan 1997 20:13:31 -0800 writes:
:>
:>I'm looking for a source for a plate transformer for a Gonset :>GSB-101/Model 3262 linear amplifier. This is a table top linear
:>using 4 811A's, and needs 3600vCT at over 600 mA in a very small
:>size (4 x 5 x 6 1/2"). I do NOT have the original, so rewinding
:>is out of the question.
:>
:>Any ideas would be appreciated.

Neil (and others who have been asking about replacement transformers),

Check the Peter W. Dahl site at "www.pwdahl.com."

In the case of the Gonset GSB-101 I find:

GONSET GSB-101 ER PLATE C EXACT REPLACEMENT UNIT WITH 117 VAC PRI EI-175 X 5" 29G M6X 04 31 $195.00 PR) 117 VAC 60 HZ 1 PH S1) 3600 VCT @ 500 MA CCS DM) HT = 5.250 WT = 4.375 DT = 7.205 MD = 6.125 MW = 3.500 WT = 31.1 LBS
==========
==
GONSET GSB-101 ER PLATE J EXACT REPLACEMENT UNIT WITH 220 VAC PRI EI-175 X 5" 29G M6X 04 31 $195.00 PR) 220 VAC 60 HZ 1 PH S1) 3600 VCT @ 500 MA CCS DM) HT = 5.250 WT = 4.375 DT = 7.205 MD = 6.125 MW = 3.500 WT = 31.1 LBS

These are exact replacement transformers in either 115 Volt or 220 Volt primary versions. The secondary is rated at 3600 Volts @ 500 mA CCS (Continuous Commercial Service) so should be easily able to provide 600 or 700 mA peak ...

Dahl has exact replacement transformers for most amateur amplifiers, higher capacity retrofit transformers, as well as transformers for many of the ARRL/Ham Radio/CQ magazine/Handbook modification articles and construction porojects.

73,

... Joe, W8IK

--
==========
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>

<subich@ibm.net>
<71350.1204@compuserve.com>
==========

163. Re: Weird speaker question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: Leon Heller <lfheller@lfheller.demon.co.uk>
Message-ID: <7SioHBAgzE0yEw3B@lfheller.demon.co.uk>
Source record: 98914

In article <5ai1n7$2eu$1@news3.microserve.net>, Rick Yerke
<yerke@csrlink.net> writes
>I recently bought some old radio stuff from an estate sale,including several
>speakers.One of the speakers a Jenson 12 incher,had quite a few 2 inch
>pieces of paper soda straw glued to the paper cone,about two inches up from
>the dustcover in a parallel circular pattern sort of like this ///// all
>around the paper cone.Does this somehow improve sound quality from the
>speaker? I think the guy who did this must have seen this in Popular Science
>or something.

Probably an attempt to make the cone more rigid, to improve the quality.

Leon
--
Leon Heller, G1HSM
leon@lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home)
+44 (0) 1344 385556 (work)

164. wd: d2mac encoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: peter smit <peter_smit@hoogovens.e-mail.com>
Message-ID: <32D044A4.2C2@hoogovens.e-mail.com>
Source record: 98915

i would like to buy a d2mac encoder (no decoder)
i you have any information for me where to buy a encoder
please help me

Peter_smit@hoogovens.e-mail.com

165. Searching for SPICE software tutorial

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: vincebucc@aol.com
Message-ID: <19970106083900.DAA22186@ladder01.news.aol.com>
Source record: 98916

The other day I came across an offer for a tutorial article/software for the SPICE software while browsing on the WEB. I failed to read tje article/ download the tutorial software.

Can anyone point me in the direction of a website where I can receive tutorial information on the SPICE program ?

Tnx.

73s

Vince ~ WA2RSX
Deer Park, Long Island
New York

QRV @ 7085kHz (FSK) Baudot RTTY

166. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0601970050110001@port8.vcnet.com>
Source record: 98917

In article <32cfef82.1830366@news.airmail.net>, jfriley@iadfw.net (J. Fred Riley) wrote:

> measures@mail.vcnet.com (R. L. Measures) wrote:
...snip...
> >Flames are needed to light charcoal. Delrin plus RF =s flames.
> Well, again that's not true. There are instances where the mechanical
> strength of Delrin makes it the material of choice. The bandswitch
> drive rods on our 100KW HF transmitter all all made of delrin. ...snip...

This appears to be a non-sequitur. Are the drive rods exposed to high RF potentials?

> >I rest my case.
> I find it's best to make your case before you rest it. ...snip...

This was connected with the stated quote from the Sept. 1994 QST. Have you read it? Do you have an opinion?

--
--Rich-- ag6k, 805-386-3734

167. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0601970143330001@port8.vcnet.com>
Source record: 98918

In article <32cfed07.1195016@news.airmail.net>, jfriley@iadfw.net (J. Fred Riley) wrote:

> measures@mail.vcnet.com (R. L. Measures) wrote:
> > Do the 1 and 5 KW MW transmitters have a step-start circuit?
>
> No. And yes. The filament transformers were designed to be low
> capacity (like the heater transformer in the 30S-1) and to stand off
> 20 KV which meant that they were fairly high impedance devices. The
> starting current was usually less than twice the operating current.

It is possible to build 20kV-insulated transformers that have low copper loss and low hystereses loss--i.e., that exhibit low Z. // "Usually"...? Did anyone measure the peak startup current through the rheostat brushes with an oscilloscope?

I would have been tempted to spend a bit extra on a graphite contact brush as opposed to a less-costly carbon contact brush. Using Kanthal® resistance wire, as opposed to nichrome resistance wire, might have helped. Perhaps a better solution would be to use a Centralab 9000 series 18-position shorting-contact switch, with an appropriate resistor between adjacent contacts. These switches use silver-plated contacts, so there are potentially no dissimilar contact material problems. Since the most common silver compounds, silver oxide and silver sulphide, conduct almost as well as silver, environmental problems should be minimal.
By using two such switches in series, 324 increments of adjustment can be achieved.

--
--Rich-- ag6k, 805-386-3734

168. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: <>
Message-ID: <5aqpjh$gs@bvadm.tek.com>
Source record: 98919
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

In article <32D00252.4C84@silcom.com>, rdb@silcom.com says...
>
>I have a Tektronix Type 551 oscilloscope from a yard sale...
>
>And it has a mighty weird 16-Pin power connector; it looks like a
>rack-mount connector.
>
>The back of the oscilloscope is marked "Wired for 117V".
>
>Does anyone have any idea whether I can just apply 117V power to
>some pins of this connector. And, if so, which pins it would be?
>
>Any help or related information would be much appreciated. Thanks!
>
>Robert Bernstein
>rdb@silcom.com

I believe this scope is one that had a separate power supply chassis. It provided B+,filaments ,etc. It should have been provided with the scope. Tek made a couple of tube scopes with separate p.s. because they used so much power and space. I suggest that you put your money and effort into a solid-state scope like a 465.

Jim Yanik

169. Re: Coax Connectors Impedance (Humble Pie, Oh yum...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: becclest@pcug.org.au
Message-ID: <32d0e69c.0@cheese.pcug.org.au>
Source record: 98920

"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:

Hummmm, seems I've had a feast of humble pie!

>Bob Ecclestone wrote:
>>davem@cs.ubc.ca (Dave Martindale) wrote:
>>
>>>d.NOrdquest@juno.COM writes:
>>>>In regard to Jeanne's query, I believe there are 75-ohm BNC's, as well as
>>>>50-ohm types. Could someone more knowledgeable tell us how to
>>>>distinguish them?
>>>> Dave KE9ED
>>
>>
>>This is still a very contentious subject!
>>
>>However the bottom line is that, by definition, "BNC" is 50 ohm.

>Of course BNCs are available in both 50 and 75 ohm - check any connector
>maufacturer's catalog and most distributors' catalogs too!

>>"BNC" = Bayonet "N" Connector, which is 50 ohm.

>"BNC" stands for Bayonet Neil Concelman (Neil invented the N, Concelman
>the C which is a large bayonet connector, and the BNC uses ideas from
>both).

I like the "Big Nose Charlie" explaination too. (see other post this
thread)

>Like BNCs, Ns are also available in 75 ohm, though much less commonly.

>>
>>The secret is the ratio of inner conductor outside diameter to outer
>>conductor inside diameter (follow??!)
>Yes...
>>The ratio always (should) come
>>out to 50 ohms.
> ... unless of course it was designed as a 75 ohm connector.

>>The dielectric used will alter the loss factor (Q) and
>>propagation velocity but will not (within reasonable limits) affect
>>the characteristic impedance.
>>
>It depends what you define as "reasonable limits". In a solid dielectric
>transmission line, the impedance is inversely proportional to the square
>root of the dielectric constant. A coaxial connector is a short section

>of transmission line, partly air and partly solid dielectric. So the
>dielectric does matter - but in practice it's always PTFE in Ns and
>BNCs.

Here comes some humble pie..
The dielectric constant for PTFE is about 2.1, the square root around
1.5. About the same ratio as 50:75! (munch, munch...)

(stuff snipped)

>>Despite the folklore folks, BNCs are still 50 ohm.
>Sorry, that just ain't true. Both impedances are freely available.
More munch, munch...

>>Anyone from Kings or any other connector manufacturer out there care
>>to get into this one?.

>No need - just read the catalogs.

To be fair to myself, I did ask a rep from a connector manufacturer
once about this and he said "You can't make a 75ohm BNC..."

>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)
>Professionally:
>IFW Technical Services Clear technical English - world-wide.

I guess this is how folklore starts...
Thanks for the discussion folks.

73s. Bob VK1ZRE.

Bob Ecclestone becclest@pcug.org.au

"Imagination is more important than knowledge" Albert Einstein
---

170. ! MASS POST Was Here! (PqZXpV)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: Ones-And-Zeros@prodigy.net
Message-ID: <5aqqt5$34si@usenet1y.prodigy.net>
Source record: 98921

```
MASS POST--the program by Ones and Zeros--has been used to send this message
to thousands of newsgroups.

(PqZXpV)
```

171. Antique rx with 2A3 triodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: jcraig@morgan.ucs.mun.ca
Message-ID: <5ar4u0$rcd@coranto.ucs.mun.ca>
Source record: 98922

I've located a small source of 2A3 triodes and am considering
building an old-time receiver (perhaps a TRF). Are there
any references on using 2A3's in receivers?

--
73 Joe VO1NA

172. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0601970802240001@port7.vcnet.com>
Source record: 98923

In article <5akq86$o64$1@news-s01.ca.us.ibm.net>, macino@ibm.net wrote:

> In <5act14$23j8$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) writes:
> >In message <32C3C9CA.2572@star.enet.dec.com> - "L.Mark Pilant"
> ><pilant@star.enet.dec.com>Fri, 27 Dec 1996 08:06:19 -0500 writes:
> >:>
> >:>
> >:>If anyone wants to ask me questions about this software, feel free to
> >:>send me E-mail: pilant@seesaw.enet.dec.com.
...snip...
> >In this day and age why would anyone publish what is exxentially a
> >database or infromation retrieval product that *required* its users
> >to use a specific operating environment? Particularly, when there are
> >at least three four other operating environments (DOS, Macintosh, Unix,
> >OS/2) in use among the product's target audience?

Perhaps the ARRL staffers who were in charge of producing the CD are not
well informed.

> >Everything that is done with the Windows database could have been done
> >just as easily, perhaps more easily, with HTML coding ... then the CD
> >ROMS would have been operating system independent. The user would only
> >need to furnish an appropriate HTML engine (aka Web Browser) for his
> >particular system.
> >
> >HTML retrieval and display systems are here, more importantly they will
> >be around for quite some time ... and are platform independent.

However, as I understand it, the files/documents on the CD in question are
images, not text. HTML is text. Converting a magazine page to text
requires a scanner, an OCR app. like TextBridge, and *MUCH* time spent
copy-editing. I published a 210 page out-of-print book on the Internet
and it took at least 80 man/woman hours.

> >As it is, I'm waiting on the OS/2 version of the QST CD ROMS for my
> >personal system and the Macintosh version for my wife's system.
> >

......snip......

> Your other point of the ARRL being infected with Windozitus also is
true. There
> are a lot of DOS, Linux, and OS/2 users that just can't suck up that way.
>
> Jim W9LZ

QST is typset with Adobe PageMaker on a Macintosh---the same way I used to write QST articles, and still write QST advertisements.

Those who are somewhat less than enchanted with Windows-95 and 'Dollar Bill' might want to check out the Boycott Micro$oft page at: <http://www.vcnet.com/bms/>

--
--Rich-- ag6k, 805-386-3734

173. Need help with 440 Mhz Pin Diode Set Up for ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: dwentz@accessus.net
Message-ID: <5aqr0o$nf0@news.accessus.net>
Source record: 98924

I am looing for any info on building a PIN diode switch to go from a 60 watt amp and my atv receiver, anyone have one, or know of one.

Thanks
de KB9JJA/Dale
dwentz@accessus.net

174. Antenna 8 position antenna switch w MOV's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: Wendell Wyly - W5FL <w5fl@flash.net>
Message-ID: <01bbfc00$f33113e0$4adfb5cf@w5fl.flash.net>
Source record: 98925
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I am in the process of designing a remote antenna switch for 8 antenna's with MOV protection on the input lines. 5 of the connections are for 5 quad loops and the others are for dipoles for 30/40/80 on the tower.For lack of a better source, I have always used the 10 amp 12 volt DPDT Radio Shack Relays in sockets. It takes 4 for this arrangement with up to 3 contacts in series which I do not like (all suggestions appreciated here). I have always used the 6 position Jones plugs for connections (anyone know of a better or less expensive connector) or just a terminal board.

Does anyone know a good inexpensive source of high current MOV's (to protect the control lines against lightning). Is there a source for brass (non-rusting) SO-239 connectors for the antenna connectors?

Does anyone have any experience in bringing a bundle of 5 to 8 RG213 (RG8) coaxes past the rotator? (Also have some vhf antennas above this). If this is a real problem, then I may have to split the antenna switch and that is more complex.

--
Wendell Wyly - W5FL w5fl@flash.net

175. Re: QRP X MTR using the IC7400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: john_marshall@nt.com
Message-ID: <john_marshall-0601971318340001@nntpm365.plaza.nt.com>
Source record: 98926

In article <32CB919F.3BC3@xs4all.nl>, up <vspscpub@xs4all.nl> wrote:

> Hello!
>
> I heard that it is posible to make a simple xmtr using the IC-7400 and a
> few other components...
>
> I would appreciate it if anybody could let me know something more about
> such a project.
>
> Greetings,
>
> Hans
>
> 73 from PA3GZN
>
> Email: vspscpub@xs4all.nl

Hello Hans,

Several others have suggested using the 74HC240 instead. For an example of a complete CW transceiver using this chip as the "final", check out the 38 Special at <http://www.fix.net/norcal.html>.

73,
John WA1UPB/4
johnmars@mindspring.com

176. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970106184100.NAA02712@ladder01.news.aol.com>
Source record: 98927

In article <measures-0501970116000001@port78.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>
>**Virtually all commercial amplifiers use a rheostat or a Variac to
>continuously adjust filament voltage. If a commercial amplifier
>manufacturer produced an amplifier without a means of continuously
>adjusting filament voltage, it is unlikely that any knowledgeable
engineer
>would recommend purchasing such an amplifier.

Fred Riley is involved with commercial transmitters, and has confirmed my opinion and experience. A rheostat could only have been suggested because you fail to understand the problems it creates.

This has once again become a "let me pick to death anything anyone else does" thread. You've ripped up QST, ETO, Commander, Kenwood, Heathkit, Ameritron, Ten Tec, and on and on. You even rip up your own family, saying pathological liars run in your family and you have to "check out" anything your own family members say!

Rich, there is no point in continuing this. You apparently have no more technical points, and a slander campaign generates little support for anyone participating.

Tom

177. Re: Coax Connectors Impedance (Humble Pie, Oh yum...)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970106192200.OAA03566@ladder01.news.aol.com>
Source record: 98928

In article <32d0e69c.0@cheese.pcug.org.au>, becclest@pcug.org.au (Bob Ecclestone) writes:

>>It depends what you define as "reasonable limits". In a solid dielectric
>>transmission line, the impedance is inversely proportional to the square
>>root of the dielectric constant. A coaxial connector is a short section
>>of transmission line, partly air and partly solid dielectric. So the
>>dielectric does matter - but in practice it's always PTFE in Ns and
>>BNCs.
>
>Here comes some humble pie..
>The dielectric constant for PTFE is about 2.1, the square root around
>1.5. About the same ratio as 50:75! (munch, munch...)

If you peek inside 50 ohm BNC's, youll see a solid dielectric.

If you peek at the 75 ohms, you'll find air!

Same size pins and internal leads in both.

If you peek at the end of a 75 ohm N youll see a thin pin, and thin leads. With a 50 ohm N youll see thicker leads.

Plug a 50 ohm N male into a 75 ohm female and you've ruined her for life. Plug a 75 ohm male into a 50 ohm female and the mating is poor.

I like Big Nose Chuck's idea better!

>I guess this is how folklore starts...
>Thanks for the discussion folks.

I know a guy who changed his ~35 ohm UHF SO-239's/259's to 75 ohm N's (he picked the N's that were more expensive on a price list, he thought they were better) to improve his SWR on 30 MHz and down. He thought the so-239 connectors had .1 dB loss per connector, and when he was done he swore it made a big difference!!!!.

That's where folklore usually winds up. hi.

73 Tom

178. Retail Sales of Tektronix 'scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: "Joseph M. Zawodny" <J.M.Zawodny@LaRC.NASA.gov>
Message-ID: <32D163F8.214E@LaRC.NASA.gov>
Source record: 98929

I am looking for mail order places that sell Tektronix
Oscilloscopes (preferable at less than list prices). Specifically,
I'm interested in the TDS 210 or 220. If you are aware of anyone
selling these please pass the info on to me.

Thanks

--
Work: Dr. Joseph M. Zawodny Play: Joe Zawodny
NASA Langley Research Center KO4LW@amsat.org
E-mail: J.M.Zawodny@LaRC.NASA.gov zawodny@exis.net
(757) 864-2681 (757) 864-2671 FAX

179. Re: Antique rx with 2A3 triodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5arp5i$git@news1.mnsinc.com>
Source record: 98930
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Joe - try asking this information in the BOATANCHORS newsgroup or in the GLOWBUGS mailing list.

I will copy it to both. I bet SOMEONE can help you there!

We have a BUNCH of great home construction articles for old tube radios at:
http://www.mnsinc.com/bry/hamfiles.htm

But it is MOSTLY transmitters.

jcraig@morgan.ucs.mun.ca (Joe Craig) whistled a happy tune like:

|>I've located a small source of 2A3 triodes and am considering
|>building an old-time receiver (perhaps a TRF). Are there
|>any references on using 2A3's in receivers?

|>--
|>73 Joe VO1NA

p.s. - send an e-mail to:

listserv@theproch.com

with the text:
SUBSCRIBE GLOWBUGS YOURNAME

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

180. WTB: Parts needed etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5arpmd$git@news1.mnsinc.com>
Source record: 98931

Please take a look at my TRADES list at:

http://www.mnsinc.com/bry/

Thanks!

AF4K - Bry

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

181. j

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: 666@earthlink.net
Message-ID: <32D1953F.251B@earthlink.net>
Source record: 98932

j

182. Re: Air Flow Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <5as2jd$c3c@news.doit.wisc.edu>
Source record: 98933

Dan Bryden <bryden@deltanet.com> wrote:

>A question for an experienced power amplifier builder. When using the
>3-500z toward its maximum dissipation limit, Eimac requires a chimney
>assembly and and forced air cooling. If the CFM airflow is specified,
>how do you measure the airflow in CFM. Blowers are rated at some CFM,
>but I assume that is with no back pressure unlike the situation you
>would find forcing air around a tube. Is it better to measure tube
>envelope temperature directly since that is the parameter of interest.

I don't have the Eimac data sheets here at home but I will try to
remember to look at work tomorrow. I know that what they ask is that
you use their air system socket and chimney and a fan that produces a
given pressure drop between the inside and the outside of the chassis.

I believe that they recommend ~0.3" of water as the pressure. This is
actually easy to measure with a small length of 1/4" clear plastic
tubing. Just push one end in a hole in the chassis and leave the
other end out. You may need to insert the other end somewhere it will
see a pressure that is the same as the chimney exit. Fill a few
inches of the tubing with water and let it form a loop with the water
at the bottom. The difference in the water levels is the pressure
difference between the two ends of the tubing in inches of water.

Jim

Melissa Kepner Jim Adney
mgkepner@facstaff.wisc.edu jim.adney@mpcug.com
Laura Kepner-Adney
Madison, Wisconsin
---

183. Analysis & Synthesis Capability Now Available to Ham Clubs, Groups and Consortia!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: Kathy Goerg <kgoerg@webblabs.com>
Message-ID: <32D1848F.7675@webblabs.com>
Source record: 98934
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

I posted material some time ago regarding the Webb Laboratories Education & Professional Partnership Programs, unprecedented opportunities through which every faculty member, graduate student and undergraduate student (alternatively for the PP program - each member of a working group of designers) can achieve true ownership, at school, home and on the job, of powerful electronic CAE capability. The EP and PP Programs provide general, graphical nodal circuit analysis, RF/microwave-specific analysis, unconstrained nodal noise capability and true 'floating' two-nodes-per-port definition. In addition, the EP and PP Programs include the industry's most comprehensive transmission structure analysis/synthesis engine as well as the powerful SystemPlus suite of design tools for the wireless/receiver/system designer.

The complete EP or PP Program package, including over 500 pages of documentation, may be distributed department/group/consortium/company-wide with no restrictions, without expiration, and at no liability to the School, Group, Consortium or Corporation. EP/PP Program details, an editorial review and a growing example library may be found at:

http://www.webblabs.com/ep.htm

or

http://www.webblabs.com/pp.htm

I ask that you forward this announcement to potentially interested individuals. If you prefer, kindly reply with names and e-mail addresses of those to whom I should convey information directly. Thank you for taking the time to consider what has become a unique access and ownership opportunity for a great number of designers worldwide.

Wishing you a Happy New Year!

Kathy Goerg
Education Partnership Program Liaison
Webb Laboratories
13731 W. Capitol Drive
Suite 260
Brookfield, WI USA
kgoerg@webblabs.com
TEL 414.367.6825
FAX 414.367.6824

184. TEFLON HOOKUP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <32D18638.688E96C1@acsu.buffalo.edu>
Source record: 98935

FOR SALE Teflon insulated hookup wire. 22 and 24 AWG silver plated stranded. MIL SPEC MIL-W-16878D

Builder's Hook up set @ $44/set

* (10) rolls each set, 50 ft wire/roll *

* plus 2 feet mini TFE Coax (free) *

* (shipping 2-day mail included) *

Won't melt when you solder it. Above pak has 10 different colors. (No choice of colors)

Jim (N2GO)

185. Re: Telecommunications Act of 1996

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: Arthur & Robin Clemons <afclemons@msn.com>
Message-ID: <01bbfc40$95750000$faa0aa98@default>
Source record: 98936

J Mullins <jmullins@erols.com> wrote in article
<01bbf47d$243282c0$276e60cf@jmullins.erols.com>...
> The FCC, on August 5, !996 adopted a rule which partially pre-emts the
> enforcement of community association restrictions with respect to
satellite
> dish antennas, broadcast television antennas, and other communication
> reception devices.
>
> The above statement is the leading sentence of a memo sent to the Board
of
> Directors of my community's Home Owners Association.
> I will try to convey the main points.
>
> "Under the new rule, any association Covenant, rule, or similar
restriction
> which "impairs" the installation, maitenence or use of certain antenas is
> UNENFORCEABLE."
>
> Antennas protected include dishes up to one meter and any size antenna
> designed to recieve television broadcast services.
>
> The FCC rule allows communities to regulate antennas so long as the
> restriction does not "impair" the installation, maitenence or use of the
> antenna.
>
> HOA's can regulate the placement of antennas so long as the reception
would
> not be compromised
>
> 73
>
> John Mullins

The problem with the FCC pre-emption isn't that it exists, but rather that it doesn't go far enough for hams. Note that your quote doesn't in any way benefit amateur transmit or receiving antennas. To be blunt, a pre-emption would have to specify amateurs or state that all antennas below a certain size were covered. I also note that many satellite dish owners won't benefit, as a one meter dish isn't all that big, although it will allow adequate reception of many of the DSS services. It won't however even offer adequte reception of audio services of satellites, so picture reception of the few unscambled services won't be affected either. 73 de n8blk/3 -art clemons-

186. WTB Protel DOS Pack

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: "Robert R. Koblish" <n3hat@erols.com>
Message-ID: <32D1FD38.99F@erols.com>
Source record: 98937

Looking for the Protel Dos Pack schematic capture + PC layout package,
which Protel no longer sells. If you've upgraded and want to sell or
donate your copy to a 501(c)3 nonprofit organization, please email with
particulars. It would be an upgrade to what we now have.

tnx,
Bob Koblish, N3HAT
Baltimore Radio Amateur Television Society
brats@smart.net
http://www.smart.net/~brats

187. Alternative to Chassis Punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: gsparks@ix.netcom.com
Message-ID: <5ard99$mi8@dfw-ixnews7.ix.netcom.com>
Source record: 98938

I found a very acceptable alternative to chassis punches at a pawn shop a few years ago.

They are pipe reamers for steel plumbing pipes, they are 8 fluted tapered reamers, I have 2, on braces (hand drill's), the first goes from 3/8 to about 1", and second goes from 3/4 to about 2". I drill a 3/8 hole, and just hand ream to any size in just a few momemts. I don't know the real cost of these, but I picked them up for $10 for the pair and one brace. I have a few chassis punches, but I tend to use these almost always.

Glenn Sparks KI5Gy

188. List Of Stamp Applications [970107]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-06 00:00:00 UTC
From: cj@hth.com
Message-ID: <32d18c9e.1695398@news.buller.se>
Source record: 98939
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
Since the L.O.S.A is getting bigger I only post the index of
applications to the newsgroups and you can download the complete
L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 Whats is L.O.S.A all about ?
--------------------------------

I started to compile L.O.S.A because I know there are lots of great
ideas and many problems that are solved with the BASIC Stamp and the
main purpose of this list is to get an idea of what other people are
using their BASIC Stamps for and maybe get some inspiration or hints.

1.1 How can I contribute to this list ?
---------------------------------------

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 List of contributions
-------------------------

> = Indicates a new or updated application since last time.

# 001 Robo-Cat
# 002 Logic Rudder
# 003 Interfacing MAX186 8 channel 12bit A/D
# 004 Scrolling LED Sign
# 005 Tone Decoder
# 006 Pager
# 007 HexWalker Mobile Robot
# 008 Robo Bug
# 009 EXPBOT Robot controlled by Stamp
```

010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector
044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule
054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
># 059 Wind speed and wind direction measurement device

>\# 060 Calibrated Dust Feeder for Air Cleaner Tests
>\# 061 Use of a Serial EEPROM as a Lookup Table
>\# 062 Dispaying Quantities on a 200 mV Panel Meter
>\# 063 Programmable Proportional Air Valve
>\# 064 Basic Stamp machine control application

Regards,

/Christer

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-

189. Need: Output Z of pair of MRF-150 FET's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: philk5pc@connect.net
Message-ID: <5asofl$3p8@dallas1.connect.net>
Source record: 98842

I am trying to put a Collins PA-2000 amp on the air. It has a FET driver module (pair of MRF-150's in the final) that I want to replace with my 100w transceiver. I need to construct a transformer that will match the 50 ohms from the transceiver to the 4-port combiner that feeds the finals (4 modules of 2 transsitors each, MRF-448). The transformer must be broadbanded, 1.8-30 mhz.

I hope someone has been down this road and can help me with a transformer design. Thanks! (((73))) Phil, K5PC

190. Re: Retail Sales of Tektronix 'scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: cripps@netcom.com
Message-ID: <cripps-0601971937000001@10.0.2.1>
Source record: 98843

In article <32D163F8.214E@LaRC.NASA.gov>, "Joseph M. Zawodny"
<J.M.Zawodny@LaRC.NASA.gov> wrote:

> I am looking for mail order places that sell Tektronix
> Oscilloscopes (preferable at less than list prices). Specifically,
> I'm interested in the TDS 210 or 220. If you are aware of anyone
> selling these please pass the info on to me.
>

Got my TDS220 from Allied Electronics. Credit card, 2nd day air UPS, no probs.

Nice scope, excellent value, especially compared with state of the art 10
or even 5 years ago. Only gripe is that there is some sampling noise
evident at around 3 mV p-p on max BW without display averaging.

Although the BW is claimed to be 100 MHz, mine gives useful response
beyond 200 MHz. The joys of real time 1 GHz sampling.....

Also, despite PR, you will still need an analog scope. Display of a 10 MHz
carrier with 1 kHz AM is unconvincing.

Best,

Peter

--
Peter Cripps Associates
Technology Strategy and Product Development
20 Carrera Court
Redwood City, CA 94062
415 364 4413 voice
415 364 1353 fax

191. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5at1la$c7l$1@news3.microserve.net>
Source record: 98844

measures@mail.vcnet.com (R. L. Measures) wrote:

> In the various notes that come with the low VHF Q parasitic
>suppressor retrofit kits, I advise owners . . .

Hi Rich,

I came in on this discussion late, but was just wondering if
you've attempted to solve parasitics by other means? Reducing
the Q of the tank across the entire range of operating
frequencies seems self-defeating, particuarly when there are
alternate methods.

Have you measured the increase in harmonic output in the
amplifiers you've modified?

73,
Jack WB3U

192. Re: Need help with HW-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5at23j$c7l$2@news3.microserve.net>
Source record: 98845

"Gary Ritter" <Highfrequency@msn.com> wrote:

>The major problem seems on 20M...Sidebands are out of
>whack...normally when tuning in a signal,I have the same rig
>but a newer version,sigs are tight and narrow but on this one
>is very wide and can tune strong sigs. but weaker sigs are
>tough to capture...by the time you tune it in the signal is
>very weak.

Sounds like the USB BFO may not be at the right frequency. If
it's too far outside the passband of the filter, "zero beat"
will result in the attenuation you've described.

73 & GL,
Jack WB3U

193. Re: Disc Capacitor Markings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5at2fq$c7l$3@news3.microserve.net>
Source record: 98846

d888888@juno.com wrote:

>The markings are in PicoFarad. 103k would be 10,000 PF = .0
>1 uFd.

In the examples cited, I'm sure you're correct. However,
some caps marked "470" are 470 pF, while others with the same
markings will be 47 pF. Manufacturers don't always read the
same rule book. ;)

73,
Jack WB3U

194. QRP VIA REAPETERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: jorgenj@uddeholm.se
Message-ID: <5at5gu$rm5@Steinlager.tip.net>
Source record: 98847

Hello im Looking for a tiny schematic on a qrp tranciver for 2meters
does anyone have constructed
pse send schematic to me

jorgenj@uddeholm.se

73 de SM4WDQ

195. Searching for a commercial FM transmitter.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: -Tony-Gallagher- <kiss@iol.ie>
Message-ID: <5atc1eact2@nuacht.iol.ie>
Source record: 98848

Have you got a working/knackered FM transmitter,
preferably something high power?
I'm actually trying to locate a burnt out FM valve PA cavity chassis.

Any help to:

Tony
Limerick 95

196. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <32D244D3.2429@staffnet.com>
Source record: 98849

R. L. Measures wrote:

> > >In this day and age why would anyone publish what is exxentially a
> > >database or infromation retrieval product that *required* its users
> > >to use a specific operating environment?

COST COST COST! If you want to maximize profit you write software for
the largest market - which happens to be Windows at the moment.

197. MLA-2500 P/S caps?? 150 uF @ 450V??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: garyk9gs@pitnet.net
Message-ID: <32d08c0e.162343140@news.pitnet.net>
Source record: 98850
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

A while back there was someone selling replacement caps for the
MLA-2500 Power Supply. 100-150 uF @ 450 Volts.

Does anyone remember who was selling them or know of a source? I do
know that caps in this size/voltage are difficult to buy.

These are for a good friend of mine.

Any help appreciated!

Gary K9GS

garyk9gs@solaria.sol.net or
garyk9gs@pitnet.net
73,
Gary K9GS

____
/ K9GS |_____________________________
/ FP/K9GS, TO5M |Society of Midwest Contesters |_____________________
(| garyk9gs@solaria.sol.net |Secretary/Treasurer/
\ Gary Schwartz | K9GS@WA9KEC.WI.USA.NOAM | Greater Milwaukee/
___________________| PacketCluster: NB9C | DX Association (
(_____________________________| GMDXA \
(_____________________\

198. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: Mike Willis <mjw@rcru.rl.ac.uk>
Message-ID: <32D266CF.3CBD@rcru.rl.ac.uk>
Source record: 98851

Alan J. Richer wrote:
>
> I must be getting old - I'm forgetting my mathematics...8*(
>
> I just ran across a large number of programmable-channel cable TV head
> ends - the transmitters look really useful for ATV, s I bought them.
>
> The thing is, they're +55DBm output. To me, that works out to about a
> watt or so - enough to push an amplifier without too much trouble.

Really. All it takes is an inverse log function. +55 dBm = 316 W.

Quite an output - lossy cable perhaps. Are you sure about the output?

+55 dBuW is plausible, as is 5.5 dBm, -55 dBm, +55dBuV, +55 dBmV?

Mike

199. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: Mike Willis <mjw@rcru.rl.ac.uk>
Message-ID: <32D28DA3.7F2D@rcru.rl.ac.uk>
Source record: 98852

w8jitom@aol.com wrote:

>
> My dad drove a tractor, he told me there was one important lever.
> Leave-her B.
>
> 73 Tom

This pun does not work in US English, was your father English?

I still can't work out why the EZ-Match is so named.

200. Re: Air Flow Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970107184200.NAA06607@ladder01.news.aol.com>
Source record: 98853

Hi Jim,

In article <5as2jd$c3c@news.doit.wisc.edu>, mgkepner@facstaff.wisc.edu (Melissa & Jim) writes:

>I don't have the Eimac data sheets here at home but I will try to
>remember to look at work tomorrow. I know that what they ask is that
>you use their air system socket and chimney and a fan that produces a
>given pressure drop between the inside and the outside of the chassis.

They really don't care what system you use, they only require airflow be enough to insure seal temperatures below 200 degrees C and envelope temperatures below 225-250 C.

>I believe that they recommend ~0.3" of water as the pressure. This is
>actually easy to measure with a small length of 1/4" clear plastic
>tubing. Just push one end in a hole in the chassis and leave the
>other end out. You may need to insert the other end somewhere it will
>see a pressure that is the same as the chimney exit. Fill a few
>inches of the tubing with water and let it form a loop with the water
>at the bottom. The difference in the water levels is the pressure
>difference between the two ends of the tubing in inches of water.

That's way too much air. Pressure drop is .082 inches of water from below the base air entrance to the anode area exit.

The correct way to determine if you have a problem is to measure the temperature in operation. You can do this by using temperature measuring crayons from Tempil.

Tempil sells indicating markers at 908 757 8300, crayons are $8 each, I use them here. 3-50-0Z seal temperature ratings are 200 degrees C for the base, and 225 c for the anode seal and envelope.

Cooler temperatures will reduce seal and glass fatigue. Seal leakage is the number one cause of failure in properly manufactured 3-500Z's. The result is a tube with gas, producing arc-overs when high peak voltages are applied. This is sometimes blamed on parasitics or inrush by people who are inexperienced in the cases of tube failures.

73 Tom

201. FREE ELECTRONICS DIRECTORY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: Todd Peterson <elab@netins.net>
Message-ID: <32D29B6A.42BA@netins.net>
Source record: 98854
Body handling: HTML body converted to readable text

Hi,

We would like to take a minute of your time to inform you of our new Electronics Resource Directory, a free, comprehensive listing of over 500 Web sites of interest to electronics enthusiasts and engineers.

The Directory is available on our web site at:
http://www.netins.net/showcase/elab

If you have an electronics-related web site and would like to add a link to our resource directory from your site, just cut-and-paste the following HTML into your page's source code:

This will place an attractive 'Electronics Resource Directory' logo onto your page that will hot-linked to our Directory for your and your visitor's convenience and use.

We thank you for your time and hope the Electronics Directory will be useful to you. Please let us know if you would like a free listing for your page in our directory!

Todd Peterson
E-LAB Digital Engineering, Inc.
elab@netins.net
(712) 944-5344

http://www.netins.net/showcase/elab

202. ATU ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <tD+m5CAZMq0yEw0w@ifwtech.demon.co.uk>
Source record: 98855

In that other thread, Tom W8JI wrote in response to Rich AG6K:
>
>> IMO, anyone who chooses Delrin for a coil form material is ignorant of
>>the fact that Delrin has a relatively high dissipation (D) factor.
>
>I agree. That was an idiotic choice of materials.

At about the same time, W8JI had responded to a request on the TowerTalk reflector for information on the MFJ-989 ATU. It casts more light on the Delrin problem and on the origins of the "3 kW ATU" rating.

Over to W8JI (reproduced here with permission)...

Subject: Re: MFJ-989 antenna tuner comments review

I'm an independent RF designer. I started going through the MFJ tuners about a year or two ago. I feel insight into engineering facts is important. People should understand a few things about tuners in general, and the 989 in particular.

I've yet to find any tuner (except the ATR-15 as advertised by Ameritron in the 80's, and the old EF Johnson KW Matchbox) that always met power specifications as advertised. The ATR 15 was rated at the RF output power over a specific load impedance and frequency range, and the KW Johnson Matchbox was rated for a 1 kW AM transmitter (about 750 watts continuous carrier and 3 kW PEP modulation peaks, so it easily handles 1500 watts CW or PEP output).

Power ratings for tuners are an offshoot of when PA's were measured by plate INPUT power. For example, the SB-220 (I am a former RF consultant for Heath-Zenith) was advertised as a 2 kW PEP Input Power PA, but the SB-220 was really a ~1kW SSB PEP and 600 watt CW output PA. The matching tuners were called "2 kW tuners", because they went with 2 kW PEP INPUT POWER PA's.

Enter Dentron. They called their PA's "3 kW", even though they only put out the same reliable power as the 220. Likewise Dentron called their matching 600 watt CW output tuners "3 kW tuners". That rating of "3 kW" has since become attached to any tuner of the same basic quality components as Dentron's, and it seems to have stuck.

So, a typical so-called "3 kW tuner" is actually a 600-700 watt CW (1200 watt PEP SSB) tuner by today's OUTPUT power standards.

The MFJ 989 used a roller produced by Oren Elliot Products. It is an industry standard roller, and is similar to or the same as rollers used in high dollar tuners. Unfortunately, the Oren Elliot roller has a

Delrin form, but it is the overall roller design that seriously lowers the power rating. Roller Q is absolutely NOT a problem of cabinet size or anything external to the roller, it is a problem of materials used in the roller and the basic roller design.

Even the expensive ceramic form roller from Cardwell barely offers an improvement. It has almost the same loss, but the ceramic form does stand heat much better. The new design air coil roller used in the MFJ 989 helps to solve Q and heating problems, and the manual was also re-written to correct misinformation on how to adjust the tuner for the lowest matched loss.

As for power ratings, it is NOT correct to specify a power rating without specifying both a load impedance and a frequency. ANY manufacturer who says "this is a 3 KW tuner" without being band and load specific is just howling out a number that may not - and probably will not - mean anything to you. The only way to know for sure if a certain tuner will work is to try it with your own antennas.

T network tuners (like the 989, Xmatch, Vectronics, Tucker, Murch, etc) handle the least power on 160 and loads of low resistance and high capacitive reactance. T network tuners handle MORE power into higher resistance loads or loads with some amount of inductive reactance.

In a T network tuner, maximum efficiency and power handling generally occurs with maximum and equal amounts of capacitance, and the least amount of inductance is used. This is true even though many other settings will produce a low SWR.

L network tuners (like the Ten-Tec, Nye Viking, etc) handle more power into impedances near 50 ohms, but often do a poor job matching reactive or very low impedance loads on low frequencies. (Sometimes these tuners are called Pi-networks, even though they do not really function as a pi except perhaps on 15 or ten meters.)

I hope this dispells some of the hyperbole about tuners.

73 Tom W8JI

[How many automated reponses are going to begin with "G3SEK wrote"?
Please remember who you're REALLY quoting!]

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

203. Re: FAREWELL TO THE "SHIP OF THE MIND", AND TO ITS MASTER, DR. CARL SAGAN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: cpwinter@ix.netcom.com
Message-ID: <32d2b88e.3536401@nntp.ix.netcom.com>
Source record: 98856
Cross-posted to: alt.fan.art-bell,alt.sci.physics.relativity,sci.astro,sci.astro.amateur,sci.physics,rec.radio.amateur.homebrew,rec.radio.amateur.antennas

Ah, good; you _are_ out in the open.

>I would be pleased if you were able to see that[the universe is alive].

I can see that it might perhaps possibly be so. To state that it IS
alive is conjecture. (Unless you can prove your statement.)

>On the other hand I wonder if you are actually able to see that as clearly as we are able
to
>see how disingenuous you are?
>
>>And thanks for setting us straight about Dr. Sagan. I guess we were
>>all deluded by the more than 200 scientific papers, the decades of
>>productive work on the Pioneer and Voyager missions, and the teaching
>>at Cornell.
>
>You are welcome. Yes, this much is evident. When you don't love the
>truth you are easily deluded. Sagan and others are (were) richly rewarded
>by the prince of this world for leading many astray.

I don't think my message was disengenuous. But since you do, let me
state my position plainly: Sagan's statements describe things that
can be tested, and thus proven (or disproven). Your statement cannot
be tested this way. That doesn't make it either true or untrue --
just unprovable, and therefore conjecture.

Furthermore, I don't agree that Dr. Sagan was, in your words, "leading
many astray." He might have been leading them away from some belief
system that you happen to value, but I doubt I would agree that this
is something which (as you imply) deserves punishment.

204. Re: QRP VIA REAPETERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: griffin@jgfl1.allcon.com
Message-ID: <E3nMBu.2nG@jgfl1.allcon.com>
Source record: 98857

jorgenj@uddeholm.se wrote:
> Hello im Looking for a tiny schematic on a qrp tranciver for 2meters
> does anyone have constructed
> pse send schematic to me

Check the G-QRP club circuit handbook. One of the articles has
exactly what you are looking for.

72, Jens, DB9LL (G-QRP 8376)
--
at work: jg@combtx.com, bofh@combtx.com (http://barbara.combtx.com/~jg)
at home: griffin@jgfl1.allcon.com
at play: jg@beach, griffin@rpg, db9ll@g-qrp/darc
"You beeped me for WHAT?"

205. Re: Building a phone-patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: 74372.3477@compuserve.com
Message-ID: <19970107213452330649 5@dd27-176.compuserve.com>
Source record: 98858

Bruce Chadwick <bchadwi@bsu.NET> wrote:

> Has any built or have the plans for building a phone patch?

Ramsey is a kit supplier that sells one. Don't know any details but
they advertise in nuts and volts.

--
Go Carolina Panthers!

206. help with MC1350

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: Zack Clobes <zclobes@southwind.net>
Message-ID: <32D30A94.7696@southwind.net>
Source record: 98859

I'm working on a 20M SSB receiver and I'm working on the IF amplifier. I chose to use the mc1350 because of it's simplicity. I built a circuit that used a capacitor coupling on the input and the output came out on pin 1, through a xformer, and to the +vcc. I was unable to get the amplifier to amplify so I ended up tearing it down and rebuilding a simpler circuit. The new circuit is a 50ohm source, coupled directly into the chip with 2 caps. The output is simply a 1K resistor from pin 1 to ground.

According to a 10K pot and the Oscope, a 1K load seemed to be the best match to the chip. Does this agree with other people's findings?

Why does most every schematic with the 1350 in it have the output of the chip with a DC path to +vcc. Why is this? The chip seemed to work just fine with a 1K to ground.

I didn't do any more testing past the 1K resistor. Are the two output 180 out of phase? Are there any advantages of tieing the two outputs through a xformer? What would the output Z be if they were together?

Motorola's web page has been of little help with this chip. I assume that it is about outdated and they have very little info covering the specs. Any help would be appriciated.

--
73's de Zack, W0ZC

zclobes@southwind.net
http://www2.southwind.net/~zclobes/zackc.html

207. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0701972000500001@port22.vcnet.com>
Source record: 98860

In article <5aur2q$1v0s$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) wrote:

snip...

> :>I rest my case.
> :>
>
> You have no case.
>
> 73,
>
> ... Joe, W8IK
>

"I rest my case.." refers to the quote from the September 1994 issue of QST magazine. Are you saying that the QST quote is incorrect, Joe?

--
--Rich-- ag6k, 805-386-3734

208. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: Bill WD2AEV <bkantz@monmouth.com>
Message-ID: <32D32945.6D8C@monmouth.com>
Source record: 98861
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

I had a Tek 555 which I belive was a dual beam version of the 551 and it had a seperate PS that was connected via a 16 pin connector. I doubt the scope is usable with out it. I might have a schematic if you need to figure out the pinouts.

73 Bill
WD2AEV

209. Building a phone-patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: bchadwi@bsu.NET
Message-ID: <32D2D00C.549B@bsu.net>
Source record: 98862

Has any built or have the plans for building a phone patch?

210. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: ucapb6t@ucl.ac.uk
Message-ID: <1997Jan7.163209.28456@ucl.ac.uk>
Source record: 98863
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

In article <32D00252.4C84@silcom.com>, Robert Bernstein <rdb@silcom.com> says:
>
>I have a Tektronix Type 551 oscilloscope from a yard sale...
>
>And it has a mighty weird 16-Pin power connector; it looks like a
>rack-mount connector.
>
>The back of the oscilloscope is marked "Wired for 117V".
>
>Does anyone have any idea whether I can just apply 117V power to
>some pins of this connector. And, if so, which pins it would be?
>
>Any help or related information would be much appreciated. Thanks!
>
>Robert Bernstein
>rdb@silcom.com
From Tim;
The TEK 551 (dual-beam) should have a *seperate* power-supply unit, which
is connected via a cable to that 16-way plug on the 'scope. The EHT for
the CRT is generated inside the scope itself, but the other voltages are
provided by the power-unit. If you don't have this, then it's :-(
unless you can find one.
regards

211. What is packet & amateur radio. Help me

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: waheeb@scscomm.com
Message-ID: <2.2.32.19970104103214.006858b0@scscomm.com>
Source record: 98864
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

If this post has been sent to wrong place I am very sorry

Could anyone explain to me what is packet radio, amateur radio and the difference between them.

What sort of equipment do I need

Does it work worldwide or do I have to be within a distance of (say a tower or station)

Anything extra would be very valuable

pls drop me email direct
Thanks in advance

waheeb

212. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: jimm@teleport.com
Message-ID: <32d1933f.5494147@news.teleport.com>
Source record: 98940
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

On Sun, 05 Jan 1997 11:34:42 -0800, Robert Bernstein <rdb@silcom.com>
wrote:

>I have a Tektronix Type 551 oscilloscope from a yard sale...
>
>And it has a mighty weird 16-Pin power connector; it looks like a
>rack-mount connector.
>
>The back of the oscilloscope is marked "Wired for 117V".
>
>Does anyone have any idea whether I can just apply 117V power to
>some pins of this connector. And, if so, which pins it would be?
>
>Any help or related information would be much appreciated. Thanks!
>
>Robert Bernstein
>rdb@silcom.com

I think this took a separate PS, it took up the lower
shelf on a big scope-mobile.

Jim McVein
jimm@teleport.com

213. Re: Retail Sales of Tektronix 'scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-07 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bbfc45$5b3eb5c0$b60d2399@peter-s>
Source record: 98941

Joseph M. Zawodny <J.M.Zawodny@LaRC.NASA.gov> wrote in article
<32D163F8.214E@LaRC.NASA.gov>...
> I am looking for mail order places that sell Tektronix
> Oscilloscopes (preferable at less than list prices). Specifically,
> I'm interested in the TDS 210 or 220. If you are aware of anyone
> selling these please pass the info on to me.

Tucker and some other instrument sales/rental firms sell them, but the
prices are pretty close to list.
I got a new TDS 320 at an auction for 600 but that was really, really rare.
If you can deal with
guaranteed used try the large national instrument rental firms (USIR,
others) and also ask around
at all the instrument calibration labs as they frequently know what's
available as well as sometimes
selling stuff themselves.

...Peter

214. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5avhjn$7d$1@nadine.teleport.com>
Source record: 98792

In article <measures-0601970143330001@port8.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) wrote:

>. . .
>Since the most
>common silver compounds, silver oxide and silver sulphide, conduct almost
>as well as silver, environmental problems should be minimal. . .

For years I've heard this (mostly as justification for silver plating), and
for years I've looked in every relevant reference book I could get my
hands on. But I've never found a reference that gives the conductivities of
common silver or copper salts. Please tell me what reference you got this
from! Thanks!

Roy Lewallen, W7EL

215. Re: Wanted: Tips for constructing water cooled load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Ocean Surveys 6 <osi6@connix.com>
Message-ID: <Pine.BSI.3.95.970108222554.7094A-100000@comet.connix.com>
Source record: 98793
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Take another look at the electric heaters, they don't get HOT because
of the large heat sink around the element(s).

216. vhf dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <805_9701090144@conchbbs.com>
Source record: 98794

Hi all i got a lote of replys about a vhf dummy load and i want to ask some of you would a 1watt Metal-oxide 5% work radio shack sells them thay carry the 10 ohms,100 ohms,1k ohms.

Or if not how about a 8 ohm non-inductive resistor 5% 20 watts

Please tell me if them will work.

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

217. Re: Good source for ampli

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <852706425@infoway.com>
Source record: 98795

Since my old message became dislodged from somewhere
(not by me) in the year end floods, let me say thank you to
all the helpful replies I received (many by e-mail).

My question was:
>What measures are used to test for parasitics in a less
>destructive fashion?

Using a few series resistors in series with the plate supply fuse,
seems the easiest way to avoid loud bangs. I had mistakenly
read the advice as a fuse or series resistors, when both in
series seems to be the sage advice.

In response to Fred, W8OY:

Thanks for your thoughts on what may have been the actual problem.
My problem was that I so disliked loud bangs, that I "fixed"
several possible problems all at once, and don't know what really
happened. I have never had a problem while operating, just
while "testing" with the variac to sweep up the plate voltage.

Jf> You don't say what the nature of the output network is.

Pi-L.

I ain't sure
Jf> you got a parasitic

Neither am I, actually. Since I fixed it before knowing what the
problem really was.

Jf> maybe something
Jf> else is arcing--something like the blocking or bypass cap. (Sometimes
Jf> they arc over inside the ceramic where you can't see it. Usually a
Jf> big bang will knock a chunk of ceramic out, though.) The violence of
Jf> the event makes me doubt that it's a parasitic at all.

Very good interesting guess.
The bypass cap. was shorted. So I replaced it with a cap with a
much higher voltage rating. What I don't know, is if it was
the DC voltage, or AC from a parasitic, that caused it to go.

Jf> Since output-to-input feedback is
Jf> required for an unwanted oscillation, you shouldn't overlook the
Jf> possiblity of coupling

I did improve input/output shielding also.

Thanks for your thoughts, Fred.

Don, N6MCE

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

218. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5aur2q$1v0s$1@news-s01.ny.us.ibm.net>
Source record: 98865

In message <measures-0501970116000001@port78.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures)Sun, 05 Jan 1997 01:16:00 -0800
writes:
:>
:>
:>**Virtually all commercial amplifiers use a rheostat or a Variac to
:>continuously adjust filament voltage. If a commercial amplifier
:>manufacturer produced an amplifier without a means of continuously
:>adjusting filament voltage, it is unlikely that any knowledgeable :>engineer would
recommend purchasing such an amplifier.
:>

I have worked with high power (up to 250 KW) commercial transmitters
for move than 25 years and have ***NEVER*** seen a rheostat used in
a single one. In only one case did the transmitter use a Variac and
that transmitter had a reputation for eating the Variac's brushes.

One transmitter, an RCA G-line, used a regulated DC filament supply
(with NO "normal operating range" indicated on the meter, by the way).
The other transmitters used tapped filament transformers with taps
spaced about 4% ... except one which didn't even bother with any
filament adjustment (for tubes costing $30K each no less)!

:>
:>I rest my case.
:>

You have no case.

73,

... Joe, W8IK

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==

219. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5aur36$c2c$1@news-s01.ny.us.ibm.net>
Source record: 98866

In message <measures-0501970116000001@port78.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures)Sun, 05 Jan 1997 01:16:00 -0800
writes:
:>
:>
:>**Virtually all commercial amplifiers use a rheostat or a Variac to
:>continuously adjust filament voltage. If a commercial amplifier
:>manufacturer produced an amplifier without a means of continuously
:>adjusting filament voltage, it is unlikely that any knowledgeable :>engineer would
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:>
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73,

... Joe, W8IK

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==

220. Re: Headset mic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9701072227513117@atdbbs.com>
Source record: 98867

->I need copy of article in Jan 93 QST on building headset mic.

Many major libraries carry QST! on microfilm! Call and see!

Otherwise, call the ARRL and for a nominal fee, they'll ship you a copy.

Clint Bradford, KE6LCS/KAF3359 909.681.6210 Voice sysop@atdbbs.com
ATTENTION to Details 909.681.6221 BBS ftp@atdbbs.com
---

221. Re: Building a phone-patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: vincebucc@aol.com
Message-ID: <19970108072500.CAA28267@ladder01.news.aol.com>
Source record: 98868

I'm looking for circuit schematic that will allow coupling the audio generated by a PC program to the telco line.

I want to eliminate the relay operator when calling a deaf person who uses a text telephone and to use the HamComm program to generate the required tones.

Vince ~ WA2RSX
Deer Park, Long Island
New York

QRV @ 7085kHz (FSK) Baudot RTTY

222. Re: What is packet & amateur radio. Help me

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <5b0jhc$6nq@news.myriad.net>
Source record: 98869
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In <2.2.32.19970104103214.006858b0@scscomm.com>, waheeb@scscomm.com writes:
>If this post has been sent to wrong place I am very sorry

For what? All of us have to start somewhere! You have arrived in the friendliest place in the world, ham radio. Sort of like Internet without wires! <Huge grin>

Once you discover what all this is about, you may embark on a lifetime of discovery. At 44 years into this thing, I am still having fun and, for the most part, the people in it are WAY above average folks.

>Could anyone explain to me what is packet radio, amateur radio and the
>difference between them.

Amateur radio is the permitted use of a relatively large part of the radio channels by individuals who do not have to pay for the right to use the channels. If you look at your broadcast radio, your FM radio and your TV set, you will see they are marked in channel numbers. Never mind about the meaning of that, right now, just discover here that there are MORE channel numbers above and below and between those that you see!

Many, many more. Whole sections of the channels are used by different people for different things! Police, fire people, constuction crews, people sending I love you messages from a cruise ship - they ALL use these other channels and MOST of the time they have to get a LICENSE from the government to use one or more of them.

Hams have to get licenses too. However, the hams use whole chunks of channels. Each chunk has different characteristics. Some chunks can be used to talk directly from Podunk, Texas, to Sydney, Australia, direct! On a good day, you can do that with the power of no more than a FLASHIGHT!

Imagine that, shining a flashlight up in the air and having it seen in Australia! Not only that but your little flashlight can be seen by THOUSANDS of people, all over the world at the SAME TIME! And, its all for free (well, not the cost of the flashlight or the very little for the paper work of the license), totally free, any time of day or night, just holler hello!

It is a priceless, fascinating hobby.... MAGIC that even David Copperfield cannot top.....

Now Packet Radio is a form of radio that packages up blocks of text and numbers into small groups within a larger message. It uses the radio channel to communicate these chunks of text to someone else, and while it is doing it, it makes sure that the chunk was received correctly at the

other end of the circuit. It is just one of MANY forms of amateur radio, but note... it isn't used just by hams. It is also used by fire departments, astronaughts in space... you name it.

>What sort of equipment do I need

A transmitter and receiver that operate upon a channel or set of channels that can be used with a similar type setup on the other end. Cost can be very little or LOTS. Like dogs, or most anything else, some dogs are bigger than other dogs. Ham radio is competitive and the my dog is bigger than your dog deal exists here too! That's part of the fun! It leads to CONTESTS!

There, a well trained little dog can often bite the heck out of even far bigger dogs... expererience and dedication count, just like other sports.

>Does it work worldwide or do I have to be within a distance of (say a tower >or station)

All of the above!

You may talk direct from you to someone else, or go through what we call a repeater station to help you.

Either way, your station uses an antenna. You buy or build your own antennas, some of which need be no larger than a foot or less in size, to HUGE ones that can require towers more than 200 feet high with wire lengths of 2400 to 4000 feet long.

The controlling factor for the tower and antenna size is the channel area. Some channels take bigger antennas than others.

Owning a St. Bernard can be a chore... Using the channels that require the huge antennas above takes space only found out in the country, but there are TONS of channels that can be carried around in your hand or pocket!

<smile>

All dogs are welcome!

>Anything extra would be very valuable

Yes indeed. Go to Radio Shack or a book store or a library and look us up! Your local library is a fine place, or in any event, one of several books you can thumb through is "Now You're Talking", published by one of the fraternal organizations in the hobby called the American Radio Relay League.

If you take it home, the chances are you will be started on this stuff!

In even most smaller cities or even out in the country, chances are someone will know of a "ham operator." Seek the person out, guys and gals abound in this thing!

The rest is all MAGIC!

>pls drop me email direct

Not really. I hope I've answered it in such a way that you will come back here or seek the area that will let you start this fascinating journey!

>Thanks in advance
>
>waheeb
>

De nada. !

//----------------------------
Mike - W5WQN
Mike.Luther@ziplog.com
MIke.Luther@f3000.n117.z1.fidonet.org

223. Re: Disc Capacitor Markings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: "Aaron A. Collins" <collina@pop3.cris.com>
Message-ID: <32D37BA5.6989@pop3.cris.com>
Source record: 98870

d888888@juno.com wrote:
>
> mhorowit@erols.com (Michael Horowitz) wrote:
>
> >Curious about the relationship between the markings on disc capacitors
> >and their values, I cruised the shelves the other day. Found the
> >following: '103k' on a box of .01uf, '47p' on a box marked 47pf,
> >'224k' on a box marked .22uf. The latter made me think the
> >relationship between the value and the markings was shaky.
> >Can anyone shed any light on what I was seeing? - Mike
>
> The markings are in PicoFarad. 103k would be 10,000 PF = .0
> 1 uFd.
>
> 224k would be 22 with 4 zeros = 220,000PF = .22 uFd.
>
> The third digit is the number of zeros to add after the first 2
> digits.

What he said: It works like resistor color code bands, digits 1 + 2 are
significant; the third digit is a multiplier (number of zeroes to add)
so we get: 104 = .1uf, 103 = .01uf, 102 = .001uf (1000p), 101 = 100 pf,
and
100 = 10pf. Values marked with a "p" suffix are usually that exact
marked
value i.e. 47p = 47pf.

224. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: "Robert R. Koblish" <n3hat@erols.com>
Message-ID: <32D40C23.5BBA@erols.com>
Source record: 98871

Mike Willis wrote:
>
> w8jitom@aol.com wrote:
>
> >
> > My dad drove a tractor, he told me there was one important lever.
> > Leave-her B.
> >
> > 73 Tom
>
> This pun does not work in US English, was your father English?<snip>

It works for me, and I speak US English! (Also a Flanders & Swann fan)

Why wouldn't it work -- does it depend on whether you learned to say
'lever' with a long or short E?

73,
Bob N3HAT

225. Re: Help Alinco DM-1350 DC supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: no.spamming.allowed@null.com
Message-ID: <5avo1f$n99@jerry.loop.net>
Source record: 98872

In article <32D33B21.2F1B@worldnet.att.net>,
"R.E. Dodson" <rdodson@worldnet.att.net> wrote:
>
>
> Just received a Alienco DM-1350 DC supply. Fan is not running. Is it
>supposed to run all the time or does it cut in w/temp. If you have one
>let me know abt fan.
>
>Thnx
>WB5APD
>Bob
>
The fan is thermistor controlled. It kicks in at around 120 F.

>
>< Content-Type: text/html; Filename: C:\INET\DOWNLOAD\text00.htm >
>
Ahh.. Mozilla. Gag.

7 3 de KE6ALM
Matt

##
This side of the .sig has # Reply to:
no technical content # ke6alm
get.lost.stinkin.spammers.#.@loop.com
##

226. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5aur3a$1s32$1@news-s01.ny.us.ibm.net>
Source record: 98873

In message <measures-0501970116000001@port78.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures)Sun, 05 Jan 1997 01:16:00 -0800
writes:
:>
:>
:>**Virtually all commercial amplifiers use a rheostat or a Variac to
:>continuously adjust filament voltage. If a commercial amplifier
:>manufacturer produced an amplifier without a means of continuously
:>adjusting filament voltage, it is unlikely that any knowledgeable :>engineer would
recommend purchasing such an amplifier.
:>

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for move than 25 years and have ***NEVER*** seen a rheostat used in
a single one. In only one case did the transmitter use a Variac and
that transmitter had a reputation for eating the Variac's brushes.

One transmitter, an RCA G-line, used a regulated DC filament supply
(with NO "normal operating range" indicated on the meter, by the way).
The other transmitters used tapped filament transformers with taps
spaced about 4% ... except one which didn't even bother with any
filament adjustment (for tubes costing $30K each no less)!

:>
:>I rest my case.
:>

You have no case.

73,

... Joe, W8IK

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==

227. Re: FAREWELL TO THE "SHIP OF THE MIND", AND TO ITS MASTER, DR. CARL SAGAN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Wil Milan <wmilan@airdigital.com>
Message-ID: <32D38ED3.77F0@airdigital.com>
Source record: 98874
Cross-posted to: alt.fan.art-bell,alt.sci.physics.relativity,sci.astro,sci.astro.amateur,sci.physics,rec.radio.amateur.homebrew,rec.radio.amateur.antennas

Christopher P. Winter wrote:
>
> Furthermore, I don't agree that Dr. Sagan was, in your words, "leading
> many astray." He might have been leading them away from some belief
> system that you happen to value, but I doubt I would agree that this
> is something which (as you imply) deserves punishment.

Pardon me for jumping in, but I don't think it can be argued that Sagan did sometimes lead people astray in the sense that he sometimes played fast and loose with the facts. He often put on the airs of having much more expertise than he did, particularly in areas outside astronomy, sometimes committing blunders such as calling a fish an invertebrate (as he did in _Dragons of Eden_, as someone noted earlier). Sagan also seemed prone to glossing over "inconvenient" facts or alternative viewpoints so as to leave the impression that his view of a matter was the only logical position, and that too "leading people astray," I think.

Sagan had many good qualities, I think, but his ego sometimes overcame his intellectual honesty, and in my mind that is a very bad thing. No matter how many good things he wrote, whenever I read Sagan my B.S. detector is on full alert, as it is with any author whom I've caught bending or glossing the truth on multiple occasions. When I caught him doing that in areas in which I know something, it made me very leery of trusting what he said in areas about which I know less. That, to me, is a big black mark against any author or self-proclaimed expert.

In a more cynical moment I once mentioned to a friend of mine (a real Sagan fanatic) that Carl Sagan's greatest gift was sounding knowledgeable to the unknowing. That's a big component of what made him such a media celebrity; to audiences like the _Tonight_ show and _Good Morning America_ he always presented himself as The Voice of Scientific Authority when it was often his philosophical prejudices and preferences talking.

Of course everyone has preferences and prejudices. But much too often Sagan cloaked *his* bents and prejudices behind the mantle of science, and thus left many (including many of his most devoted followers, it seems) with the impression that they'd heard the voice of science when in fact they'd only heard Carl Sagan. In my mind that does amount to leading people astray, and it's not something that should be glossed over in eulogizing him.

Wil Milan

228. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0801971215460001@port22.vcnet.com>
Source record: 98875

In article <19970106184100.NAA02712@ladder01.news.aol.com>,
w8jitom@aol.com wrote:

> In article <measures-0501970116000001@port78.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
snip.....
> This has once again become a "let me pick to death anything anyone else
> does" thread. You've ripped up QST, ETO, Commander, Kenwood, Heathkit,
> Ameritron, Ten Tec, and on and on. You even rip up your own family, saying
> pathological liars run in your family and you have to "check out" anything
> your own family members say!

Run in the family? I said there were two, Tom. One is addicted to
heroin. One is addicted to ethanol. Neither one of them have have been
trustworthy, so the other members of the family know that anything these
two individuals say is unreliable. The family member who uses heroin is
still using despite the fact that he is currently on federal probabation.
The ethanol addict is still drinking ethanol. IMO, neither situation is
likely to change direction. Some people just seem to fall through the
cracks, Tom. If there are no such individuals in your family, count
yourself lucky.

IMO, the family members who rip up my family are its two drug addicts.

> Rich, there is no point in continuing this. You apparently have no more
> technical points, and a slander campaign generates little support for
> anyone participating.
>
> Tom

Slander is defined as:
1. Law. Oral communication of false statements injurious to a person's
reputation.
2. A false and malicious statement or report about someone.

Is my quote of your statement in QST magazine false?

Can you specify a false statement I made about QST, ETO, Commander,
Kenwood, Heathkit, Ameritron, or Ten Tec?

Making a truthful statement that happens to be injurious to a person's
reputation is not slanderous. It is part of the impeachment process.

No point in continuing this? Is it just a coincidence that you are
bailing out shortly after you received Wes Stewart's measurements of a
conventional (W8JI) vhf parasitic suppressor vs. a low vhf-Q (AG6K)

parasitic suppressor? // If anyone would like to receive an RTF file/document of Mr. Stewart's measurements, e-mail me and I will send you one. //

RE: technical points: ---I recently received 2 kaput 8874s and 3 kaput 8877s from Lon, K5JV. According to the Funderburg (W6IHA) test for gold-sputtering, 2 of the 8874s and 2 of the 8877s appear to have loose gold particles inside the envelopes. Discussing a look at the innards just might prove to be interesting, Tom, but now it looks like you are going to miss out. .

--
--Rich-- ag6k, 805-386-3734

229. Re: HELP! Need Pinouts re:MRF901 Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Madjid <mboukri@cam.org>
Message-ID: <32D3F60E.4055@cam.org>
Source record: 98876

forensi1@ix.netcom.com wrote:
>
> Please help:
> I can't find pinouts for the MRF901 bipolar npn uhf/microwave
> transistor I'm using in a porject. Currently I have no access to
> handbooks, and have had no success on the web. The transistor looks
> like this:
> | (top view) ___
> | ____|. _ . |____
> ----------( )---------
> |
> | (side view)
> |
> |
>
> I can't figure which is Emitter, Base, or Collector - I only need
> three points out of four to use. Please help. THX KB5YOK (Scott)

Package is SOE 317/2
http://design-net.com/cases/outlines/gifs/317d-02.revc.1.gif

You can find all specs & packages at the Motorola site:
http://design-net.com/cgi-bin/search

also via Electronics links in my page with other
manufacturers.

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

230. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: a.p.vanderwel@student.utwente.nl
Message-ID: <5b113r$fet@dinkel.civ.utwente.nl>
Source record: 98877
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

In article <32D00252.4C84@silcom.com>, you say...
>
>I have a Tektronix Type 551 oscilloscope from a yard sale...
>
>And it has a mighty weird 16-Pin power connector; it looks like a
>rack-mount connector.
>
>The back of the oscilloscope is marked "Wired for 117V".
>
>Does anyone have any idea whether I can just apply 117V power to
>some pins of this connector. And, if so, which pins it would be?
>
>Any help or related information would be much appreciated. Thanks!
>

Oh dear, this really is a pity as you need the power supply that goes with the 551. This is in a separate box and provides all the required regulated power busses.

You need a 551 power supply. Power supplies for other 2-part Tek's (eg. 507, 517 or 555) will not fit.

If you find the power supply, the connection 1:1 so it is easy to make a cable yourself.

If you decide to build your own power supply, it will need to produce:

about 4 different 6.3 VAC lines at a total of about 10 A (My guess)

-150 V @ 100 mA
+100 V @ 100 mA
+225 V @ 200 mA
+350 V @ 350 mA
+500 V @ 50 mA

The current ratings are approximate but they do indicate that it is probably non-trivial to build your own power supply. Also, they need to be well regulated, typical ripple specs on these busses are of the order of 5 or 10 mV tt.

If you need more info, talk to Stan Griffiths (w7ni@teleport.com) who knows everything about old Tek scopes, Or EJ Holleman (e.j.holleman@student.utwente.nl) who has a 551 and is probably willing to give you a connector pinout if you need one.

Too bad about your scope, for it is truly one of the great classics when complete and working.

On the subject of classic scopes, you are welcome to have a look at the Museum of Tektronix scopes, which can be found at:

http://cal003109.student.utwente.nl/~wel/tek.htm

And should you get the connector pinout, it would be great if you would send me a
copy so I can include it in the museum on the technical info page.

Regards,

Arnoud.

p.s your mailing address does not seem to work.

231. Re: ATU ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: alanb@sr.hp.com
Message-ID: <5b1207$gkt@canyon.sr.hp.com>
Source record: 98878

Ian White, G3SEK (G3SEK@ifwtech.demon.co.uk) wrote:

: Over to W8JI (reproduced here with permission)...

: I've yet to find any tuner (except the ATR-15 as advertised by Ameritron
: in the 80's, and the old EF Johnson KW Matchbox) that always met power
: specifications as advertised.

In a previous life, I was the designer of the Drake MN-2700. I don't
remember exactly what the power spec was, but I remember spending a lot
of time verifying that it met the spec with reasonable margin.

: The MFJ 989 used a roller

It is very difficult to get good Q from a roller inductor. One reason
is that optimum Q requires the coil to be reasonably close to the
optimum length/diameter ratio. The L/D of a roller inductor is close
to zero at minimum inductance. Small-inductance coils should have
fat tubing or wide strap for the conductors, which you don't get with
a roller inductor. Finally, the contact resistance of the sliding or
rolling contact can easily be large enough to affect the Q. For example,
a 1 uH coil with a Q of 1000 on the 40 meter band has a series resistance
of only 44 milliohms. Any extra series resistance will kill the Q.

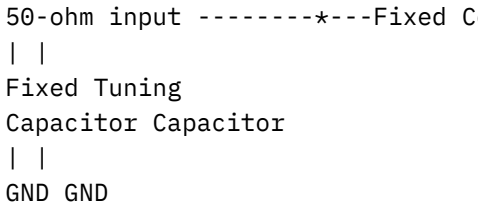
: Roller Q is absolutely NOT a problem of cabinet size
: or anything external to the roller, it is a problem of materials used in
: the roller and the basic roller design.

Coils with very high loaded Q can induce substantial circulating currents
in any nearby metal, so you don't want to get the cabinet TOO small.
What you really don't want to do is get any ferrous material in the coil's
magnetic field. When I was working on the L-75 amplifier, I had used
steel screws to mount the main tank coil. They got way too hot to touch
in just a few seconds of amplifier operation. I replaced them with
brass screws which ran cool as a cucumber.

: As for power ratings, it is NOT correct to specify a power rating
: without specifying both a load impedance and a frequency. ANY
: manufacturer who says "this is a 3 KW tuner" without being band and load
: specific is just howling out a number that may not - and probably will
: not - mean anything to you. The only way to know for sure if a certain
: tuner will work is to try it with your own antennas.

That depends on the circuit design. The above is true for most designs.
However, all the Drake tuners used a PI-L arrangement set up so that the
circulating current in the tank coil is independent of the load impedance.
That means you can specify the insertion loss and power capability without

specifying the load impedance. True, the load impedance does slightly affect the RF voltage across the loading capacitor (the one in series with the output), but it is not hard to figure out the worst-case condition and design the capacitor accordingly.



I remember spending many days with a Smith chart and an HP Vector Impedance Meter verifying that the design met the SWR specifications at all phase angles.

Those were the good old days. These days, I think anything over +20 dBm (1/10 watt) is high power!

Al Bloom N1AL

232. Re: help with MC1350

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970108132331.27597A-100000@Stratus.CAM.ORG>
Source record: 98879

The two outputs of the MC1350 (by the way, the MC1590 is the same circuit, in a metal case and maybe slightly better specs) are 180 degrees out of phase.

More important, the two output pins (1 and 8) are open collector. They need those resistors to +vcc. The only way they would go to ground is if you have your plus supply going to ground, with the minus side floating.

If it works with a resistor to ground, then it's because there is enough gain to overcome the output circuit that can never amplify because it's receiving no voltage.

If it works better with the resistor from pin 1 to ground, then something is wrong elsewhere in the circuit. Maybe you have an oscillation due to bad layout or bad bypassing, and it works better with the resistor to ground because it stops oscillating when the output stage can't amplify. Thus, the "working better" is an illusion.

If the data sheet on the Motorola web page is insufficient, it might be a good idea to get a hard copy of the data sheet (in the form of a data book or specific data sheet for the MC1350) from Motorola. I've always found their information for the device quite good, so I am assuming that the version on the web is incomplete.

The MC1590 data sheet does seem a tad more extensive, so you might get a copy of it.

These devices are at least 25 years old, so there are a lot of old Motorola data books out there that carry this data sheet, so finding a copy used should be very easy.

Michael VE2BVW

On Tue, 7 Jan 1997, Zack Clobes wrote:

>
> Why does most every schematic with the 1350 in it have the output of the
> chip with a DC path to +vcc. Why is this? The chip seemed to work just
> fine with a 1K to ground.
>
> I didn't do any more testing past the 1K resistor. Are the two output
> 180 out of phase? Are there any advantages of tieing the two outputs
> through a xformer? What would the output Z be if they were together?
>

233. Rad-hard circuit design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: alanb@sr.hp.com
Message-ID: <5b0vjm$gkt@canyon.sr.hp.com>
Source record: 98880

[Article crossposted from rec.radio.amateur.space]
[Author was Alan Bloom]
[Posted on 8 Jan 1997 20:18:52 GMT]

I'm working on one of the electronics modules for the Phase 3D satellite to be going up this Spring. Does anyone on the net have any experience in designing space-qualified circuitry? I have lots of circuit design experience but have never designed anything for space applications.

What I need is practical advice on how radiation affects the design. I have been assuming that it's only an issue for small-geometry IC's like memory chips. My design is all analog and consists of LM324 op amps, LM339 and LM311 comparators, AD538 analog multiplier/dividers, 78L15 and 79L15 regulators, and some bipolar transistors. Can I assume that special rad-hard devices are not required? (I don't even think they exist.)

The P3D satellite will be in a highly elliptical orbit that passes through the Van Allen belts.

I would be interested in any comments from anyone with experience in this area. It would be helpful if you could list your qualifications in your reply. I'll check this newsgroup for the next couple weeks, but email replies will get to me faster.

Thanks,

Al Bloom N1AL
alanb@sr.hp.com

234. Re: F.S. : JAN 6186W (6AGEWA) from $.08 each

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5b1bv1$2ic@rosenews.rose.hp.com>
Source record: 98881
Cross-posted to: rec.radio.swap,misc.industry.electronics.marketplace,rec.audio.tubes,rec.radio.amateur.homebrew

MURRAY PASTERNACK (murray.p@ix.netcom.com) wrote:
: For Sale : Sharp cut-off pentode, 7 pin miniature, type JAN 6186W equal
: to 6AG5WA. These were made by philips in the USA in 1986. All are new
: and in the origonal clean boxes.

I cant find any specifications for the 6186W, though it was
listed in my 1970 ARRL handbook for the base diagram only.

Anybody have this info?

Murray's valves are real nice. I plan to use them in some
projects for rf amps. I have seen them used as rf amps for
some of the early am/fm sets in Riders as 6AG5 type.

Anyone else see these used as something other than rf amps?

thanks.

235. Homebrew 12v rotator controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: jeffg@istar.ca
Message-ID: <5avh14$38r@news.istar.ca>
Source record: 98882

I received a tv antenna rotator. Unfortunately there is no controller unit for it, nor is there a name on the unit. I did find out that it was originally sold at walmart. It operates on 12volts, which is great as I want to use it at the cottage and we run everything off solar. The question is how to build a 12volt controller. Creating a refersing switch is a piece of cake, but controlling the rotator and knowing exactly where it's facing is the trick. Does anyone have any ideas, or better yet a schematic or some idea where I can get my hands on a compatible (12v) controller?
Jeff
VE7CTD

236. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Doug King <doug@raymog.demon.co.uk>
Message-ID: <DKNPPDAfm30yEwgg@raymog.demon.co.uk>
Source record: 98883
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

In article <32D00252.4C84@silcom.com>, Robert Bernstein <rdb@silcom.com>
writes
>I have a Tektronix Type 551 oscilloscope from a yard sale...
>
>And it has a mighty weird 16-Pin power connector; it looks like a
>rack-mount connector.
>
>The back of the oscilloscope is marked "Wired for 117V".
>
>Does anyone have any idea whether I can just apply 117V power to
>some pins of this connector. And, if so, which pins it would be?
>
>Any help or related information would be much appreciated. Thanks!
>
>Robert Bernstein
>rdb@silcom.com
Hi, some of the big tek scopes came with a trolly and a power supply
on the bottom shelf they had a black cable with retanglar connectors
on each end. circa 1960, No's like 454, 455, I seem to remember
They did need the trolly very large and very heavy,
Hope this helps, why not give tek a ring

--
Doug King

237. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: onat@turbine.kuee.kyoto-u.ac.jp
Message-ID: <5av2ut$jhs@kuee2.kuee.kyoto-u.ac.jp>
Source record: 98884
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

In Steve & Gale Carlisle's opinion;

: In article <32D00252.4C84@silcom.com>,
: Robert Bernstein <rdb@silcom.com> wrote:
: >I have a Tektronix Type 551 oscilloscope from a yard sale...
: >And it has a mighty weird 16-Pin power connector; it looks like a
: >rack-mount connector.
: >The back of the oscilloscope is marked "Wired for 117V".
: >
: >Does anyone have any idea whether I can just apply 117V power to
: >some pins of this connector. And, if so, which pins it would be?
: >Any help or related information would be much appreciated. Thanks!
: >
: >Robert Bernstein
: >rdb@silcom.com
:
: Check with Stan Griffiths (W7NI) at w7ni@teleport.com. He is a TEK
: specialist. If he doesnt know, chances are no-one does.
:
: Steve

And please post the results for the rest of us! (^_^)

| Ahmet ONAT Kyoto Univ. Japan |
| E-mail : onat@kuee.kyoto-u.ac.jp |
| WWW page : http://turbine.kuee.kyoto-u.ac.jp/staff/onat.html |
| My 6 leg walker, RC airplanes & more in home page |

238. WANTED: National XR-50 coil forms

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: kc5ng@dlep1.itg.ti.com
Message-ID: <5b0986$p98@sf18.dseg.ti.com>
Source record: 98885

I need a few National XR-50 coil forms for homebrew transmitters.
Got any you can part with?

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

239. Re: help with MC1350

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com.DELETE-FOR-EMAIL>
Message-ID: <32D4764D.60974DCE@primenet.com.DELETE-FOR-EMAIL>
Source record: 98886

Zack Clobes wrote:
>
> I'm working on a 20M SSB receiver and I'm working on the IF amplifier.
> I chose to use the mc1350 because of it's simplicity. I built a circuit
> that used a capacitor coupling on the input and the output came out on
> pin 1, through a xformer, and to the +vcc. I was unable to get the
> amplifier to amplify so I ended up tearing it down and rebuilding a
> simpler circuit. The new circuit is a 50ohm source, coupled directly
> into the chip with 2 caps. The output is simply a 1K resistor from pin
> 1 to ground.

mc1350, an oldie but goodie. Where was the other output (pin 8) tied?
It needs to be tied to vcc also. It has a differential output stage.

> According to a 10K pot and the Oscope, a 1K load seemed to be the best
> match to the chip. Does this agree with other people's findings?

It is open collector so it will be a hi-z output. If i remember, it has
a current output so the higher the impedance, the larger the voltage
gain.

> Why does most every schematic with the 1350 in it have the output of the
> chip with a DC path to +vcc. Why is this? The chip seemed to work just
> fine with a 1K to ground.

The differential amplifier in the output obtains it's power that way.
No accident. I can't tell you why it worked with outputs grounded
thru resistors.

> I didn't do any more testing past the 1K resistor. Are the two output
> 180 out of phase? Are there any advantages of tieing the two outputs
> through a xformer? What would the output Z be if they were together?

The outputs are out of phase. Using a transformer would double the
voltage gain. The transformer would also would eliminate any power
supply noise coming in the power pins of the mc1350 from getting added
to the signal since the noise would appear on both outputs and be
cancelled by the transformer. Plus you can match the hi-z output to
a lower z using the same transformer if you need to. You can use
an inductor (or resistor) from one output to vcc if you don't want
to use a transformer -- the other output should be tied to vcc.

> Motorola's web page has been of little help with this chip. I assume
> that it is about outdated and they have very little info covering the
> specs. Any help would be appriciated.

There may be more info on the mc1590. There is a smt part 'tya1350'
(I think) that you may be able to find. I couldn't find it on the
mot web site but I can't find stuff that I know is there either...

> --
> 73's de Zack, W0ZC
>
> zclobes@southwind.net
> http://www2.southwind.net/~zclobes/zackc.html

good luck,

Bob Doyle, WA3TGF

240. Re: FM broadcast in phone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Bill WD2AEV <bkantz@monmouth.com>
Message-ID: <32D477D7.7988@monmouth.com>
Source record: 98887

Talk to the radio station they probaly already have the filters and will hand them out for free. Also Ma Bell will also install filters for free.

Bill
WD2AEV

241. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0801970750250001@port14.vcnet.com>
Source record: 98888

In article <5avhjn$7d$1@nadine.teleport.com>, w7el@teleport.com (Roy Lewallen) wrote:

> In article <measures-0601970143330001@port8.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) wrote:
>
> >. . .
> >Since the most
> >common silver compounds, silver oxide and silver sulphide, conduct almost
> >as well as silver, environmental problems should be minimal. . .
>
> For years I've heard this (mostly as justification for silver plating), and
> for years I've looked in every relevant reference book I could get my
> hands on. But I've never found a reference that gives the conductivities of
> common silver or copper salts. Please tell me what reference you got this
> from! Thanks!
>
> Roy Lewallen, W7EL

I do not recall where I read it, Roy, but is was a long time ago, perhaps in high school chemistry class.

I propose that someone conduct (no pun intended) a test on the conductivity of silver-sulphide to see if this is the case. Unfortunately, my wife's silver spoon collection was recently cleaned, so I may be dead in the water. If anyone possesses a silver object that has turned black from the formation of silver-sulphide, please measure the resistance of the coating with an ohmeter, and report your findings.

--
--Rich-- ag6k, 805-386-3734

242. YIG sphere

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Litco@webtrak.com
Message-ID: <5b0v8r$do5@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 98889

Would somebody know a source for YIG (yttrium iron garnet) spheres.
These spheres will be used for tuning cavaties in the 2-4Ghz region.
Thanks, Peter

243. Help Alienco DM-1350 DC supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: "R.E. Dodson" <rdodson@worldnet.att.net>
Message-ID: <32D33B21.2F1B@worldnet.att.net>
Source record: 98890

Just received a Alienco DM-1350 DC supply. Fan is not running. Is it supposed to run all the time or does it cut in w/temp. If you have one let me know abt fan.

Thnx
WB5APD
Bob

244. Re: Retail Sales of Tektronix 'scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-08 00:00:00 UTC
From: Litco@webtrak.com
Message-ID: <5b170p$fjf@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 98891

"Joseph M. Zawodny" <J.M.Zawodny@LaRC.NASA.gov> wrote:

>I am looking for mail order places that sell Tektronix
>Oscilloscopes (preferable at less than list prices). Specifically,
>I'm interested in the TDS 210 or 220. If you are aware of anyone
>selling these please pass the info on to me.

> Thanks

>--
>Work: Dr. Joseph M. Zawodny Play: Joe Zawodny
> NASA Langley Research Center KO4LW@amsat.org
> E-mail: J.M.Zawodny@LaRC.NASA.gov zawodny@exis.net
> (757) 864-2681 (757) 864-2671 FAX

I bought TDS210 from Brill Electronics (510 834 5888) for $946.00
Speak to Debbie Valin. Frankly I do not know if there is a differance
between TDS210 and TDS220. As with the previous post mine goes
easily past 200Mhz. There is the usual sampling noise which can
be drastically reduced by averaging. Also the setup recall is a
little inconvenient as it does not allow for measurement window
to automatically come up.These are really silly gripes if one
considers the price. With 1000mhz sampling and 5ns glitch capture
(much better than advertised) it is a great bargain.
Peter

245. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.ch.intel.com>
Message-ID: <32D57E63.35AC@ccm.ch.intel.com>
Source record: 98692
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Pieter Ibelings wrote:
> Teddy Bear <teddyb@prog1.caprica.com> wrote
> > I don't remember asking for criticism.
> Someone here is trying to help you and at
> the same time you are treating him like an idiot.

Reckon our old friend Altavoz has gotten himself a new
internet account?

246. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109223539.20816E-100000@prog1.caprica.com>
Source record: 98693
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On 9 Jan 1997, Pieter Ibelings wrote:

> Teddy Bear <teddyb@prog1.caprica.com> wrote in article
> <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>...
> > Duh.
>
> > That's an old XYL's tale.
>
> > I expect 25-30 bB.
>
> > I don't remember asking for criticism. nothing more.
>
> > You mean to say that you critiqued my idea when don't even HAVE a 2m
> > helical much less built one?
>
> > No thanks, I'll wait for someone who can offer exact formulas or
> > mesurements, rather than speculations. My time is valuable and my money
> > is sparse. This is not a game to me so I can't just wing it.
>
> You obviously have an attitude ploblem "teddy bear". Someone here is trying
> to help you and at
> the same time you are treating him like an idiot.

Since you are addressing this to me more politely than John did, I will
reply more politely to you...

DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
CRITICISM, SIR?

> How can you expect anybody to help you when you treat people the way
> you do?

Help MUST be the information that was ASKED FOR in order to qualify AS help.
Since it was CLEARLY what I had said in advance that I DON'T want, then
it is not help.

If you are visiting someone working on something and they ask you to pass
them a screwdriver and instead you pass them a hammer then you are
annoying them, not helping them, RIGHT?

> If you don't like the help that you are being offered for free then
> hire an engineer and pay him consulting fees. I am sure that he will put up
> with your **** if you pay him enough.

With that language, young man, you just threw all politeness right out the
window. If you can't discuss it without cussing me out, get lost. This is

not email, it's a public forum and kids DO read the posts here.

> By the way, if you are expecting 25-30 bB's of gain you are
> just dreaming.

WHO ASKED YOU? DID I ASK FOR OPINIONS? NO! I WAS SPECIFIC IN WHAT I ASKED FOR AND IN WHAT I DID NOT WANT TO HEAR! ALL I ASKED FOR WERE DESIGN SPECS! IS THAT CLEAR???

> Or do your bB's = MFJ dB's?

Since you DID ask:

MFJ makes crap. They are hung up on using half-wave designs which usually ARE crap. When they figure out what a quad is they might have a clue, but until then much of what they make is overpriced trash.

> 73's

What's the purpose of that? Don't tell me "73" after you just cussed me out. 73 means best regards and you've displayed contempt, not best regards.

TO EVERYONE: KEEP YOUR CRITICISMS AND CONTEMPT TO YOURSELVES! I DON'T WANT IT AND I WON'T HAVE IT! I asked only for antenna design SPECS.

If you can't give someone what they asked for then don't annoy them by wasting their time and "bandspace" with unwanted opinions!

247. Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109230343.20816F-100000@prog1.caprica.com>
Source record: 98694
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

I THOUGHT that these were newsgroups for radio science discussions, based upon factual information. But mostly all I see here are people's unsolicited opinions based upon conjecture.

That's what happens when code skills are emphasized, hailed and rewarded instead of engineering skills. That's also why hams of today would rather buy equipment from a store than built it.

Once upon a time iw was WE who invented everything elecronic! Now most of us have been reduced to clueless consumers, lead by the nose like dumb sheep... a sad legacy indeed to leave to future hams.

When someone asks for calculations, instead they get speculation. But I must warn that if you were to try to build things out of speculation, you'll soon have a pile of failed projects stacked taller than you are.

Amateur radio is a SCIENCE, not a realm of personal opinions! We are SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!

I shouldn't even HAVE to tell you this! Half the hams I hear these days barely know how to even solder! WHAT the heck is happening to us? Who lowered the technical knowledge standards? Who said that they could? When did it become no longer required to demonstrate the ability to build and troubleshoot radio equipment? It's truely an embarrassment to amateur radio that this has happened! I honestly know of novices who understand electronics better than extras and extras who act like CB'ers!

248. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: "F. Kevin Feeney" <fkf1@cornell.edu>
Message-ID: <5b3ro0$a4q@newsstand.cit.cornell.edu>
Source record: 98695
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

In article <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>
Teddy Bear, teddyb@prog1.caprica.com writes:
>I don't remember asking for criticism. I remember asking for a computer
>designed plan. Translate that as this: The only things I was asking
>for was the exact spacing, overall wire legnth, helix diameter and
>reflector demensions, nothing more.

And what were you offering for payment?

You show up presenting a list of requirements like an RFP and expecting
free help, and when someone looks at the requirements and says they might
not be totally realistic, you jump all over them. Well I've built several
helix antennas and read a bunch more on them and I agree with Jims
evaluation of your design conditions.

>
>> Well I can see some advantages to a helix over yagis, and I'm
>> considering one myself for 2m, but I don't see why you don't want them
>> for EME that's your call.
>
>You mean to say that you critiqued my idea when don't even HAVE a 2m
>helical much less built one?
>
>> Maybe if we started with what your goals are, then we could find
>> something more realistic to do. But if you insist on doing it with
your
>> rough specs tehn I can supply the relative cookbook plans. The helix
is
>> not all that complicated to need to go to a computer design.
>
>No thanks, I'll wait for someone who can offer exact formulas or
>mesurements, rather than speculations. My time is valuable and my money
>is sparse. This is not a game to me so I can't just wing it.

I think with your attitude, you're likely to wait a long damn time.

Kevin

249. Wanted: Info on 1296Mhz ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5b32l2$orn@techsrv1.tech>
Source record: 98696

I am looking for any info on 1296Mhz ATV transmitters and receivers
using FM modulation. If you have built it I would like to here about it
and if there are any plans/kits out there that you know about, please email
me.

Thanks a bunch in advance,
Mike

--
/\
\ Michael Long || President /
/ Callsign: KB8WPE || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/

250. Re: What is packet & amateur radio. Help me

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: cipriano@nutecnet.com.br
Message-ID: <32d50f2e.2178709@news.nutecnet.com.br>
Source record: 98697
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Thu, 09 Jan 1997 07:24:25 -0800, AC6V <ac6v@ix.netcom.com> wrote:

>waheeb@scscomm.com wrote:
>>
>> If this post has been sent to wrong place I am very sorry
>>
>> Could anyone explain to me what is packet radio, amateur radio and the
>> difference between them.
>>
>> What sort of equipment do I need
>>
>> Does it work worldwide or do I have to be within a distance of (say a tower
>> or station)
>>
>> Anything extra would be very valuable
>>
>> pls drop me email direct
>> Thanks in advance
>>
>> waheeb
>
` Hi Waheeb...

My name is Carlos Alberto...
I'm amateur radio of Brazil...
I not write english very well, but lets go...
The packet radio is a mode of transmition an reception of
digitals signals..
Amateur radio is a class of people with make conversation from
radio equipment.
We have very others modes.. SSB, CW, RTTY, AMTOR, PACTOR,
GTOR, SSTV, SATELITE....
I hope help you...
See about amateur radio in ALTAVISTA SEARCH in ARRL
Bye Bye...

Carlos Alberto
PY4CEL

251. Re: Retail Sales of Tektronix 'scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: cripps@netcom.com
Message-ID: <cripps-0801971605020001@10.0.2.1>
Source record: 98796

In article <5b170p$fjf@mtinsc01-mgt.ops.worldnet.att.net>,
Litco@webtrak.com wrote:

>
> I bought TDS210 from Brill Electronics (510 834 5888) for $946.00
> Speak to Debbie Valin. Frankly I do not know if there is a differance
> between TDS210 and TDS220. As with the previous post mine goes
> easily past 200Mhz. There is the usual sampling noise which can
> be drastically reduced by averaging. Also the setup recall is a
> little inconvenient as it does not allow for measurement window
> to automatically come up.These are really silly gripes if one
> considers the price. With 1000mhz sampling and 5ns glitch capture
> (much better than advertised) it is a great bargain.

Hmmm, Tek says the 210 is 60 MHz and the 220 is 100 MHz. I decided that I wanted 100 MHz, even though it increases the cost by about 50%.

But if yours goes up to 200 MHz anyway, I wonder if the only difference is that the 220 spec to 100 MHz is guaranteed and the 210 might or might not? Everything else is identical -- including of course the 1 GHz sampling rate.

Peter

--
Peter Cripps Associates
Technology Strategy and Product Development
20 Carrera Court
Redwood City, CA 94062
415 364 4413 voice
415 364 1353 fax

252. Re: FAREWELL TO THE "SHIP OF THE MIND", AND TO ITS MASTER, DR. CARL SAGAN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: cpwinter@ix.netcom.com
Message-ID: <32d4470e.1407892@nntp.ix.netcom.com>
Source record: 98797
Cross-posted to: alt.fan.art-bell,alt.sci.physics.relativity,sci.astro,sci.astro.amateur,sci.physics,rec.radio.amateur.homebrew,rec.radio.amateur.antennas

>Pardon me for jumping in, but I don't think it can be argued that Sagan
>did sometimes lead people astray in the sense that he sometimes played
>fast and loose with the facts.

No pardon required; this is an open forum.

I don't think your "leading people astray" has quite the same
scope as the other fellow's. But in any case, I do not claim that
Sagan was perfect. I know of two errors in "Dragons of Eden", and
though it's been years since I read it, I also seem to remember some
points I disagreed with. Also, former astronaut Frank Borman relates
a story that paints him as a rude idealogue. No doubt there are other
lapses as well. It would take something much worse to convince me
that Sagan's contribution was mostly a positive one.

>He often put on the airs of having much more expertise than he did,
>particularly in areas outside astronomy, sometimes committing blunders
>such as calling a fish an invertebrate (as he did in _Dragons of Eden_,
>as someone noted earlier). Sagan also seemed prone to glossing over
>inconvenient" facts or alternative viewpoints so as to leave the impression
>that his view of a matter was the only logical position, and that too
>"leading people astray," I think.

Except for the "fish foulup", this is pretty vague. Care to give
me some specifics?

>Sagan had many good qualities, I think, but his ego sometimes overcame
>his intellectual honesty, and in my mind that is a very bad thing. No
>matter how many good things he wrote, whenever I read Sagan my B.S.
>detector is on full alert, as it is with any author whom I've caught
>bending or glossing the truth on multiple occasions. When I caught him
>doing that in areas in which I know something, it made me very leery of
>trusting what he said in areas about which I know less. That, to me, is
>a big black mark against any author or self-proclaimed expert.

No argument there. B.S. is bad no matter what the source. But
again, how about some specifics?

>In a more cynical moment I once mentioned to a friend of mine (a real
>Sagan fanatic) that Carl Sagan's greatest gift was sounding
>knowledgeable to the unknowing. That's a big component of what made him
>such a media celebrity; to audiences like the _Tonight_ show and _Good
>Morning America_ he always presented himself as The Voice of Scientific

>Authority when it was often his philosophical prejudices and preferences
>talking.

Always? A very sweeping statement.

>Of course everyone has preferences and prejudices. But much too often
>Sagan cloaked *his* bents and prejudices behind the mantle of science,
>and thus left many (including many of his most devoted followers, it
>seems) with the impression that they'd heard the voice of science when
>in fact they'd only heard Carl Sagan. In my mind that does amount to
>leading people astray, and it's not something that should be glossed
>over in eulogizing him.

I think it's OK in a eulogy to gloss over a whole host of sins.
This is, after all, customary respect for the newly dead and kindness
to their loved ones. The balanced assessments can come later.

When they do (I'm sure someone is working on a biography of Sagan,
though I haven't yet heard of any), I think you will find that he
comes off pretty well.

253. Re: DBm to Watts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: bspeed@cyberramp.net
Message-ID: <5b1r9f$h79$2@newshost.cyberramp.net>
Source record: 98798

"Alan J. Richer" <alan_richer@crd.lotus.com> wrote:

>I must be getting old - I'm forgetting my mathematics...8*(

>I just ran across a large number of programmable-channel cable TV head
>ends -
What brand ?

>The thing is, they're +55DBm output. To me, that works out to about a
>watt or so - enough to push an amplifier without too much trouble.

Typo or something....cable is dBmv +55 dbmv is, I think, going to be
-47dBm + 55 db, so that's +8dBm out.
In a 75 Ohm system.

0dBmv is approx. -47dBm., 75 Ohms.

Thanks, ajr/N1TWY

254. Re: Please help with unknown bandwidth of Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: bspeed@cyberramp.net
Message-ID: <5b1rki$h79$3@newshost.cyberramp.net>
Source record: 98799

rburden@student.ecel.uwa.edu.au (Richard Burden) wrote:

>Hi,

>picked up some surplus commercial VHF radios at a recent Hamfest and
>wondered if anyone knew the bandwidth for the following crystal filters:

>HyQ "QF10701" and "QF10A7"
>HCM "10M-4B"
>Phillips "10.7N" and "10.7P"
10.7 Mhz filters....could be wide..

>Murata "CFM455F" and "CFM455D"

CFM455F:
Center Freq: 455Khz +/- 2Khz
3dB Bandwidth: +/- 4.2Khz
6dB bandwidth: +/-6Khz
50dB Bandwidth: +/- 12Khz
Stopband Attenuation: 45dB
Insertion Loss: 5dB
In/Out Impedance: 2K ohms.

The CFM455D is:
Center Freq: 455Khz +/- 2Khz
3dB Bandwidth: +/- 7Khz
6dB bandwidth: +/-10Khz
50dB Bandwidth: +/- 20Khz
Stopband Attenuation: 50dB
Insertion Loss: 3dB
In/Out Impedance: 1.5K ohms.

255. Re: Direct conversion FM receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5b1v8f$38q@camel4.mindspring.com>
Source record: 98800
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

nagle@netcom.com (John Nagle) wrote:

>innovative_technologies@actcom.co.il (innovative technologies) writes:
>>Hello all,
>>Is there such a thing as a Direct conversion FM receiver, similar to
>>designs available for CW and SSB reception? Sensitivity isn't a
>>premium.
>>I've heard about mini FM receivers for the broadcast FM band (such as
>>"wrist watch" or "necklace" versions), that might implement such a
>>concept.
>>Any pointer in the proper direction (either theoretical or a practical
>>design) would be truly appreceated.

> There are other approaches than using IF stages. I read a ham
>article a few years ago that suggested that TRF-type receivers, in
>which all the amplifying stages are tuned, might be worth trying.
>This was tried in the early days of radio, but having all those knobs
>to tune was a big pain. Today we could make all the stages self-tuning.

> Another recent cute idea is being used in some cell sites.
>They downconvert the entire cellular band to an IF frequency,
>digitize the entire band, and crunch on the results with DSPs to
>extract all 800+ channels simultaneously. For fully populated
>cell sites, it beats having 800 FM receivers.

> John Nagle
I think the SETI project would liked to have used DSP in the above
manner instead of building all those individual radios to listen at
once. OH well DSP was not a ho-hum technology when they built
the SETI site. ET go DSP.
Anthony Catalano WW2W
http://www.pipeline.com/~acatalan/

256. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5b20bi$4bc$1@nadine.teleport.com>
Source record: 98801

In article <measures-0801970750250001@port14.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) wrote:

>I do not recall where I read it, Roy, but is was a long time ago, perhaps
>in high school chemistry class.
>
>I propose that someone conduct (no pun intended) a test on the
>conductivity of silver-sulphide to see if this is the case.
>Unfortunately, my wife's silver spoon collection was recently cleaned, so
>I may be dead in the water. If anyone possesses a silver object that has
>turned black from the formation of silver-sulphide, please measure the
>resistance of the coating with an ohmeter, and report your findings.
>

This sure has all the characteristics of an urban legend. I've seen it
quoted as fact many, many times, but have yet to find an authoritative
source. Gary Coffman was the last person I saw quote it as fact, and he
couldn't come up with a reference either. (I wonder how many other
"well-known facts" floating around out there are in the same category. . .)

Now, armed with an ohmmeter, how do I measure the resistance of the coating
without simultaneously measuring the resistance of the underlying silver?
If there were a way, the next question is how to determine the resistivity
of the material given the measured resistance, without knowing the
thickness of the coating?

And, how do I tell silver sulfide from silver oxide?

Roy Lewallen, W7EL

257. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b217plfp2@news3.microserve.net>
Source record: 98802

jackl@pinetree.microserve.com (WB3U) wrote:

Typo Repair:

In the following paragraph, replace "inductance" with "reactance".

>The conventional suppressor design is based on the technique of
>allowing HF signals to take a high Q path to the tank, while VHF
>and above are shunted to the parallel resistor by the rising
>inductance of the coil.

>73,
>Jack WB3U

258. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b20pvlfp1@news3.microserve.net>
Source record: 98803

CC by mail -

measures@mail.vcnet.com (R. L. Measures) wrote:
> jackl@pinetree.microserve.com (WB3U) wrote:

>> I came in on this discussion late, but was just wondering if
>> you've attempted to solve parasitics by other means? Reducing the
>> Q of the tank across the entire range of operating frequencies
>> seems self-defeating, particuarly when there are alternate
>> methods.
>>
>> Have you measured the increase in harmonic output in the
>> amplifiers you've modified?

>I have not, Jack. However, no increase in TVI harmonics have been
>reported in over 4000 cases. The band where tank Q would be
>affected most is 28-29.7 MHz, the second harmonic of which lands on
>TV Channel 2.

Rich, I have at least two concerns regarding these statements:

First, the absence of TVI reports is a totally inadequate
criteria by which to append a seal of approval to any amplifier
modification. The antenna system itself can easily mask the
symptoms, particularly if a tuner or resonant multiband radiator
is used.

Second, operator testamonies, no matter how prolific, are
notoriously unreliable. If the amplifiers have not been tested
with a spectrum analyzer (or simiarly reputable method), nothing
positive can be objectively claimed regarding harmonics. The
only thing we know for certain is that nichrome will raise the
level of harmonics due to decreased tank Q. This alone is
sufficient to question whether anyone should install these devices.

>According to Wes Stewart's measurements, a low VHF-Q suppressor adds
>0.88 ohms of series R to the anode circuit at 10MHz, adds 4.32 ohms
>at 30MHz, and adds 58 ohms at 150MHz.

Could you clarify what you mean when you say the suppressor "adds"
these values? Do you mean these are the values of the nichrome
suppressor coil at various frequencies, or that the entire
suppressor assembly using that coil exhibits the additional R
(compared to a conventional suppressor assembly) stated above?
Also, do these values refer to resistance or impedance?

>At 30MHz, a low VHF-Q suppressor adds 4.3 ohms of resistance in
>series with 1200 ohms of (anode) reactance. I do not know how
>to go about recalculating tank Q if4.3 ohms is added in series
>with 26% of the tank's tune C, so someone smarter than me is
>hereby invited to show us how do the calculations.

I don't know either, but one thing is evident - harmonics will increase. The admittedly few operators I've talked with have reported extremely broad tuning following installation of the nichrome suppressors. Several actually found the technique appealing due to the "vernier tuning" that resulted.

>I do not know of another way of solving the parasitic oscillation
>problem.

There are several effective methods that do not decrease the Q at HF; in fact they may increase it (compared to conventional suppressors), depending on component values.

>Since voltage gain is basicly mu*R-parallel (Rp), i.e.,
>the load on the anode, decreasing Rp appears to be the goal. In Wes
>Stewarts recent tests, a conventional (W8JI/Ameritron) VHF
>suppressor exhibited a Rp of 166.67 ohms at 100MHz, while a low VHF
>Q suppressor exhibited a Rp of 101.73 ohms at 100MHz. In other
>words, the conventional VHF suppressor would yield about 64% more
>VHF voltage gain. For amplifiers that use a silver plated Ls, like
>the TL-922, Henry Radio amplifiers, the Ten-Tec Titan and a few
>others, the voltage gain difference would be even higher.

I'm a little confused by this paragraph. Most amplifiers use a suppressor resistor between 47 and 100 ohms. Assuming the leads from the anode to the suppressor and from the suppressor to the Tune cap are infinitely short, and that the Tune cap represents zero ohms impedance at the unwanted frequencies, how can Rp exceed the value of the parallel resistor in the suppressor assembly? (Perhaps the parallel resistors in the above examples were inductive?)

In any event, unless the amplifier oscillates, it is not the impedance or resistance at VHF that should concern the owners. Rather, the potential problem is the reduction in Q at desired frequencies when nichrome is installed.

Personally, I think there is a basic misconception here regarding the two paths through the suppressor. The typical LC suppressor uses a well-defined, logical concept for its construction. While nichrome wire may indeed reduce or remove parasitics, so will a carbon resistor placed directly at the anode.

The conventional suppressor design is based on the technique of allowing HF signals to take a high Q path to the tank, while VHF and above are shunted to the parallel resistor by the rising inductance of the coil. The speed of the transition is directly related to the Q of the suppressor coil and the value of the

parallel resistor. The more the Q of the coil is reduced (such as with nichrome wire), the slower the transition becomes and the more the suppressor assembly as a whole begins to resemble the simple, undesired resistor mentioned above.

As a final note, nichrome suppressor coils can be simulated by wiring a high Q suppressor inductor in series with a resistor, then placing the usual suppressor resistor across both components. The result of such a design, as with nichrome wire, is to simply reduce the Q of the amplifier for every signal that exits the anode of the tube.

73,
Jack WB3U

259. Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970108232742.8779B-100000@prog1.caprica.com>
Source record: 98804
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Can ANYONE here give me a computer-designed plan to make a beam antenna that fits the following "rough-draft" parameters?

A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam antenna for 144.3 MHz, on a manually-swiveling rear-mount boom,(made of 2" OD Aluminum tubing), with a mono-filar element,(made of bare #6 solid copper wire, commonly used by electricians as ground wire for a building's main box), with insulating "spreaders",(made of either 1/2" PVC, fiberglass rods or wood dowels).

My idea is to mount the boom vertically on a universal joint, which itself is mounted atop a 10' mast,(5' of the mast actually being below ground level in concrete), and to use pullies and counter-weights with the non-conductive guy ropes to actually TILT the antenna at the moon,(using a boom-mounted 3X rifle scope to aim it), so by turning 2 lockable cranks I can track the movement of the moon manually anywhere in it's path anywhere within 60 degrees from plumb,(by "plumb" I mean an exactly vertical position). The mechanics of it are much the same as those of the older mobile cranes they used to use on rural construction sites.

BTW: I am not open to the idea of using a yagi, so please don't suggest it.

Please reply via both, the newsgroup and email.

Thank you.

260. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0901970006140001@port28.vcnet.com>
Source record: 98805

In article <5b20bi$4bc$1@nadine.teleport.com>, w7el@teleport.com (Roy Lewallen) wrote:

> In article <measures-0801970750250001@port14.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) wrote:
>
> >I do not recall where I read it, Roy, but is was a long time ago, perhaps
> >in high school chemistry class.
> >
> >I propose that someone conduct (no pun intended) a test on the
> >conductivity of silver-sulphide to see if this is the case.
> >Unfortunately, my wife's silver spoon collection was recently cleaned, so
> >I may be dead in the water. If anyone possesses a silver object that has
> >turned black from the formation of silver-sulphide, please measure the
> >resistance of the coating with an ohmeter, and report your findings.
> >
>
> This sure has all the characteristics of an urban legend. I've seen it
> quoted as fact many, many times, but have yet to find an authoritative
> source. Gary Coffman was the last person I saw quote it as fact, and he
> couldn't come up with a reference either. (I wonder how many other
> "well-known facts" floating around out there are in the same category. . .)
>
From my experiences with Gary Coffman, he does not proffer bovine feces or porcine shampoo (a.k.a. bs and hogwash). // What is an 'urban legend'?

> Now, armed with an ohmmeter, how do I measure the resistance of the coating
> without simultaneously measuring the resistance of the underlying silver?

Don't use test leads with sharp tips. IMO, it might be a good idea to clean the contact points of the test leads with fine steel wool to remove any oxide before you attempt the measurement.

> If there were a way, the next question is how to determine the resistivity
> of the material given the measured resistance, without knowing the
> thickness of the coating?

It seems to me that the basic question is: does silver-sulphide conduct electricity?

> And, how do I tell silver sulfide from silver oxide?
>
Silver oxide is not obvious. Silver-sulfide is black, and it is far more common, especially in environments that use (hydrogen-sulphide odorized) natural gas heating appliances.

--
--Rich-- ag6k, 805-386-3734

261. Re: 2meter ssb receiver, need help to build one.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970109181503.4596A-100000@supreme>
Source record: 98806

Timothy - I would be inclined to start with a receiver for a relatively low frequency (say 10-30 MHz) and then build a receiving converter for 2 metres, using the receiver as a tunable IF. As you will only be covering 1445.8-146 MHz (the satellite segment) you should be able to get a good tuning rate, dial resolution, etc. A rx I made for 20 metres used a NE602 mixer, a ladder crystal filter (from 9MHz CB xtals) a MC1350 IF amp, NE602 detector and LM386 audio amp. You would also need a MPF102 for the VFO and a few extra transistors for the s-meter and AGC.
I think I used a BF981 for the RF preamp.

For the 2m converter, you could use a NE602 or a SBL-1 (if you want better front-end performance) and of course an RF preamp (BF981 again) and xtal oscillator/multiplier chain.

73, Peter VK1PK

262. Re: Homebrew 12v rotator controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19970109121900.HAA06240@ladder01.news.aol.com>
Source record: 98807

In article <5avh14$38r@news.istar.ca>, jeffg@istar.ca (Jeff Groberman)
writes:

>but controlling the rotator and
>knowing exactly where it's facing is the trick. Does anyone have any
>ideas, or better yet a schematic or some idea where I can get my hands
>on a compatible (12v) controller?
>Jeff
>VE7CTD

HI jeff.

I'm shooting in the dark here but surely there is resistance of some form
in the rotator. As it turns the resistance goes up or down. Simply supply
voltage and monitor the rotator with a ua or ma meter.

I have a popular rotator schematic if you need to see one.
I could trace it and make it available on my BBS for you to download.

Keep in touch..

Carl N9EFJ

263. Re: Retail Sales of Tektronix 'scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Litco@webtrak.com
Message-ID: <5b1huv$14g@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 98808

cripps@netcom.com (Peter Cripps) wrote:

>In article <5b170p$fjf@mtinsc01-mgt.ops.worldnet.att.net>,
>Litco@webtrak.com wrote:

>>
>> I bought TDS210 from Brill Electronics (510 834 5888) for $946.00
>> Speak to Debbie Valin. Frankly I do not know if there is a differance
>> between TDS210 and TDS220. As with the previous post mine goes
>> easily past 200Mhz. There is the usual sampling noise which can
>> be drastically reduced by averaging. Also the setup recall is a
>> little inconvenient as it does not allow for measurement window
>> to automatically come up.These are really silly gripes if one
>> considers the price. With 1000mhz sampling and 5ns glitch capture
>> (much better than advertised) it is a great bargain.

>Hmmm, Tek says the 210 is 60 MHz and the 220 is 100 MHz. I decided that I
>wanted 100 MHz, even though it increases the cost by about 50%.

>But if yours goes up to 200 MHz anyway, I wonder if the only difference is
>that the 220 spec to 100 MHz is guaranteed and the 210 might or might not?
>Everything else is identical -- including of course the 1 GHz sampling
>rate.

>Peter

>--
>Peter Cripps Associates
>Technology Strategy and Product Development
>20 Carrera Court
>Redwood City, CA 94062
>415 364 4413 voice
>415 364 1353 fax

I decided to go with the TDS210 because the product differentiation
between TDS210 and TDS220 did not make sense to me.
Here are two scopes with identical front panels, identical specs
except for the bandwidth. The all important digitizer rate is the
same. The only difference must be then the analog front end.
But how much cost difference could there be between 60Mhz
and 100Mhz front end in terms of components? Practically none.
There would not be much sense in setting up two production
lines in this case. I assumed therefore that the differentiation
is made in final test. I further assumed that most sales will be
for rhe TDS210 because of the much lower price so there might
not be enough lower performance units to fill the 210 orders so

the chances were good that I would receive 220 marked as 210.
Pete

264. Re: Rad-hard circuit design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: jeroen@sp072.cern.ch
Message-ID: <E3qvE5.Aq5@news.cern.ch>
Source record: 98809

In article <5b0vjm$gkt@canyon.sr.hp.com>, Alan Bloom <alanb@sr.hp.com> wrote:
>[Article crossposted from rec.radio.amateur.space]
>[Author was Alan Bloom]
>[Posted on 8 Jan 1997 20:18:52 GMT]
>
>I'm working on one of the electronics modules for the Phase 3D satellite
>to be going up this Spring. Does anyone on the net have any experience
>in designing space-qualified circuitry? I have lots of circuit design
>experience but have never designed anything for space applications.
>
>What I need is practical advice on how radiation affects the design.

I can't be too specific, for lack of accurate data. Most semiconductors
appear to survive a few hundred Gray. Device failure seems depend on
how a device is used, rather than on its technology or size.

For bipolar transistors, the effect is a gradual decrease of beta.
In MOS devices, the threshold voltage changes. If your circuits are
designed so as to tolerate large variations of these parameters, you
should be OK.

ECL and I2L logic are particularly resistant (>1e4 Gy). TTL and LSTTL
fare nearly as good. The fast and advanced TTL families are much more
vulnerable and start to show failures from 10 Gy upwards. NMOS logic
seems to be the weakest, with failures showing up somewhat below 10 Gy.
(Ref: F. Wulf, 1992)

In my personal experience, opto-couplers are to be avoided, although
some makes are a little more durable than others.

Best regards,
Jeroen Belleman
Jeroen.Belleman@cern.ch

265. Mobile sets in rental cars

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: "Frank W. van Wensveen" <fvwensve@hvsag01.nl.lucent.com>
Message-ID: <32D50C90.75F0@hvsag01.nl.lucent.com>
Source record: 98810

*** Please CC to my Email address as well. Thanks! ***

Does anyone have a good idea on how to mount a mobile set in a company car or a rental car?

I used to drive my own car; an old clunker so drilling a hole in the dashboard was no problem at all. Now I drive a company car and (frequently) rental cars, and drilling holes for mounting brackets and such is no longer an option. I don't want to put the set in the clove compartment, because during sharp curves or emergency stops it tends to fall out. I've already lost a mobile telephone that way.

The set needs to be fixed firmly so that it won't move while driving around. It also needs to be easily accessible or at least clearly visible. I don't want to have to stick my head under the dashboard while driving.
That rules out the lower glove compartment, double sided tape or other adhesives, and anything that damages the car. (I can't simply drill a hole somewhere. If I do that, I'll be billed for repairs as soon as I have to turn in the car.)

Suggestions anyone?

--

73 PA3GMP (Frank W. van Wensveen)

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*** All standard disclaimers apply ***
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266. Re: 100watt dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: "Frank W. van Wensveen" <fvwensve@hvsag01.nl.lucent.com>
Message-ID: <32D50DC8.5EE7@hvsag01.nl.lucent.com>
Source record: 98811

Charles Mccurdy wrote:
>
> Hi can any one give me any info on how to make a 100 watt dummy load?
The easiest way I know is to get one of those new (well, relatively new) 50 ohms chip resistors. I've got a 150W resistor that cost me about DFl 80,-- (about 50 US $) when they were just introduced. The resistor itself looks like a 5x10 mm ceramic block with a small (2x2 mm) connector strip and a mounting plate. I've mounted that on an X-shaped heatsink that can get rid of 150W. A small piece of semi-rigid is soldered between the resistor and the connector.

The SWR is better than 1:1.05 from 0 to 430 MHz and better than 1:1.1 from 430 MHz to 1GHz.

--

73 Frank PA3GMP

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267. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: macino <macino@ibm.net>
Message-ID: <32D50C28.2121@ibm.net>
Source record: 98812
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

Arnoud van der Wel wrote:
>
> In article <32D00252.4C84@silcom.com>, you say...
> >
> >I have a Tektronix Type 551 oscilloscope from a yard sale...
> >
> >And it has a mighty weird 16-Pin power connector; it looks like a
> >rack-mount connector.
> >
> >The back of the oscilloscope is marked "Wired for 117V".
> >
> >Does anyone have any idea whether I can just apply 117V power to
> >some pins of this connector. And, if so, which pins it would be?
> >
> >Any help or related information would be much appreciated. Thanks!
> >
>
> Oh dear, this really is a pity as you need the power supply that goes with
> the 551. This is in a separate box and provides all the required regulated
> power busses.
>
> You need a 551 power supply. Power supplies for other 2-part Tek's (eg. 507,
> 517 or 555) will not fit.
>
> If you find the power supply, the connection 1:1 so it is easy to make a
> cable yourself.
>
> If you decide to build your own power supply, it will need to produce:
>
> about 4 different 6.3 VAC lines at a total of about 10 A (My guess)
>
> -150 V @ 100 mA
> +100 V @ 100 mA
> +225 V @ 200 mA
> +350 V @ 350 mA
> +500 V @ 50 mA
>
> The current ratings are approximate but they do indicate that it is probably
> non-trivial to build your own power supply. Also, they need to be well
> regulated, typical ripple specs on these busses are of the order of 5 or 10
> mV tt.
>

> If you need more info, talk to Stan Griffiths (w7ni@teleport.com) who knows
> everything about old Tek scopes, Or EJ Holleman
> (e.j.holleman@student.utwente.nl) who has a 551 and is probably willing to
> give you a connector pinout if you need one.
>
> Too bad about your scope, for it is truly one of the great classics when
> complete and working.
>
> On the subject of classic scopes, you are welcome to have a look at the
> Museum of Tektronix scopes, which can be found at:
>
> http://cal003109.student.utwente.nl/~wel/tek.htm
>
> And should you get the connector pinout, it would be great if you would send
> me a
> copy so I can include it in the museum on the technical info page.
>
> Regards,
>
> Arnoud.
>
> p.s your mailing address does not seem to work.

Hi,

Try giving Pembleton Electronics in Fort Wayne area code 219
a call. He had/has tons of old Textronics stuff around. He's
right across the street from the old Magnavox factory and
surpluses a lot of their stuff, and others as well. Not too
big in computers, but about 30,000 sq ft. Closest thing to the
Chicago - Michigan Ave joints of old. Any grins out there?

73 Jim W9LZ

268. Re: Coherer...What is it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: "Frank W. van Wensveen" <fvwensve@hvsag01.nl.lucent.com>
Message-ID: <32D5103B.1969@hvsag01.nl.lucent.com>
Source record: 98813

pfriedr wrote:

> I wonder if one of the old timers out there could tell me something about
> "Coherers"---what were they exactly and how did they work?

AFAIK, a coherer was a glass tube with two electrodes and filled with a granulate conductor or semi-conductor. (Iron filings?) An HF signal would make the granulate stick together somehow, which resulted in a significant lowering of resistance between the two electrodes. (Sorry if this is a little vague but so is my recollection of these old things.)

> I get the impression that they functioned as detectors,
In the sense that they could detect an HF signal, but AFAIK they didn't rectify it.

> but I'm puzzled about
> references to "tappers" and other key-wound mechanisms designed to > agitate them.
The HF signal triggered an (increase of) electric current in the circuit that the coherer was part of. Because the granulate remained stuck together a mechanical means of separating them was needed. Therefore, the current (typically a received morse code signal) triggered a solenoid that activated a little hammer, that tapped the glass tube to shake loose the granulate.

Those were the days...

73 Frank PA3GMP

--

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269. Re: What is packet & amateur radio. Help me

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <32D50DA9.14D2@ix.netcom.com>
Source record: 98814
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

waheeb@scscomm.com wrote:
>
> If this post has been sent to wrong place I am very sorry
>
> Could anyone explain to me what is packet radio, amateur radio and the
> difference between them.
>
> What sort of equipment do I need
>
> Does it work worldwide or do I have to be within a distance of (say a tower
> or station)
>
> Anything extra would be very valuable
>
> pls drop me email direct
> Thanks in advance
>
> waheeb

Waheeb. For lots of information on Packet and the digital modes -- go to
the DX Reference page below.

For What is Amateur Radio and how to become one go to the INDEX Page,
then ARRL Home pages. Tons of info for u there. The ARRL will send u a
packet of info upon request. See how to get started in Amateur Radio on
the ARRL Pages.

Good luck
Rod in San Diego
--
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V

270. Re: 20, 30 or 40 M home brew reciever/transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: "Frank W. van Wensveen" <fvwensve@hvsag01.nl.lucent.com>
Message-ID: <32D50EA8.2AD8@hvsag01.nl.lucent.com>
Source record: 98815

Bill Meara wrote:

> Virgil: If I were you I'd start out by building a simple monoband
> transmitter. Tackle a receiver or transceiver later.
Even better, start with a receiver. If you've never built an HF project before, it's much better to experiment with a receiver to 'get the feel' of HF.

--

Regards,
Frank van Wensveen

==========
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271. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: rickle@tek.com
Message-ID: <rickle.80.001A8507@tek.com>
Source record: 98816
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

In article <32D00252.4C84@silcom.com> Robert Bernstein <rdb@silcom.com> writes:
>From: Robert Bernstein <rdb@silcom.com>
>Subject: Tektronix O'scope Power Connector Info Help
>Date: Sun, 05 Jan 1997 11:34:42 -0800

>I have a Tektronix Type 551 oscilloscope from a yard sale...

>And it has a mighty weird 16-Pin power connector; it looks like a
>rack-mount connector.

>The back of the oscilloscope is marked "Wired for 117V".

>Does anyone have any idea whether I can just apply 117V power to
>some pins of this connector. And, if so, which pins it would be?

>Any help or related information would be much appreciated. Thanks!

>Robert Bernstein
>rdb@silcom.com

I just happened to have an old 1967 catalog at my desk and was amused to see a picture of your old 551 sitting next to its enormous power supply. The supply was two thirds the size of the scope and weighed in at 43.5 lbs. I know nothing about these old scopes other than the fact that they were the best there was at the time.

272. Re: vhf dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32d50ade.307606631@news.santafe.edu>
Source record: 98817

Charles.Mccurdy@1492.conchbbs.com (Charles Mccurdy) wrote:

>Hi all i got a lote of replys about a vhf dummy load and i want to ask some of
>you would a 1watt Metal-oxide 5% work radio shack sells them thay carry the 10
>ohms,100 ohms,1k ohms.

>Or if not how about a 8 ohm non-inductive resistor 5% 20 watts

The non-inductive 8 ohms are just specially wound wire wound resistors
and won't be any good at VHF. The 1 W carbon film resistors are your
best bet if you are constrained to what you can buy at Radio Shack.

A load consisting of twenty 1000 ohm resistors in parallel will be
usable, if you make it very compact. But, it will not be perfect. I
once built a load with thirty 1500 ohm 2 watt resistors. It was
somewhat reactive at 50 MHz, but still adequate for low power
transmitter testing. I didn't check it at higher frequencies.

73 de K9GXC, Jim

Surplus Sales of Nebraska (in Omaha, I don't have the phone number
handy) has 50 ohm Carborundum resitors which would be better, but
slightly more expensive.

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

273. homebrew security system using toy walkie-talkies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: parnass@marconi.ih.lucent.com
Message-ID: <5b34v3$8op@ssbunews.ih.lucent.com>
Source record: 98818
Cross-posted to: rec.radio.scanner,alt.radio.scanner,rec.radio.amateur.homebrew

I am posting this for Bret Johnson, who does not have netnews access.

Bret constructed an interesting "border patrol" security system
by modifying children's walkie talkies for use with sensors.

He is seeking circuitry information on the Radio Shack #60-4024
Space Patrol walkie talkies.

If you respond here, Bret won't see your posting, so be sure
to mail him a copy of your response at:

johnsonb@laugate1.lau.aetc.af.mil

Bret describes his system below:

| From: <johnsonb@laugate1.lau.aetc.af.mil> (Bret Johnson)
| Status: R
|
| .... Since my only access to a computer is at work,
| I do not have the ability to interact
| with Newsgroups directly (parts to the program that allow that are
| intentionally deleted from our computers). I personally live
| in a bad area -- on the Mexican border -- which is frequented
| by thieves and transients and use a baby room monitor
| transmiter (housed in an outside electrical
| fuse box) to listen for unusual noises (breaking glass,
| human foot steps at 3:00 a.m., etc.) while I am at home.
| Works well with the exception of
| electrolytic capacitors breaking down (maybe the heat?) prematurely.
|
| I would really appreciate some help on another project of mine,
| even if you could act as an "intermediate" to post it
| to a usenet and forward replies to me (I know -- that
| could be asking a lot!). I have various sensors
| available to place on the "Mexican trails" leading towards
| my home but need a wireless reporting proceedure to alert
| me in advance of the possibility of an "undesireable" visit.
|
| Radio Shack #60-4024 Space Patrol (children's)
| Walkie Talkies fit the bill nicely due to size, power requirements, and
| above all -- cost per unit. Replacing the "rubber-duckie"
| antenna with an appropriate length long wire (and jumpering
| the internal loading coil) solves the range problem.
| Cutting the negative battery cable provides a
| nice place to tie relay contacts from my sensors to (the Push-To-Talk

| button can be locked down in a constant transmit mode on this model)
| and serves to enable a signal to be transmitted only when a
| sensor is tripped.
|
| A slide switch is installed to provide a constant "Morse Code
| tone" upon power connection. (This model is equipped with an internal
| audio oscillator and a Code Key button.) The wires to the
| speaker of the "reporting" radios are cut to prevent
| sidetone and provide a "silent" (from the intruder's
| point-of-view, anyway) alarm. Noisy alarms tend to just get stolen,
| especially if the area is lit well enough for a hasty search.
|
| The problem I have is distinguishing which sensor has
| been tripped by the audio tone (sent by its accompanying
| transmitter). Altering the audio oscillator tone for each
| transmitter and just remembering which tone is
| transmitted from where seems to be the best approach.
|
| Can someone help me locate which parts need to be swapped out
| to alter the tone of the internal code-key audio oscillator?
| I've tried Radio Shack and Tandy National Parts
| but no service manual or schematics seem to exist.
| Thank you in advance.
|
| -Bret
| (Radio Technician in the Armed Services)
| johnsonb@laugate1.lau.aetc.af.mil
--
==========
Copyright 1997, Bob Parnass, AJ9S parnass@bell-labs.com

Locate & identify transmitters in your area with RadioMap(tm)

274. MFJ-259 Mod - MORE POWER!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: grhosler1@mmm.com
Message-ID: <5b35pg$sod@dawn.mmm.com>
Source record: 98819
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have been using an MFJ-259 for the past couple of years and love it. One area where it falls short is output power. I found this when I tried to set up a Mosley CL-33 beam (capacitive coupling feed). The analyzer had me going in circles till I finally just put some RF to the antenna and found that it was fine. The MFJ-259 simply did not have enough output to couple properly to the CL-33. Last night I built some antenna traps and used the MFJ-259 to resonate them. I later placed the traps in PVC to protect them from the weather. I tryed to dip them with the 259 to verify that the resonant frequency had not changed, but the analyzer didn't have enough poop to adequately couple to the trap inside the PVC. I dug out an old Knight brand Grid Dip Meter and it worked (with the usual GDO characteristics). I'm sure that I'm not the only one who has experienced this problem with the MFJ-259. Has anyone out there modified their 259 to increase the output? Lets face it, it needs MORE POWER,.....ARR, ARR, ARR! Thanks for taking the time to read this.

73 & GUD DX
de KN0Z Gary

Opinions expressed herein are my own and may not represent those of my employer.

275. Re: Building a phone-patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109082255.8779G-100000@prog1.caprica.com>
Source record: 98820

On 8 Jan 1997, Vincebucc wrote:

>
> I'm looking for circuit schematic that will allow coupling the audio
> generated by a PC program to the telco line.
>
> I want to eliminate the relay operator when calling a deaf person who
> uses a text telephone and to use the HamComm program to generate the
> required tones.

> QRV @ 7085kHz (FSK) Baudot RTTY

I'm sure you heard of an invention called a "modem"! And most modern 28800 and even 14400 modems have more than one FSK standard built-in these days. In fact, my 15 year old Lynx 2400 SmartModem had them built in!

276. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0901970926470001@port2.vcnet.com>
Source record: 98821

In article <5aur36$c2c$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) wrote:

> In message <measures-0501970116000001@port78.vcnet.com> -
> measures@mail.vcnet.com (R. L. Measures)Sun, 05 Jan 1997 01:16:00 -0800
> writes:
> :>
> :>
> :>**Virtually all commercial amplifiers use a rheostat or a Variac to
> :>continuously adjust filament voltage. If a commercial amplifier
> :>manufacturer produced an amplifier without a means of continuously
> :>adjusting filament voltage, it is unlikely that any knowledgeable
:>engineer would recommend purchasing such an amplifier.
> :>
>
> I have worked with high power (up to 250 KW) commercial transmitters
> for move than 25 years and have ***NEVER*** seen a rheostat used in
> a single one. In only one case did the transmitter use a Variac and
> that transmitter had a reputation for eating the Variac's brushes.
>
In the Collins Radio 30S-1 amplifier, R230, a 35 ohm rheostat is used to continuously adjust the filament voltage. I have never heard of R230 failing in a 30S-1. As I recall, the Collins KWS-1 and 208-U10 have continuously adjustable filament voltage.

I asked Terry, W6TG, whether or not the FM and AM broadcast amplifiers he services. have a means of continuously adjusting filament voltage. He said that all of them do. The typical range of adjustment is around plus and minus 5%.

--
--Rich-- ag6k, 805-386-3734

277. Timer/receiver combo unit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: "Michael T." <michaelt@emtel.com>
Message-ID: <32D521F6.152@emtel.com>
Source record: 98822
Cross-posted to: rec.radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Happy New Year, all.

I'd like to be able to record (unattended) my favorite radio programs and features for later listening. Something like a VCR with multi-event programming would do the job nicely. Some have suggested using a VCR and a tuner connected to the audio input, but that would require going back and retuning the receiver to different stations between events, which is not possible in this case.

Any ideas? Thank you in advance.
Michael

michaelt@emtel.com

278. Re: help with MC1350

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: bspeed@cyberramp.net
Message-ID: <5b1r18$h79$1@newshost.cyberramp.net>
Source record: 98823

Zack Clobes <zclobes@southwind.net> wrote:

>I'm working on a 20M SSB receiver and I'm working on the IF amplifier.
>I chose to use the mc1350 because of it's simplicity. I built a circuit
>that used a capacitor coupling on the input and the output came out on
>pin 1, through a xformer, and to the +vcc. I was unable to get the
>amplifier to amplify so I ended up tearing it down and rebuilding a
>simpler circuit. The new circuit is a 50ohm source, coupled directly
>into the chip with 2 caps. The output is simply a 1K resistor from pin
>1 to ground.

A 1K output load is fine for this device. 1K to 2K will work.

It should work well with a transformer (double ended) output, or with
a single inductor, instead of the resistor. The Xl of the inductor
should be 1K to 2K at your frequency. Likewise, this is the
transformed impedance of thge primary of the transformer design.

The xformer design will give better performance. 3db more power.
improved odd harmonics.

The input may be cap coupled as you did, but did you decouple the
unused input? The input likes to be matched, and for a SSB IF, it is a
good idea to provide a little extra bandwidht-limiting by matching
with a tuned ckt of Q = 5 to 20 or....

What are you going to do with the AGC port?

Also, if you are breadboarding at this stage, may I reccomend a piece
of brass shim stock across the IC to isolate the input/ouptut. The
1350 will oscillate from feedback....

...Bryan
a
>Motorola's web page has been of little help with this chip. I assume
>that it is about outdated and they have very little info covering the
>specs. Any help would be appriciated.
Yea, it's old like 20years, but it is still made and it's cheap,
compared to some other IF/AGC IC's.
The databook is good, and the 1349 is similar to the 1350

279. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <32D52BF1.694B@arrl.org>
Source record: 98824

Joe Subich wrote:
>
> In message <32C3C9CA.2572@star.enet.dec.com> - "L.Mark Pilant"
> <pilant@star.enet.dec.com>Fri, 27 Dec 1996 08:06:19 -0500 writes:
> :>
> :>
> :>If anyone wants to ask me questions about this software, feel free to
> :>send me E-mail: pilant@seesaw.enet.dec.com.
> :>
> :>I apologize for being so long winded, but there are probably some folks
> :>that would benefit from these CDs; crude as they are (at the moment).
> :>
>
> In this day and age why would anyone publish what is exxentially a
> database or infromation retrieval product that *required* its users
> to use a specific operating environment? Particularly, when there are
> at least three four other operating environments (DOS, Macintosh, Unix,
> OS/2) in use among the product's target audience?

I've heard from several Mac users who are, to put it mildly, highly incensed that the QST View product is Windows-only. And, of course, there are the comments that havwe appeared on this newsgroup.

The fact is, if we had decided to do this product only if we could make it multi-platform, the product wouldn't exist at all. The only way we were able to do this economically was by means of a good deal with a third-party shop that does the scanning and the software; "normal" commercial providers of these kinds of services are vastly more expensive. The people we are working with supply only Windows software, so that's what's available.

The basic problem, which recurs for just about any software product we produce, is that the number of Mac users who might buy an ARRL product is miniscule. That's not an assumption; we know it from market research. To offer a custom software product that supports both Windows and Mac platforms would require Mac development costs that we could never recover from sales to Mac users. In effect, the pricing would have to be such that the Windows users would be subsidizing the Mac users, and I hardly think that's fair. Now, if we were selling hundreds of thousands of each product, things would be different. But we're not, and comparing ARRL's electronic products to those that sell in large quantities is a poor comparison.

Of course, if we could find low-cost, off-the-shelf multi-platform products that would provide the capabilities we need, we'd use them.

We've not found any such as yet. (We're always interested in hearing about any you know of.)

As I've said to several Mac users, if I had *my* way we'd include Linux X Window applications on the CD-ROMs. But that's not going to happen any time soon for the same reason.

> Everything that is done with the Windows database could have been done
> just as easily, perhaps more easily, with HTML coding ... then the CD
> ROMS would have been operating system independent. The user would only
> need to furnish an appropriate HTML engine (aka Web Browser) for his
> particular system.

Ummm... how does one implement a searchable database in HTML? You need an HTTP server with CGI and a database application. And of course, that software would have to be multi-platform.

> HTML retrieval and display systems are here, more importantly they will
> be around for quite some time ... and are platform independent.
>
> As it is, I'm waiting on the OS/2 version of the QST CDROMS for my
> personal system and the Macintosh version for my wife's system.

I'm afraid you'll have a long wait. I'll point out one thing, though. The image files on the QST View CD-ROMs are standard TIFF files (using CCITT Group 3 compression). And the database for each set is contained in a comma-delimited ASCII file on the first disk of the set. (The file contains a few SQL engine commands you can ignore.) If some enterprising Mac (or OS/2, or *nix, or...) software type wants to write an application for his/her favorite platform that will search and display the files, I'd be delighted. Heck, I'll gladly make it available from ARRL's Web site. We just can't afford to *pay* anyone to do it.

--
Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

280. Re: Need help with HW-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: "Tom V. Pfaffenbach" <tvpfaffe@mail.delcoelect.com>
Message-ID: <32D53B7D.26E8@mail.delcoelect.com>
Source record: 98825

WB3U wrote:
>
> "Gary Ritter" <Highfrequency@msn.com> wrote:
>
> >The major problem seems on 20M...Sidebands are out of
> >whack...normally when tuning in a signal,I have the same rig
> >but a newer version,sigs are tight and narrow but on this one
> >is very wide and can tune strong sigs. but weaker sigs are
> >tough to capture...by the time you tune it in the signal is
> >very weak.
>
> Sounds like the USB BFO may not be at the right frequency. If
> it's too far outside the passband of the filter, "zero beat"
> will result in the attenuation you've described.
>
> 73 & GL,
> Jack WB3U
Check the plate resistors on the 12AU7 sideband select BFO. They should
both be 33,000 ohms. Often one or both will be much higher than that.
They ran pretty close to their full 1/2 watt dissipation rating and many
brands aged badly, climbing very high in resistance over the years.
The circuit works pretty well up to 100K, but if they go much higher,
the amplitude of the oscillator output is too small for the ring
modulator and detector to work correctly. Then, you have a terrible
time with Rx tuning, and low transmitter drive/power output.

73 de K9JDU

281. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan9.181011.4098@ke4zv.atl.ga.us>
Source record: 98826

In article <19961228173700.MAA14881@ladder01.news.aol.com> w8jitom@aol.com writes:
>Hi Dave and Gary,
>
>In article <1996Dec28.060742.3631@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us
>(Gary Coffman) writes:
>
>>A choke of several millihenries, or a high value resistor, either of
>>which have a high impedance at HF compared to the 50 ohm line they
>>are shunting, will drain static, a DC phenomenon, while being virtually
>>invisible to the RF system. The choke, or resistor, should have no
>>effect on transmission or reception.
>
>A several millihenry choke may not have a high impedance at HF. It likely
>will have series resonances that render it useless as a choke on some HF
>frequencies. A 100 microhenry choke would be more than enough impedance,
>about 1000 ohms on 160, and much less prone to unwanted resonances. Use a
>choke of 50 to 100 microhenries.

This is a good point. Any choke you use should be chosen the same way
you'd choose a plate choke for an amp, IE there shouldn't be any self-
resonances at frequencies of interest. I've successfully used a 2.5 mH
choke on a 160m long wire, but that probably isn't a good idea on the
higher bands. A resistor suffices, and avoids most of this sort of problem.

>>> Thanks for the info on this issue. I imagine the series capacitor will
>>>work fine on xmit, but are there higher insertion losses on recv from
>using
>>>this style of suppressor?
>>
>>No. The value of the capacitor is sufficient to present a negligible
>>impedance to HF RF. If this weren't so, it would affect transmit.
>>Most HF receivers are voltage driven, not power driven, and aren't
>>fussy about the match presented to them.
>
>Most HF receivers are power driven. They have a finite receive input
>impedance, and it is almost always between 20 and 100 ohms in most rigs.
>That requires power, not voltage alone. To require "voltage", the input
>impedance woiuld be near infinite.

Well, I haven't measured the input impedance of many HF receivers, but I
get the impression that they don't much care about a match. What I meant
by voltage driven is in the same sense that a VOM is voltage driven.
Of course it takes power to swing the pointer, but we usually don't think
of it that way. With modern devices, HF receivers aren't internal noise
limited, they are atmospheric noise limited, so they don't need a match

to achieve best MDS.

>If the capacitor passes HF RF, then I suspect it is almost useless for
>lightning. It would only be effective at VLF frequencies and lower as an
>isolating device. Lightning and nearby stroke induced EMF has a rise time
>that is very fast, so the cap looks like it is not even there.

No. It is precisely because the risetime is so fast that the capacitor
works. It has to have a time constant such that its dV/dt charging slope
is 350volts/2nS or more. That allows the gas tube time to fire before the
surge gets clamped by the receiver input shunt impedance, IE a cavity or
helical filter with an input loop. To an RMS HF signal, it looks like
a low series impedance, but to the very fast pulse, the charging time
is sufficient to provide the needed slope. (To protect equipment operating
above 500 MHz we have to do something different. In that case, we use a
line section to give us the phase delay we want to allow the gas tube to
see the transient at least 2nS before the equipment does.)

>>On receive, the *receiver* is the load presented to the line, not the
>>antenna. I was talking specifically about cavity resonators where the
>>input loop is DC shorted. However, some receivers use a shunt coil
>>in their inputs, and that would have a similar, though not so pronounced,
>>effect.
>
>Protecting an HF receiver, via a surge suppressor that will carry
>kilowatts of RF, is wishful thinking. As little as 50 volts of surge for a
>few microseconds can ruin a receiver's front end. It's best to disconnect
>antenna and main connections when the equipment is not in use. A simple T
>network antenna tuner or high pass or band pass filter would do much more
>than any of these gas tube gimmicks for protecting a receiver. A pair of
>clamp diodes and a fuse link, plus a hardened front end would be better
>than transmit type surge suppressors.

Not true. A properly designed and installed gas tube suppressor will
protect a receiver. I've taken the direct strikes to prove it, clients
of mine have taken the direct strikes to prove it, and I've proved it
on the lightning simulator too. The reason that it works is that the
suppressor will carry kilowatts of RMS RF, but it clamps in under 2nS
on a transient which exceeds its firing voltage. When it clamps, it
becomes a *very* low shunt impedance (milliohms), and won't let enough
energy past to damage the receiver components. A 350 volt 2nS pulse won't
damage a HF receiver. The junctions can avalanche that long without
permanent damage. After that initial 2nS, voltage is clamped to a
very low value for the duration of the strike pulse, so very little
current can flow past the gas shunt on into the equipment. But we
need that capacitor in there to let the gas tube see the firing
potential before the equipment can shunt it.

You can buy gas tube units with firing potentials as low as 18 volts.
In a receive-only situation, that's an even better choice than using
a transmit rated suppressor. But the transmit rated suppressor *will*
do the job if selected and installed properly. In transceive installations,

there is no choice, you have to use the transmit rated suppressor. Even with a separate receiver and transmitter, TRed to the same antenna, the transmit rated suppressor is almost always the better choice. You want the suppressor as close to the entrance to the facility as possible, IE *in* the ground window for the station, and that almost always means it has to go between the TR switch and the antenna, so it has to handle transmission as well as reception. An exception would be when you have a mast mounted preamp and TR right at the antenna. Then you can protect the RO line separately from the Tx line. (Mast mount preamps usually should be considered sacrificial, protecting them is a difficult job at best, though it *can* be done.)

Another thing of note is that your transmitter *must* provide a means to automatically trip off if it is presented with a virtual short on its output. That's because the gas tube will continue to conduct as long as there is current available after it fires. So if you take a strike while transmitting, you have to shut the transmitter down for at least a few milliseconds to allow the gas tube to quench after the strike pulse is over. And power should be limited for a few seconds after the strike to allow the gas tube to return to its rated firing potential (a hot tube has a lower firing potential than a cold one because it is still partially ionized, so it may fire again at normal operating voltages unless it is allowed time to recover).

One clever way to implement this is to *watch* the gas tube with an optical sensor separated from the tube by a good length of fiber optic cable (if the sensor is too near, transients will be induced in it, corrupting its signal). When the glow of firing is detected, trip off the transmitter for a timed delay and then ramp power back up slowly over a period of a few seconds. Of course a manual reset is almost always slow enough to allow the tube to recover.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

282. Re: Timer/receiver combo unit?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: "Robert R. Koblish" <n3hat@erols.com>
Message-ID: <32D5642A.C22@erols.com>
Source record: 98827
Cross-posted to: rec.radio,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Michael T. wrote:

> I'd like to be able to record (unattended) my favorite radio programs
> and features for later listening. Something like a VCR with multi-event
> programming would do the job nicely.

Me, too!

I bought a Reveal FM radio board for the PC (about $40 at Best Buy), with the idea of being able to program it as you suggest.

<flame> I got disgusted at the dain-bramaged software that came with it (only 10 presets, hard to set with fixed scroll rate, roundoff errors in freq display, . . .). I'd have kept it if I could have gotten specs for how to control it -- I'd have written a control program myself. But their "24/7" tech support line put me on permahold so I gave up and returned it. </flame> I could always buy another one if I decide to try it again someday. It seemed like a well-build piece of hardware.

Seems like you could build an integrated control out of an old XT with the FM radio card in it and an IR emitter to drive the VCR. If the VCR won't record sound without a video signal to sync to, put a CGA card in the PC; you could put a timestamp on the video to tell you when the audio was sent, freq, station/program ID, etc., in nice bold characters that would show up in fast forward / rewind.

If your existing FM receiver is IR controllable, then that opens other possibilities.

I agree, this is a product that is missing from the marketplace. Probably wouldn't be terribly hard for the VCR makers to implement, either; they already have the front end, what's a couple more chips for the FM broadcast IF and detector? They can sell an entire Walkman for $cheap. . . It'd be neat: an 8-hour stereo audio recorder! There's not much on the tube worth watching, anyway.

We can't be the only two who've felt this need. Ideas, anyone?

-rrk

283. Re: Building a phone-patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: "Robert R. Koblish" <n3hat@erols.com>
Message-ID: <32D55BC5.3A75@erols.com>
Source record: 98828

Teddy Bear wrote:
>
> On 8 Jan 1997, Vincebucc wrote:
>
> >
> > I'm looking for circuit schematic that will allow coupling the audio
> > generated by a PC program to the telco line.
> >
> > I want to eliminate the relay operator when calling a deaf person who
> > uses a text telephone and to use the HamComm program to generate the
> > required tones.
>
> > QRV @ 7085kHz (FSK) Baudot RTTY
>
> I'm sure you heard of an invention called a "modem"! And most modern
> 28800 and even 14400 modems have more than one FSK standard built-in these
> days. In fact, my 15 year old Lynx 2400 SmartModem had them built in!

Teddybear, the modem used by TDDs differs from the standards that we use
for 300, 1200, and up. It remains that way because of grandfathering
issues; there is a large installed base of user-owned equipment.

Care to write the DSP code to do it on a standard modem platform??

-rrk

284. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Jim <nospam@the.net>
Message-ID: <32D55669.41C6@the.net>
Source record: 98829
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hi Teddy,

Some thoughts on this interspersed with your text.

Teddy Bear wrote:
>
> Can ANYONE here give me a computer-designed plan to make a beam antenna that
> fits the following "rough-draft" parameters?
>
> A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam
> antenna for 144.3 MHz,

I'm not sure what you mean by log-spaced for a helical antenna (helix).
The helix is a spiral and is defined by circumference and pitch in
degrees. Log spaced relly makes no sense here. It does for yagis and
log-periodics and others, but not for helicals.

Also thirty turns for the 2m band is going to give you one ENORMOUS
antenna. Probably something on the order of 50 to 60 feet. Nice gain it
would have though, around 20.5 dB.

> on a manually-swiveling rear-mount boom,(made of
> 2" OD Aluminum tubing),

Rear mounting of a 60 foot boom? not likely. And the boom for a helix
has to be non-conducting and preferably low-loss fi it is a dielectric.
The interior of a helix supports a traveling wave and therefore needs to
be free of obstructions to that wave.

> with a mono-filar element,(made of bare #6 solid
> copper wire, commonly used by electricians as ground wire for a building's
> main box), with insulating "spreaders",(made of either 1/2" PVC, fiberglass
> rods or wood dowels).

Well these parts are OK.

>
> My idea is to mount the boom vertically on a universal joint, which
> itself is mounted atop a 10' mast,(5' of the mast actually being below
> ground level in concrete), and to use pullies and counter-weights with the
> non-conductive guy ropes to actually TILT the antenna at the moon,(using

Hummm, more like bend the boom of the antenna. Even with the u-joint
youve set up quite a cantelver and that is going to bend BIG-TIME. I'm
not sure what a bent boom helix is going to do. This proposal seems to
be getting further and further from realistic.

> a boom-mounted 3X rifle scope to aim it), so by turning 2 lockable cranks
> I can track the movement of the moon manually anywhere in it's path
> anywhere within 60 degrees from plumb,(by "plumb" I mean an exactly
> vertical position).

Ummm, yeah.

> The mechanics of it are much the same as those of the
> older mobile cranes they used to use on rural construction sites.
>
> BTW: I am not open to the idea of using a yagi, so please don't suggest it.
>
> Please reply via both, the newsgroup and email.
>
> Thank you.

Well I can see some advantages to a helix over yagis, and I'm considering one myself for 2m, but I don't see why you don't want them for EME that's your call.

But you can get the same amount of gain as a single long helix by stracking several shorter ones in a box pattern. Four 8 - 10 turn helicals spaced approx 1 wavelength apart would be similar to one single 30 turn as far as gain. The booms would then be more managable at 15 - 18 feet. The groundplane screen however would be something like 15 feet square.

Maybe if we started with what your goals are, then we could find something more realistic to do. But if you insist on doing it with your rough specs tehn I can supply the relative cookbook plans. The helix is not all that complicated to need to go to a computer design.

Jim

--
My from line is not machine readable my real e-mail address is:
jimf<atsign>corp.sgi.com Do not hit reply to send back to me.

Sending unsolicited e-mails to my address that are not of a
previously established personal nature nor directly related
to my business will be considered a request of my proof reading
services. My rates are $50 per word and punctuation. Sending
to my address is considered acceptance of these terms.

285. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan9.190511.4477@ke4zv.atl.ga.us>
Source record: 98830

In article <measures-04019709003300001@port10.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>In article <19970102213900.QAA23851@ladder01.news.aol.com>,
>w8jitom@aol.com wrote:
>...snip...
>> Arguing optimum ESD protection in unknown systems is like arguing the
>> number of angels on the head of a pin. There are too many variables.
>>
>> The only safe thing is to bleed off any static charge during
>> non-threatning weather, and unhook everything during threatning weather.
>> Anything else is a wild guess as to how much it helps.
>>
>Amen to that, Tom. I would toss the coax out the window onto the ground
>at least ten feet from the house. Lightning travels on the *outside* of
>coax. Since a lightning strike typically has many megavolts and many
>kiloamperes, simply unplugging the coax may not be safe if the coax is
>left inside the house.

Lightning energy travels on the outside and *inside* of the coax.
The part flowing on the outside can be dealt with by direct bonding
to the ground window, but the part flowing on the inside requires
a suppressor at the ground window.

If you don't want to do it right, however, getting the coax out of
the house is a good suggestion. Individual step leaders can traverse
150 feet of air in bringing the lightning energy down from the cloud,
so a few inches separation in the shack isn't going to do much good.
If you don't snub the energy properly at the shack entrance, you've
just invited Reddy Megavolt into your home, and he can be quite the
vandal.

Depending on unhooking the coax and tossing it into the yard often
isn't practical, however. The most intense strike I've taken here
happened on a grey November day with a light drizzle falling. There
was no prior indication of thunderstorm activity, no thunder heard,
and no warnings on the Wx radio, just a light drizzle, then <click>
KABOOOOOM!!!

(if you hear the "click" just prior to the earthshattering boom and
blinding flash, you're too damn close. The "click" is caused by direct
induction into the auditory nerves from the strike current, and means
you are very deep into the most intense part of the field.)

I don't think most people would unhook their equipment every time a
light drizzle was falling. But as my experience shows, you'd have to
if you depended on this method for protection.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

286. Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5b3lsnpa1@nadine.teleport.com>
Source record: 98831

In article <measures-0901970006140001@port28.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) wrote:

>. . .
> // What is an 'urban legend'?
>. . .

[This is getting off the topic of amplifiers, so I changed the thread
name.]

An "urban legend" is a story which is widely told and believed, and is passed along from person to person, but for which the facts can't be verified. When an attempt is made to trace the origin of such a story, each person seems just one or two links away from the source. For example, each person claims (and believes) it happened to a person known to a friend, but when the friend is asked, it seems to have happened to a friend or acquaintance of that person, etc. At least a couple of books have been written on the topic in the last ten years or so -- perhaps someone can point us to a reference. (Or is that an urban legend, too. . .)

I consider the "fact" that silver sulfide, oxide or other salts are good conductors to be an urban legend. All attempts I've made to find the source have resulted in "I heard it from. . ." but never a pointer to an authoritative source.

>> Now, armed with an ohmmeter, how do I measure the resistance of the
coating
>> without simultaneously measuring the resistance of the underlying
silver?
>
>Don't use test leads with sharp tips. IMO, it might be a good idea to
>clean the contact points of the test leads with fine steel wool to remove
>any oxide before you attempt the measurement.

>> If there were a way, the next question is how to determine the
resistivity
>> of the material given the measured resistance, without knowing the
>> thickness of the coating?
>
>It seems to me that the basic question is: does silver-sulphide conduct
>electricity?

I'm really missing out here. Suppose I took my black spoon, used some cleaned, dull-tipped probes, put them on the spoon and measured 200 ohms. What's the resistivity of the coating? Of course, if the silver sulfide is a good insulator, I would read an infinite resistance. But the basic

question isn't whether it's an insulator or conductor. It's whether it's a very good, good, poor, or lousy conductor, i.e. what its resistivity is.

>> And, how do I tell silver sulfide from silver oxide?
>>
>Silver oxide is not obvious. Silver-sulfide is black, and it is far more
>common, especially in environments that use (hydrogen-sulphide odorized)
>natural gas heating appliances.

Roy Lewallen, W7EL

287. Re: Building a phone-patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109115047.8779N-100000@prog1.caprica.com>
Source record: 98832

On Thu, 9 Jan 1997, Robert R. Koblish wrote:

> > I'm sure you heard of an invention called a "modem"! And most modern
> > 28800 and even 14400 modems have more than one FSK standard built-in these
> > days. In fact, my 15 year old Lynx 2400 SmartModem had them built in!
>
> Teddybear, the modem used by TDDs differs from the standards that we use
> for 300, 1200, and up. It remains that way because of grandfathering
> issues; there is a large installed base of user-owned equipment.
>
> Care to write the DSP code to do it on a standard modem platform??

Maybe you weren't paying attention. They CAN do TDD! Maybe you don't have the software for it, maybe you didn't read your modem manual thoroughly or maybe you don't know what standards TDD's use? I'm SURE that most of these name-brand fancy-pants modems have them, becasue even my cheapo $87 (tax included) Best Data model 2834F has the following 4 standards in it of the 6 standards currently installed in many TDD's:

Bell 103 FSK
Bell 212A DBSK
V.21 FSK
V.23 FSK

All it needs is software that can access these standards. And none of that's not including the 9 different FAX standards my 2834F does:

EIA/TIA 578 Class I
EIA Class II
Group III
ITU T.3
ITU T.4
ITU V.17
ITU V.21
ITU V.27ter
ITU V.29

It also does V.34, V.FC, V.32, V.32bis and V.22 Data Standards plus the 4 Standards used by TDD which can also be used for Data connections. It has everything except HST,(which nobody uses anymore)! "Gee... all that and without paying USR's rip-off prices!" you might say,(and you'd be right)!

Bottom line: There is not just one single TDD standard you know.

288. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>
Source record: 98833
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Thu, 9 Jan 1997, Jim wrote:

> Teddy Bear wrote:
> >
> > Can ANYONE here give me a computer-designed plan to make a beam antenna that
> > fits the following "rough-draft" parameters?
> >
> > A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam
> > antenna for 144.3 MHz,
>
> I'm not sure what you mean by log-spaced for a helical antenna (helix).

Log spacing of the coil instead of even spacing.

> The helix is a spiral

Duh.

> and is defined by circumference and pitch in degrees. Log spaced
> relly makes no sense here. It does for yagis and
> log-periodics and others, but not for helicals.

That's an old XYL's tale.

> Also thirty turns for the 2m band is going to give you one ENORMOUS
> antenna. Probably something on the order of 50 to 60 feet.

The length for MONO-filar would be about half that,(30 to 40 feet maximum).

> Nice gain it would have though, around 20.5 dB.

I expect 25-30 bB.

> > on a manually-swiveling rear-mount boom,(made of
> > 2" OD Aluminum tubing),
>
> Rear mounting of a 60 foot boom? not likely.

As I said above... 40 feet max... Plus I did mention the use of guy ropes.

> And the boom for a helix has to be non-conducting

Not so when you're talking about 2 meters. They used to say the same
for quads and I've seen 3 quads that prove that old XYL's tale wrong. One
of them is 12 element at 17.5' long and the other 2 are 9 element and 10'
long and not only do they have a flat match but their beamwidth is as sharp
as a tack and their gain is better than their PVC prototypes.

> > My idea is to mount the boom vertically on a universal joint, which
> > itself is mounted atop a 10' mast,(5' of the mast actually being below
> > ground level in concrete), and to use pullies and counter-weights with the
> > non-conductive guy ropes to actually TILT the antenna at the moon,(using
>
> Hummm, more like bend the boom of the antenna. Even with the u-joint
> youve set up quite a cantelver and that is going to bend BIG-TIME. I'm
> not sure what a bent boom helix is going to do. This proposal seems to
> be getting further and further from realistic.

I don't remember asking for criticism. I remember asking for a computer designed plan. Translate that as this: The only things I was asking for was the exact spacing, overall wire legnth, helix diameter and reflector demensions, nothing more.

> Well I can see some advantages to a helix over yagis, and I'm
> considering one myself for 2m, but I don't see why you don't want them
> for EME that's your call.

You mean to say that you critiqued my idea when don't even HAVE a 2m helical much less built one?

> Maybe if we started with what your goals are, then we could find
> something more realistic to do. But if you insist on doing it with your
> rough specs tehn I can supply the relative cookbook plans. The helix is
> not all that complicated to need to go to a computer design.

No thanks, I'll wait for someone who can offer exact formulas or mesurements, rather than speculations. My time is valuable and my money is sparse. This is not a game to me so I can't just wing it.

289. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.236.00410F93@azstarnet.com>
Source record: 98834

Hold on here.

I'm obviously not getting all of the comments to this group, but I'm seeing references to my measurements showing up already.

In the interest of clearing up some of the issues raised about parasitic suppressors, I volunteered to perform some laboratory measurements on the materials being used by Mr. Measures and those used by everybody else.

Rich sent me some samples of his nichrome alloys and Tom, W8JI, sent me a sample suppressor from an AL1500 amplifier. I have measured various parameters on these devices using precision laboratory equipment and have forwarded the data to these gentlemen. Rich received his OK, but Tom has not. He has requested that I FAX the material to him, which I will do later today.

I mentioned in private correspondence that I would post the info here, after each of them had a chance to review and comment upon the data. Clearly, Tom has not had this opportunity and I have not been able to present the data in what I hoped would be an impartial manner.

I believe that until Tom reviews the information and I post the complete summary, it is only adding more confusion to the discussion to make references to it.

Wes -- N7WS

290. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Jim <nospam@the.net>
Message-ID: <32D59A14.41C6@the.net>
Source record: 98835
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hi all,

Well when I read the original post asking for help, the tone of the wording and absolute strangness made me think that it might have been a troll. Something gave me the impression that this ask for help was more than just that. Now it turns out that my sixth sense proved correct and this person really seems to not want help or advice, but is more interested in a flame war, or is simply a jerk. I'm not sure. It is really sad that this person chose to be confrontational when someone else was honestly trying to help.

But I'll give it one more shot, since others may learn something about helicals and I think that is a good thing.

Teddy Bear
Ted T. Barry teddyb@caprica.com

wrote:
>
> On Thu, 9 Jan 1997, Jim wrote:
>
> > Teddy Bear wrote:
> > >
> > > Can ANYONE here give me a computer-designed plan to make a beam antenna that
> > > fits the following "rough-draft" parameters?
> > >
> > > A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam
> > > antenna for 144.3 MHz,
> > >
> > I'm not sure what you mean by log-spaced for a helical antenna (helix).
>
> Log spacing of the coil instead of even spacing.

In all the many texts, cookbooks, etc. treating helicals that I have seen in my research of helicals including Kraus I have never seen any mention of log *spacing*. Some have mentioned stepped or tapered changes in diameter of the coil, but none have talked about variable spacing. In fact, if the spacing, which is defined by the pitch is changed much out of the limits of 13 - 17 degrees then the helix will start to change from the axial mode to the normal mode meaning this is no longer the antenna that is desired.

>
> > The helix is a spiral
>

> Duh.

You seem to be a fantastically tempered person, how nice. It is always
so refreshing to be treated so well from someone that is asking for
help when that help is returned.

>
> > and is defined by circumference and pitch in degrees. Log spaced
> > relly makes no sense here. It does for yagis and
> > log-periodics and others, but not for helicals.
>
> That's an old XYL's tale.

Throwing out cliches does not make it true nor does it serve any
usefulness.

>
> > Also thirty turns for the 2m band is going to give you one ENORMOUS
> > antenna. Probably something on the order of 50 to 60 feet.
>
> The length for MONO-filar would be about half that,(30 to 40 feet maximum).

This is the second time that you have seemed to make a big point about
monofilar, big deal. This is by far the more common design compared to
bifilar and quadrifilar.

Anyways, for an axial mode helix the parameters of the "coil" follow:
.9 < C (Circumference) < 1.3 wavelengths
13 < p (pitch) < 17 degrees

Typical values are 1 wavelength for C and 14 degrees for p.

Otherwise it degenerates to a normal mode helical or dipole like
antenna.

The value of S which is the lineal length of on turn is found by:

S = C * tan(p)

Taking C = 1 lamda at 144 MHz = 6.83 ft * tan(14) = 1.70 ft = S

Now for 30 turns 30 * 1.7 = 51 ft plus you add some more for the
feedpoint and matching area.

>
> > Nice gain it would have though, around 20.5 dB.
>
> I expect 25-30 bB.

I do not believe this is possible. Nor do any of the other people I
contacted on this issue.

>
> > > on a manually-swiveling rear-mount boom,(made of
> > > 2" OD Aluminum tubing),

> >
> > Rear mounting of a 60 foot boom? not likely.
>
> As I said above... 40 feet max... Plus I did mention the use of guy ropes.

The premise of 40 ft is questionable based on the "log spacing" but
even then, 40 ft is a long boom. Your right about the guy ropes, it is
not a pure cantelever, but even with support at both ends, it will
deflect in the middle area.

>
> > And the boom for a helix has to be non-conducting
>
> Not so when you're talking about 2 meters. They used to say the same
> for quads and I've seen 3 quads that prove that old XYL's tale wrong. One
> of them is 12 element at 17.5' long and the other 2 are 9 element and 10'
> long and not only do they have a flat match but their beamwidth is as sharp
> as a tack and their gain is better than their PVC prototypes.

A quad is not a helix. A quad is not a treveling wave antenna and a
helix is. The helix relies on supporting an E field on the inside of
the coil. The quad does not. This may have some relevance, but if it
does then it is small and circunstancial.

>
> > > My idea is to mount the boom vertically on a universal joint, which
> > > itself is mounted atop a 10' mast,(5' of the mast actually being below
> > > ground level in concrete), and to use pullies and counter-weights with the
> > > non-conductive guy ropes to actually TILT the antenna at the moon,(using
> >
> > Hummm, more like bend the boom of the antenna. Even with the u-joint
> > youve set up quite a cantelver and that is going to bend BIG-TIME. I'm
> > not sure what a bent boom helix is going to do. This proposal seems to
> > be getting further and further from realistic.
>
> I don't remember asking for criticism. I remember asking for a computer
> designed plan. Translate that as this: The only things I was asking
> for was the exact spacing, overall wire legnth, helix diameter and
> reflector demensions, nothing more.

I was not criticising you as you seem to be taking it so personally. I
was questioning the ability to realistically achieve your design goals.
If soemone asked you for plans per spec for something that is in your
area of expertise and it was apparant that they would have a difficult
time making it would you not state it so? Or would you simply answer
the question and let them try to deal with the unrealistic situation.

It's kinda like the new ham that was asking me to help him with an 80
meter antanna. He lives in an apartment. He mention that he had heared
that a quad was a good design, and wanted soem help with that. By your
demeanor I should have simply told hime the design formulas and left it
at that. But he was much more thankful that I explained that a 20m on a

side square plus a long boom would not quite fit in on on his apartment.

>
> > Well I can see some advantages to a helix over yagis, and I'm
> > considering one myself for 2m, but I don't see why you don't want them
> > for EME that's your call.
>
> You mean to say that you critiqued my idea when don't even HAVE a 2m
> helical much less built one?

Yes I have critiqued your design spec. But no you are wrong with teh rest of your statement. No I do not currently have a 2m helix. My housing situation precludes that. I did use to have one at a differnt location used for satellite weather sat. I have built a few for/with friends for 2m. I have built and experimented with dozens of others for bands other than 2m. I have also studied them for classwork back in school a few years ago, and written dissertaions on them. I am no stranger to teh design and performance of the helix.

>
> > Maybe if we started with what your goals are, then we could find
> > something more realistic to do. But if you insist on doing it with your
> > rough specs then I can supply the relative cookbook plans. The helix is
> > not all that complicated to need to go to a computer design.
>
> No thanks, I'll wait for someone who can offer exact formulas or
> mesurements, rather than speculations.

I said I could do that. And my advice is not speculation, it is experience from a good deal of experimentation.

> My time is valuable and my money
> is sparse. This is not a game to me so I can't just wing it.

Well my time is also valuable, probably more so since my money is not sparse. With the free advice I have supplied to you costing roughly $350 dollars time equivalent if I were to charge... I'm very glad that you are so gracious with my advice that was sent with good intentions to help out a fellow ham (or radio-nut since I can't find your name in the callsign lists for certain).

But that is the treatment I should have expected from someone connecting to a Monterey Park ISP. From down in the Los Angeles cesspool. I just love that the cretins from LA are there and not where I am.

Soemone mentioned that we might just have ALTAVOZ back, and it sure does seem so. When he was back on with the worldnet.att ISP he would connect to either an LA area pop or a SF bay area pop. Always posting many messages from the same pop per login. I couldn't find out his pattern before his account was yanked. Now this winner is from LA too and pretty much has the same attitude and temperment as ALTAVOZ. Maybe I can hope his account gets yanked also.

For the others that have posted concerning Teddy's attitude, thank you.

Jim

291. Help with Shure 444D and Icom 751A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: picture@fosston.polaristel.net
Message-ID: <picture-0901972053250001@erskine-45.dialup.polaristel.net>
Source record: 98836

I just got an Icom 751A and want to use my Shure 444D on it. I put a 2.2 mfd electrolytic in series with both the high and low impedance lines as a voltage block. It eliminated the "pop" on low impedance, but not on high. The mic works very well on low- I get great reports. What will it take to cure the problem with high impedance? a 4.7 mfd?

PLEASE E-MAIL ME.

THANKS,

GREG

292. WTB: SK-406 Chimneys

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Dan Bryden <bryden@deltanet.com>
Message-ID: <32D5A5DC.1854@deltanet.com>
Source record: 98837

I am building a 3-500z amplifier and have a pair of sk-406 sockets and need a pair of chimneys to go with them. Any one have a couple, Dan

293. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109222311.20816C-100000-100000-100000@prog1.caprica.com>
Source record: 98838
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Fri, 10 Jan 1997, John M Dashner provoked me by saying:

> The conotation of "Teddy Bear" to me suggests a fat ass sitting back who is
> either:

Hey... Go screw yourself, butthole. You are NOBODY... as in Nobody to talk and as in Nobody to me. If you think the purpose of this newsgroup is to dessimate criticism, you must be one of those lame fidonet rejects like Ken Freeland, accustomed to flames and retarded in brains. Since you have such a love affair with criticism, how's that suit you? And I'll bet my assessment of you is accurate too.

This newsgroup is NOT for flaming so go back to Fight-o-Net and leave us alone to discuss HAM RADIO, dumbass! NOTHING I SAID TO JIM DESERVED WHAT YOU SAID TO ME! But you, by blasting me without sufficient cause, deserve every bit of what I am saying here now.

> 1. wanting to have a little perverse fun at other's expense; or
> 2. someone who truly needs help but not the kind you have asked for.

ACTUALLY you are doing exactly what you accuse me of on both, counts 1 & 2!

Only a clueless half-assed moron who speaks without knowing the entire story would see it the way you did. If you thought Jim was right for replying to me with what I TOLD him I did NOT want to hear, then you are indeed a moron for speaking up before you read my FIRST post which was a mere 24 hours ago or less so you can't use the excuse that the post was already deleted, since it wasn't! You deliberately flamed-on without threading back to see that Jim WAS INDEED bringing it upon himself!

He WAS warned, and chose to ignore the warning, so it is HIS OWN FAULT that I replied negatively, you clueless idiot. When I tell someone not to bother me with something IT MEANS DON'T FRIGGING BOTHER ME WITH IT!

I hope your VE will one day regret taking the bribe that got you your license. You obviously don't have the attention span it takes to EARN one!

> I have seen people ask for help and submit their own ideas worked up to the
> point of exhausting their knowledge,

Oh you're breaking my heart!

> but the crap you submitted is what led me to the conclusions stated above.

Your post was absolutely out of line and off base. Everything I said in this reply was provoked by YOU. If you want to hold Jims hand and kiss his butt, go ahead and do so IN HIS EMAIL, NOT MINE!

No further email messages from you are welcome here and WILL be reported to your ISP admin as net abuse. THAT IS A PROMISE! I am sure that they, like most ISP's have a company policy against harrassment eminating from their customers. Learn to PAY ATTENTION TO A WHOLE THREAD before you go shooting your mouth off or keep your stupid mouth shut, twit!

294. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-0901971344270001@port54.vcnet.com>
Source record: 98839

In article <1997Jan9.190511.4477@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> In article <measures-0401970900330001@port10.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
> >In article <19970102213900.QAA23851@ladder01.news.aol.com>,
> >w8jitom@aol.com wrote:
> >...snip...
> >> Arguing optimum ESD protection in unknown systems is like arguing the
> >> number of angels on the head of a pin. There are too many variables.
> >>
> >> The only safe thing is to bleed off any static charge during
> >> non-threatning weather, and unhook everything during threatning weather.
> >> Anything else is a wild guess as to how much it helps.
> >>
> >Amen to that, Tom. I would toss the coax out the window onto the ground
> >at least ten feet from the house. Lightning travels on the *outside* of
> >coax. Since a lightning strike typically has many megavolts and many
> >kiloamperes, simply unplugging the coax may not be safe if the coax is
> >left inside the house.
>
> Lightning energy travels on the outside and *inside* of the coax.
> The part flowing on the outside can be dealt with by direct bonding
> to the ground window, but the part flowing on the inside requires
> a suppressor at the ground window.
>
> If you don't want to do it right, however, getting the coax out of
> the house is a good suggestion. Individual step leaders can traverse
> 150 feet of air in bringing the lightning energy down from the cloud,
> so a few inches separation in the shack isn't going to do much good.
> If you don't snub the energy properly at the shack entrance, you've
> just invited Reddy Megavolt into your home, and he can be quite the
> vandal.
>
> Depending on unhooking the coax and tossing it into the yard often
> isn't practical, however. The most intense strike I've taken here
> happened on a grey November day with a light drizzle falling. There
> was no prior indication of thunderstorm activity, no thunder heard,
> and no warnings on the Wx radio, just a light drizzle, then <click>
> KABOOOOOM!!!
>
> (if you hear the "click" just prior to the earthshattering boom and
> blinding flash, you're too damn close. The "click" is caused by direct
> induction into the auditory nerves from the strike current, and means

> you are very deep into the most intense part of the field.)

Ouch.

> I don't think most people would unhook their equipment every time a
> light drizzle was falling. But as my experience shows, you'd have to
> if you depended on this method for protection.
>
That was an interesting, informative dissertation, Gary. What about
burying the last 20 feet of the coax before it enters the house?

What is a 'ground window'?

--
--Rich-- ag6k, 805-386-3734

295. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <01bbfe81$3d176400$fd1479a8@wave.mindspring.com>
Source record: 98840
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear <teddyb@prog1.caprica.com> wrote in article
<Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>...
> Duh.

> That's an old XYL's tale.

> I expect 25-30 bB.

> I don't remember asking for criticism. nothing more.

> You mean to say that you critiqued my idea when don't even HAVE a 2m
> helical much less built one?

> No thanks, I'll wait for someone who can offer exact formulas or
> mesurements, rather than speculations. My time is valuable and my money
> is sparse. This is not a game to me so I can't just wing it.

You obviously have an attitude ploblem "teddy bear". Someone here is trying
to help you and at
the same time you are treating him like an idiot. How can you expect
anybody to help you when
you treat people the way you do? If you don't like the help that you are
being offered for free then
hire an engineer and pay him consulting fees. I am sure that he will put up
with your shit if you
pay him enough. By the way, if you are expecting 25-30bB's of gain you are
just dreaming.

Or do your bB's = MFJ dB's?
73's

296. Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-09 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109233122.20816G-100000@prog1.caprica.com>
Source record: 98841
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Wayne Green, W2NSD, where are you when I need to hear from someone with good sense?

297. Free Amateur Classifieds - Sell / Buy / Trade / Add Links & Special Event Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: psuhrod@hotmail.com
Message-ID: <5b45kk$520@linet06.li.net>
Source record: 98698

CQ CQ CQ Calling All Amateurs!

!!! GRAND OPENING !!!

Point your Web Browser to http://www.hamtrader.com and use our custom search engine to help sell and find that special amateur radio and computer gear. Add you special interest, club or personal home page link, post your special event information.

IT'S ALL FREE!!!

73, The HamTrader Support Staff !!!

http://www.hamtrader.com
support@hamtrader.com

298. Folded dipole enclosed by PVC pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: n2ucn@router.n2ucn.ampr.ORG
Message-ID: <540@router.n2ucn.ampr.org>
Source record: 98699

I want to enclose a folded dipole made with no. 12 bare copper wire
inside a PVC pipe for weather proofing and to add stability.
Will the electrical properties be affected significantly by the PVC?

Chuck Curtis

299. Re: Kneed a Couple Knobs...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: ve6inm@aol.com
Message-ID: <19970110030400.WAA28621@ladder01.news.aol.com>
Source record: 98700

Will dig in my junque box...think I had an old #21 set or such with a couple knobs used on the antenna tuner. May have to wait on me though, as all the stuff is in a shed under 3 feet of snow. I'll try it out this weekend and get back to you.

Anyone out there know where I might get a manual for a TRIO #6R-4S receiver? TRIO was bought by Kenwood, but they can't help so far.

300. Re: Source of 3-500z Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: ve6inm@aol.com
Message-ID: <19970110031700.WAA28930@ladder01.news.aol.com>
Source record: 98701

My recommendation would be Svetlana. They are out on the web, and even have the specs on line for download. I replaced some 4CX250R's with their product and have been very pleased. Excellent service from the 'counter' folks. I believe they have tightened up on the quality control a lot. Current Kenwood TS-520 is running a pair of 6146W's that are also from Svetlana and they seem OK.

301. Re: THX For Help with MRF901 Pinouts!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: ve6inm@aol.com
Message-ID: <19970110032800.WAA29286@ladder01.news.aol.com>
Source record: 98702

Hams always will be a helpful and friendly group!!

302. Re: Alternative to Chassis Punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: ve6inm@aol.com
Message-ID: <19970110033000.WAA29375@ladder01.news.aol.com>
Source record: 98703

EXCELLENT tip. I homebrew a lot but have never been able to justify the cost of a set of Greenlee punches. This is a great alternative.

303. Re: Building a phone-patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: ve6inm@aol.com
Message-ID: <19970110033700.WAA29574@ladder01.news.aol.com>
Source record: 98704

Why not try a modem. A lot of the terminal program (I use Procomm Plus) have a chat capability with a buffer and all. It would enable you to send and receive in real time with no operator. I think the cost is around CDN $150.
I know I've used it from home to work when the Missus had to set file for me to download, and I gave written instruction right over the modem/terminal program.

304. Re: Homebrew 12v rotator controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: ve6inm@aol.com
Message-ID: <19970110034300.WAA29723@ladder01.news.aol.com>
Source record: 98705

I have a couple of old Channel Master control units that I'd give away,
but I think they run 24 or 28 VAC. They use a phasing capacitor to change
direction. If these will help you out let me know --- VE6INM@aol.com

305. www.hamradio-online.com: FCC CREATES 300 MHZ of UNLICENSED spectrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: vbook@vbook.com
Message-ID: <5b4jhs$nlq@kanga.accessone.com>
Source record: 98706
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Today, the FCC issued a Report and Order creating three 100 MHz wide bands in the 5 GHz area for use by unlicensed wireless devices. The bands include changes to the rules in the Amateur shared allocation at 5.725 to 5.825 GHz. Under the new rules, unlicensed devices may operate up to 4 watts EIRP (depending on the band) and may optionally use high gain directional antennas (depending on the band).

Today's ruling make possible high speed wireless Internet access over potentially several miles. You can expect to see unlicensed wireless T-1 (1.544 Mbps links) service drastically undercutting the costs of renting T-1 lines from local phone companies (often $3,000 per month). Many other applications are expected to be deployed under the new rules on the new frequencies.

This is a tremendously important announcement in terms of the future of Internet access and short range wireless communications. It also involves the Amateur service as one of the three bands is shared with Amateur Radio.

We have the FCC press release and full text of the Report and Order at http://www.hamradio-online.com

---
Ed (KF7VY) and Kim (N7VPL) Mitchell
email to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

306. Re: Good source for ampli

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b4m5l$e8u$1@news3.microserve.net>
Source record: 98707

CC by Mail -

don.phelps@infoway.com (Don Phelps) wrote:

>Very good interesting guess.
>The bypass cap. was shorted. So I replaced it with a cap with a
>much higher voltage rating. What I don't know, is if it was
>the DC voltage, or AC from a parasitic, that caused it to go.

Don, are you referring to the plate choke bypass cap? If so,
the problem might be the choke itself. Is it the original choke,
and are you operating the amplifier on any frequencies it wasn't
originally designed to output? I'm thinking about the possibility
of a series resonance in the choke that might show up if a non-WARC
amplifier was used on the WARC bands. Most (all?) plate chokes
have resonances that fall below 30 MHz, and they're designed so
those frequencies fall between the ham bands.

Sorry if this was suggested earlier in the thread (I missed the
earlier posts).

73,
Jack WB3U

307. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b4mpg$e8u$2@news3.microserve.net>
Source record: 98708

measures@mail.vcnet.com (R. L. Measures) wrote:

>Don't use test leads with sharp tips. IMO, it might be a good
>idea to clean the contact points of the test leads with fine steel
>wool to remove any oxide before you attempt the measurement.

Yikes!! Please don't do this to good probes - some are plated
with an alloy that resists oxidation. Once the material underneath
shows through, they're useless unless you want to steel wool 'em
every day.

OTOH, Feel free to do this on the cheap chrome probes made
in Taiwan and China. ;)

73,
Jack WB3U

308. Re: Folded dipole enclosed by PVC pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b4nhf$e8u$3@news3.microserve.net>
Source record: 98709

n2ucn@router.n2ucn.ampr.ORG wrote:

>I want to enclose a folded dipole made with no. 12 bare copper wire
>inside a PVC pipe for weather proofing and to add stability.
>Will the electrical properties be affected significantly by the PVC?
>
>Chuck Curtis

From what I've read, most PVC won't have a significant effect on the HF bands, in terms of loss. One way to test it is to cut a few inches of the PVC you intend to use, and place it in a microwave oven next to a glass of water. If the PVC heats, its losses *might* be unacceptable at HF.

One other thing to consider is the capacitance of the PVC, assuming the dipole wire is in physical contact with it. This might be troublesome regarding tuning of the dipole, particularly if the wire is simply laid inside the pipe and is free to move around. I've never tried this though, so I don't know for certain whether it would be a problem.

73,
Jack WB3U

309. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b4nrl$e8u$4@news3.microserve.net>
Source record: 98710

w7el@teleport.com (Roy Lewallen) wrote:

>I'm really missing out here. Suppose I took my black spoon, used
>some cleaned, dull-tipped probes, put them on the spoon and
>measured 200 ohms. What's the resistivity of the coating?

Hi Roy,

Don't you have an RF ohmmeter? ;)

73,
Jack WB3U

310. Re: MFJ-259 Mod - MORE POWER!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b4ov1$e8u$6@news3.microserve.net>
Source record: 98711
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

grhosler1@mmm.com (Gary Hosler) wrote:
>I have been using an MFJ-259 for the past couple of years and
>love it. One area where it falls short is output power.

<snip>

>Last night I
>built some antenna traps and used the MFJ-259 to resonate them. I
>later placed the traps in PVC to protect them from the weather. I
>tryed to dip them with the 259 to verify that the resonant frequency
>had not changed, but the analyzer didn't have enough poop to
>adequately couple to the trap inside the PVC. I dug out an old
>Knight brand Grid Dip Meter and it worked (with the usual GDO
>characteristics).

Many thanks for posting this Gary. Knowing that the MFJ
won't necessarily replace an aging GDO is valuable info.

73,
Jack WB3U

311. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5b4umk$nd9$1@nadine.teleport.com>
Source record: 98712

In article <32d58ecf.829916@netnews.worldnet.att.net>,
jfriley@worldnet.att.net (J. Fred Riley) wrote:
>On Thu, 09 Jan 97 20:51:22 GMT, w7el@teleport.com (Roy Lewallen)
>wrote:
>>I consider the "fact" that silver sulfide, oxide or other salts are good
>>conductors to be an urban legend. All attempts I've made to find the
source
>>have resulted in "I heard it from. . ." but never a pointer to an
>>authoritative source.
>We were, for many years, the only broadcast manufacturer to employ a
>staff chemist. This exact question came up during his tenure. The
>search for an "authorative source" was also fruitless at that time.
>There were, however, measurements made here to confirm the legend.
>The results were never published but they amounted to two
>generalizations:
>a) silver oxide is at least as good a conductor as silver, and
>b) other contaminants could impair this conductivity.
>
>Now, if it becomes a matter of national security or you have a reason
>that can be articulated to support a contrary belief, I suppose a
>wider net could be cast to get absolute numbers. As a practical
>matter, however, I see no reason to either research the point further
>or to dismiss the common belief as without foundation.

Fred,

You're the first person I've heard from with direct experience in measuring
silver oxide. It's interesting that its conductivity is as good as silver,
which I had thought to be the best conductor known (at room temperature).
Did you also measure silver sulfide, perchance, since as Rich points out
it's much more common as a contaminant.

I personally do see a reason to research the point further, and so far I
have yet to see any foundation at all for claims about silver sulfide
(although I now have your experience as testimony that silver oxide is at
least as conductive as silver). The possibility that one can oxidize silver
to further increase its conductivity should excite some interest.
Even if it's only as good as silver, this information may be
important. Silver has some real problems as a conductor material on
substrates due to metal migration. If silver oxide doesn't, and is at least
as good a conductor, it may have some real advantages for this use. It's a
shame the results of your experiments weren't published.

I absolutely have no reason "that can be articulated to support a contrary
belief." However, I don't see this as a reason to inhibit asking for

support of a statement given as fact. This is a matter of personal philosophy.

Oh -- Where were these experiments done?

Thanks for the information!

Roy Lewallen, W7EL

312. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: codyspc@aol.com
Message-ID: <19970110092700.EAA08601@ladder01.news.aol.com>
Source record: 98713

In article <measures-0801971215460001@port22.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

> Can you specify a false statement I made about QST, ETO, Commander,
>Kenwood, Heathkit, Ameritron, or Ten Tec?

Greetings!

Not to change the subject matter too much - could I please interrupt for a moment of time?

Thanks in advance - it's about Ten-Tec...

Anyone reading this thread have any advice for a Newbie Ham [KC8FQE - for reference] about this company. Any information regarding their products, especially their 1220 FM/Data transceiver kit? I may have the model number wrong - for I haven't received their catalog yet - I have ordered one BTW. I'd like to know how well and how thorough their kits have been thought out for builders wishing to enter into the 2M ham field.

If anyone has any ideas, please forward them to me. It would be appreciated and you'd have my gratitude!

:+> Andy <+:

313. would you be my friend?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: dozer@netwizards.net
Message-ID: <5b56ju$kmr@news1-alterdial.uu.net>
Source record: 98714

Hello,

I'm 14 years old and I think I may be a gay. I'm looking for some support and friendship with a older male age 18-40. Please email if you can help.

314. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <32d58ecf.829916@netnews.worldnet.att.net>
Source record: 98715

On Thu, 09 Jan 97 20:51:22 GMT, w7el@teleport.com (Roy Lewallen)
wrote:
>I consider the "fact" that silver sulfide, oxide or other salts are good
>conductors to be an urban legend. All attempts I've made to find the source
>have resulted in "I heard it from. . ." but never a pointer to an
>authoritative source.
We were, for many years, the only broadcast manufacturer to employ a
staff chemist. This exact question came up during his tenure. The
search for an "authorative source" was also fruitless at that time.
There were, however, measurements made here to confirm the legend.
The results were never published but they amounted to two
generalizations:
a) silver oxide is at least as good a conductor as silver, and
b) other contaminants could impair this conductivity.

Now, if it becomes a matter of national security or you have a reason
that can be articulated to support a contrary belief, I suppose a
wider net could be cast to get absolute numbers. As a practical
matter, however, I see no reason to either research the point further
or to dismiss the common belief as without foundation.

Fred

jfriley@worldnet.att.net jfriley@airmail.net fredwa8ajn@aol.com

315. 811A Amp Plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: kmahler@visi.net
Message-ID: <32d62a73.479389@news.visi.net>
Source record: 98716

Does anyone have plans for an 811A amp using 4 tubes.

I have most of the parts to a single band amp based on the 811A but it no longer is fully assembled. I would like to build a multiband amp from the parts I have.

Thanks

Kevin

316. Re: Alternative to Chassis Punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32d5dab5.360822552@news.santafe.edu>
Source record: 98717

gsparks@ix.netcom.com(Glenn Sparks) wrote:

> I drill a
>3/8 hole, and just hand ream to any size in just a few momemts.

Another handy hole making tool is the Unibit. There are a couple of different sizes, up to about 1" max. Each one drills its own 1/8" pilot hole. The bit is stepped in 1/16" increments, so the final diameter depends on which step you go to. The steps are wide enough for 1/8" panels. The Unibits are moderately expensive ($25-$30, I think), but they make nice round holes which are much nicer than the triangular holes you get from two-fluted drill bits in "hand-held" work. I haven't tried them in anything but aluminum. I sure wouldn't use them on steel--don't know how they do on brass.

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

317. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: James Leahy <jleahy@norwich.net>
Message-ID: <01bbfee8$8baf2640$2b821cce@jleahy>
Source record: 98718
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hmm, someone who apparently is using a "handle" calling some of us CBers?
IMHO, based on total conjecture, is that since the code was de-emphasised,
we surely haven't gotten flooded with new engineers as we were promised by
the no-code lobby. But we sure have created a boon for the 2 meter rig
manufacturers as many of the 11 meter gang has moved up to the "major
league".

"First Personal Here is....."
--
Jim Leahy K2JL jleahy@norwich.net

Teddy Bear <teddyb@prog1.caprica.com> wrote in article
<Pine.BSF.3.91.970109230343.20816F-100000@prog1.caprica.com>...
>
> I THOUGHT that these were newsgroups for radio science discussions, based

> upon factual information. But mostly all I see here are people's
> unsolicited opinions based upon conjecture.
>
> That's what happens when code skills are emphasized, hailed and
> rewarded instead of engineering skills. That's also why hams of today
would
> rather buy equipment from a store than built it.
.....
> Amateur radio is a SCIENCE, not a realm of personal opinions! We are
> SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!
>
> I shouldn't even HAVE to tell you this! Half the hams I hear these days
> barely know how to even solder! WHAT the heck is happening to us? Who
> lowered the technical knowledge standards? Who said that they could? When

> did it become no longer required to demonstrate the ability to build and
> troubleshoot radio equipment? It's truely an embarrassment to amateur
> radio that this has happened! I honestly know of novices who understand
> electronics better than extras and extras who act like CB'ers!

318. After some consideration...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970109235235.20816J-100000@prog1.caprica.com>
Source record: 98719
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Maybe I expected too much of people's ability to give me only what I asked for or to leave the answering to those who CAN.

If my high standards for engaging in scientific discussions seem to be too much for some people who access these newsgroups to handle, I can only apologize for not realizing that. However, I will not apologize for having such high standards for engaging in scientific discussions. The latter is not a sin.

Perhaps I just tend to sometimes forget that ham radio is just a hobby to some people and that said people think that the phrase "just a hobby" is synonymous with the phrase "just a game".

Ham radio cost a lot of money as you all know. I am not a rich man. Therefore I take it much more seriously than most, because I take my money much more seriously than John Q. Deep-Pockets might.

To me ham radio is NOT a game. It is an educational laboratory in which we are supposed to hone our skills as elecronic engineers or something like that. I find that not many people look at it that way. To many, ham radio is just a more respectable version of a citizens band, and these kind of people are everywhere from novice class to extra class in similar percentages from class to class. I find that frustrating sometimes, DEPENDING of the forum. "When in Rome..." you know. Well in THIS forum, the names of these three newsgroups lead me to believe I would be talking to people who are as technically serious as I am. Now I see I may have read too much into the whole thing and thus formed unreal expectations of some of you.

Let me try to make it easier to avoid conflicts in the future:

If you take ham radio and electronics VERY seriously, as I do, then I welcome you to share your studies and knowledge with me, and if you ask, I'll try to do likewise.

But if you are a "weekend warrior" who enjoys a good ragchew discussion, but ham radio is just a high tech game to you, sorry, but I do not come to technical newsgroups for that so ignore my posts because I am not going to be like a friendly puppy and go play frisbee with you in here. I find that annoying and it provokes me into being cold and if you tell me off for being cold then I am going to be very mean and nasty. Thats just the way that I tick, so don't say I didn't warn you.

However, in NON-technical newsgroups I can easily be just one of the guys and be able to kid around and have fun like anyone else, but "I don't mix my peas in my spuds" as they say. I am technical in technical newsgroups

and I am human in non-technical newsgroups and never the twain shall meet. So don't try to make me be like you, running and hopping and skipping without regard to whether I am in a lab or on a playground.

Business is business, pleasure is pleasure and science is science to me and you might like to mix them but I can't and I won't and you will piss me off if you try to force me to be like that. I am the same on the air. In a technical QSO I don't want to hear about what your favorite movie is or what good gumbo your wife can make and in a SOCIAL QSO I don't want to hear about which resistor you put on the emitter of which transistor.

This is not a social newsgroup, it is a technical newsgroup. If it were a social newsgroup I would be in an entirely different mindset. If you don't like the mindset of "Just the FACTS" then PLEASE... leave me alone and I will return the favor! Is that too much to ask? It seems fair to me!

319. Re: Need Filament transformer for SB-220 Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1001970519420001@port14.vcnet.com>
Source record: 98720

In article <o6fFNGO#7GA.353@cobia.tng.net>, dwinn@tng.net wrote:

> Does anyone know of a source for a Filament/bias Transformer used in the
> SB-220 and SB-2200 Amplifiers made by Heath.
>
> Thanks,
>
> Don AF4Z
> AF4Z@TNG.NET

You might try Peter W. Dahl in El Paso. 915 751 2300. However, to the best of my knowledge, he does not make current-limiting type transformers, like the one Heath used---so, you will need to add a step-start circuit to limit the inrush current to the filaments. Adding a rear panel adj. rheostat to set the filament v would be nice. There's plenty of room in the fan blade section for a rheostat. If you are interested, E-mail me or telephone.

BTW, if the (unfused) filament transformer failed because a 3-500z shorted between the filament and the grounded grid, chances are that you had a vhf parasitic oscillation. This problem can be corrected so that you don't experience a repeat performance in the future with the new tube and transformer. // An article about the SB-220 appears in the Nov./Dec. 1990 issues of QST magazine.

--
--Rich-- ag6k, 805-386-3734

320. Re: ATU ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970110151200.KAA14019@ladder01.news.aol.com>
Source record: 98721

Hi Alan,

I can speak only in general terms, specific cases may very.

In article <5b1207$gkt@canyon.sr.hp.com>, alanb@sr.hp.com (Alan Bloom) writes:

>It is very difficult to get good Q from a roller inductor. One reason
>is that optimum Q requires the coil to be reasonably close to the
>optimum length/diameter ratio.

Q change from a large L/D ratio change is generally not extremely large. Optimum L/D ratio is dependent on both the end application and the wire size of the winding. The thing that really "kills" roller inductor and other coil's Q is stray capacitance and dielectrics placed in areas of strong electric fields.

The truth is virtually every roller has much less Q over its' entire than any poor to moderately well designed fixed coil. EVEN WHEN the L/D ratio is some "magic number".

Roller inductors "stink" in applications wher high Q is required, but people still love them. Plus the thing to remember is it isn't the self Q of the inductor that is important in most tuners, it is the lack of enough capacitance range to keep the loaded Q low and efficiency high.

>The L/D of a roller inductor is close
>to zero at minimum inductance.

Inductor Q matters LEAST on higher bands in a tuner. That's because of two factors, load impedances tend to moderate and the capacitance is generally so large that the tuner operates with a low ratio of unloaded Q to loaded Q. It is the ratio of loaded Q to unloaded Q that sets efficiency. Even if inductor Q drops to 50 or less on ten meters, efficiency and power handling is usually much better than on 75 meters where inductor Q might peak.

> Small-inductance coils should have
>fat tubing or wide strap for the conductors, whch you don't get with
>a roller inductor.

Certainly not flat conductors! Flat wide conductors force current out to the edges, the center area of the strip carries almost no current. Not only that, the useless surface area adds needless undesired capacitance. I just measured an edge wound roller inductor, and it had lousy Q and a very low series resonant frequency! With #8 wire, the same inductor had nearly 80% more Q than with a silver plated flat 3/8 inch wide inductor.

Optimum Q for higher frequencies generally occurs with wire sizes between number eight and 14 are used. Large copper tubing coils often have LESS Q than coils of much thinner wire in applications requiring high self-resonant frequencies. With copper tubing, the thick conductor requires use of a larger diameter winding, pushing the length and diameter larger. A physically larger coil usually demonstrates increased distributed capacitance and radiation losses, as well as flux leakage and increased eddy current losses. The only place where I've seen copper tubing coil produce Q's over 300 is where frequency is at the lower end of HF where they are heavily loaded with intentional external capacitance and have a lot of physical space around them.

>Finally, the contact resistance of the sliding or
>rolling contact can easily be large enough to affect the Q. For example,
>a 1 uH coil with a Q of 1000 on the 40 meter band has a series resistance
>of only 44 milliohms. Any extra series resistance will kill the Q.

I'd like to see a 1 uH inductor with a Q of 1000!!! The highest Q inductor I've ever measured had a Q approaching 400, and that took a lot of work. If the rolling contact was the primary source of dissipation (ie, Q loss or resistance), it would quickly overheat and be destroyed. The real loss of Q is from multiple causes. The reason why rollers, as a general rule, offer less performance in applications requiring high Q, is becasue of the distributed capacitance, necessity of sticking undesirable things in induction fields (both electric and magnetic fields), and to a lesser extent the lack of proper form factor.

>: Roller Q is absolutely NOT a problem of cabinet size
>: or anything external to the roller, it is a problem of materials used
in
>: the roller and the basic roller design.
>
>Coils with very high loaded Q can induce substantial circulating currents

>in any nearby metal, so you don't want to get the cabinet TOO small.
>What you really don't want to do is get any ferrous material in the
coil's
>magnetic field.

First of all, most rollers have large metal end plates (notice I don't care if it's steel or gold). They have a wheel in the field, they have metal shafts and thick dielectric supports. All of these things reduce the effect of external objects.

The Q change of an high Q airwound coil decreases much faster than a roller does when placed in any metallic cabinet.

The rapidly time varying field could care less if the metal is ferrous or not. Eddy currents prevent any RF external magnetic effects. The real problem is the surface area excited by magnetic flux and the resistance of the material.

>When I was working on the L-75 amplifier, I had used
>steel screws to mount the main tank coil. They got way too hot to touch

>in just a few seconds of amplifier operation. I replaced them with
>brass screws which ran cool as a cucumber.

The reason brass runs cooler is its resistivity is less than 10% of some steels, it has nothing to do with the fact it is non-ferrous. Eddy currents prevent any magnetic effects from occuring due to ferrous nature of the metal. Had you used lead screws, they would have been as hot as the brass. Had you used iron screws, they would have been almost as cool as the brass. Stainless steel screws that you couldn't pick up with a magnet would have gotten much hotter. it all relates to the RF resistance of the material, not the magnetic properties.

So far as Q loss.... brass, aluminum, steel, copper or even silver will kill the Q of a coil when the material is placed in the wrong area. Any metal placed near the coil increases stray capacitance and acts like a shorted turn, reducing inductance and lowering Q.

Any cabinet wall or metal placed too close to a coil....be it gold, steel, copper, or aluminum...will kill Q and efficiency. ALL cabinets should be kept away from RF coils. The performance difference caused by the "type" of metal is often immeasurable, it is the distance that really matters.

>: As for power ratings, it is NOT correct to specify a power rating
>: without specifying both a load impedance and a frequency. ANY
>: manufacturer who says "this is a 3 KW tuner" without being band and
load
>: specific is just howling out a number that may not - and probably will
>: not - mean anything to you. The only way to know for sure if a certain
>: tuner will work is to try it with your own antennas.
>
>That depends on the circuit design. The above is true for most designs.
>However, all the Drake tuners used a PI-L arrangement set up so that the
>circulating current in the tank coil is independent of the load
impedance.
>That means you can specify the insertion loss and power capability
without
>specifying the load impedance. True, the load impedance does slightly
>affect the RF voltage across the loading capacitor (the one in series
with
>the output), but it is not hard to figure out the worst-case condition
and
>design the capacitor accordingly.

In any tank circuit, currents and voltages are greatly affected by load impedance. That current has to come from somewhere, it doesn't just "pop-up" at the output port. That includes the pi-L.

For example, I have a common point impedance of 12 ohms in my 160 meter array. A number eight coil in a pi L circuit (used for bandwidth considerations) connected to the low Z output terminal gets so hot it actually stinks. The pi-L network in the MN-2700 would be just as bad, since it would have exactly the same current in the last inductor as my L

network.

Unless the MN 2700 used a number eight air wound inductor or larger, my 160 meter antenna (or any other antenna with a low impedance) would murder it.

The MN 2700 was a good tuner, but it is no exception to network theory. The guy with the X-match complained also, but the number 12 or 14 inductor in the X-match would become history when feeding my 12 ohm load. I can guarantee there are a lot of hams that have even worse loads on 160 and 80.

73 Tom

321. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: macino <macino@ibm.net>
Message-ID: <32D661B9.43B@ibm.net>
Source record: 98722

Jon Bloom wrote:
>
> Joe Subich wrote:
> >
> > In message <32C3C9CA.2572@star.enet.dec.com> - "L.Mark Pilant"
> > <pilant@star.enet.dec.com>Fri, 27 Dec 1996 08:06:19 -0500 writes:
> > :>
> > :>
> > :>If anyone wants to ask me questions about this software, feel free to
> > :>send me E-mail: pilant@seesaw.enet.dec.com.
> > :>
> > :>I apologize for being so long winded, but there are probably some folks
> > :>that would benefit from these CDs; crude as they are (at the moment).
> > :>
> >
> > In this day and age why would anyone publish what is exxentially a
> > database or infromation retrieval product that *required* its users
> > to use a specific operating environment? Particularly, when there are
> > at least three four other operating environments (DOS, Macintosh, Unix,
> > OS/2) in use among the product's target audience?
>
> I've heard from several Mac users who are, to put it mildly, highly
> incensed that the QST View product is Windows-only. And, of course,
> there are the comments that havwe appeared on this newsgroup.
>
> The fact is, if we had decided to do this product only if we could make
> it multi-platform, the product wouldn't exist at all. The only way we
> were able to do this economically was by means of a good deal with a
> third-party shop that does the scanning and the software; "normal"
> commercial providers of these kinds of services are vastly more
> expensive. The people we are working with supply only Windows software,
> so that's what's available.
>
> The basic problem, which recurs for just about any software product we
> produce, is that the number of Mac users who might buy an ARRL product
> is miniscule. That's not an assumption; we know it from market research.
> To offer a custom software product that supports both Windows and Mac
> platforms would require Mac development costs that we could never
> recover from sales to Mac users. In effect, the pricing would have to be
> such that the Windows users would be subsidizing the Mac users, and I
> hardly think that's fair. Now, if we were selling hundreds of thousands
> of each product, things would be different. But we're not, and comparing
> ARRL's electronic products to those that sell in large quantities is a
> poor comparison.

> Of course, if we could find low-cost, off-the-shelf multi-platform
> products that would provide the capabilities we need, we'd use them.
> We've not found any such as yet. (We're always interested in hearing
> about any you know of.)
>
> As I've said to several Mac users, if I had *my* way we'd include Linux
> X Window applications on the CD-ROMs. But that's not going to happen any
> time soon for the same reason.
>
> > Everything that is done with the Windows database could have been done
> > just as easily, perhaps more easily, with HTML coding ... then the CD
> > ROMS would have been operating system independent. The user would only
> > need to furnish an appropriate HTML engine (aka Web Browser) for his
> > particular system.
>
> Ummm... how does one implement a searchable database in HTML? You need
> an HTTP server with CGI and a database application. And of course, that
> software would have to be multi-platform.
>
> > HTML retrieval and display systems are here, more importantly they will
> > be around for quite some time ... and are platform independent.
> >
> > As it is, I'm waiting on the OS/2 version of the QST CDROMS for my
> > personal system and the Macintosh version for my wife's system.
>
> I'm afraid you'll have a long wait. I'll point out one thing, though.
> The image files on the QST View CD-ROMs are standard TIFF files (using
> CCITT Group 3 compression). And the database for each set is contained
> in a comma-delimited ASCII file on the first disk of the set. (The file
> contains a few SQL engine commands you can ignore.) If some enterprising
> Mac (or OS/2, or *nix, or...) software type wants to write an
> application for his/her favorite platform that will search and display
> the files, I'd be delighted. Heck, I'll gladly make it available from
> ARRL's Web site. We just can't afford to *pay* anyone to do it.
>
> --
> Jon Bloom, KE3Z | jbloom@arrl.org
> American Radio Relay League |
> 225 Main St., Newington CT 06111 |

****

Well, there you have it, another 'take it or leave it'
deal from the ARRL. Ever think to look for a different
software supplier? That probably wouldn't fit within 'normal'
either.

Jim W9LZ

322. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <32D6221F.2973@atl.org>
Source record: 98723

O.K. I'm ready to listen to some science.

I'm trying to understand a bit about A/D
conversion prior to the DSP section in a
receiver.

For a 455kHz IF and a BW of interest of 16kHz
what are the drawbacks of sampling at 447kHz?

-bob

323. Re: vhf dummy load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: William W Janssen <billj@calweb.com>
Message-ID: <5b5oplolb1@news.calweb.com>
Source record: 98724

To improve your dummy load for VHF and higher get about a hundred feet
of RG58 (or more) and put your load on the end of it. The loss of
the cable will be high at high frequencies and will still be 50 Ohms.

Bill K7NOM

324. Re: Source of 3-500z Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970110171600.MAA17086@ladder01.news.aol.com>
Source record: 98725

In article <19970110031700.WAA28930@ladder01.news.aol.com>, ve6inm@aol.com (VE6INM) writes:

>
>My recommendation would be Svetlana. They are out on the web, and even
>have the specs on line for download. I replaced some 4CX250R's with their
>product and have been very pleased. Excellent service from the 'counter'
>folks. I believe they have tightened up on the quality control a lot.
>Current Kenwood TS-520 is running a pair of 6146W's that are also from
>Svetlana and they seem OK.
>
>

So far as I know (as of today) Svetlana does NOT manufacture 3-500Z's. The alternate sources are Eimac, Amperex, and Chinese tubes that are sold under various labels.

Eimac and Amperex are both good quality tubes for power amplifiers, and the Chinese 3-500 makes an excellent fishing line bobber if you cast it very gently so the weak envelope doesn't shatter.

73 Tom

325. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Don Wall <d.wall@nunet.neu.edu>
Message-ID: <5b5rml$hds@chaos.dac.neu.edu>
Source record: 98726
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

Too bad about your scope, for it is truly one of the great
classics

"Great"? "Classic"? Hardly!! There are a few early Tek scopes
(pre-465) which could be described with one or both of those
adjectives, but the 551 sure isn't one of them! 511, 545A, 547
maybe, but 551? Abomination would be a better descriptive term
to use. Most people who have worked on 551's would agree that
the 551 serves only to remind us how primitive the technology was
in those days. The fact that something is old does not
necessarily make it either great or classic. Don't let nostalgia
cloud your common sense.

Don Wall
(ex-Tek technician)

326. Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: 74003.470@CompuServe.COM
Message-ID: <970110190603_74003.470_BHR56-1@CompuServe.COM>
Source record: 98727

On Thu, 09 Jan 97 20:51:22 GMT, w7el@teleport.com (Roy Lewallen)
wrote:
>I consider the "fact" that silver sulfide, oxide or other salts are good
>conductors to be an urban legend. All attempts I've made to find the source
>have resulted in "I heard it from. . ." but never a pointer to an
>authoritative source.

Look in the CRC Handbook of Chemistry and Physics. There is a table entitled
"Resistivity of Semiconducting Minerals". Silver sulfide (argentite, Ag2S) has
a resistivity between 1.5E-3 and
2.0E-3 ohm-meter. If you could turn it into 22 gauge wire, its resistance would
be about 1800 ohms per foot. Copper oxide (Melaconite, CuO) has a resistivity
of 6000 ohm-meter.

For comparison:
resistivity resistance of 22 gauge wire
Silver metal 1.6E-8 ohm-meter 0.050 ohm per meter
Copper metal 1.7E-8 ohm-meter 0.053 ohm per meter
Silver sulfide 2.0E-3 ohm-meter 6000 ohm per meter
Copper oxide 6.0E+3 ohm-meter 18,000,000,000 ohm per meter

Exposed silver tends to form a sulfide rather than an oxide. Exposed copper
will form an oxide.

Paul

327. Building A Repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: JEFFWALSH <JEFFWALSH@prodigy.net>
Message-ID: <32D68AC1.4663@prodigy.net>
Source record: 98728

Hello and thank you for reading this post.
I have been trying to locate and all information on how a repeater works and ow o build one from scrach. Please let me kow any thing you might know that could help me in this attempt. I have been reading but to no avail. Please E-Mail me if possible if not I will check in here.
Thanks Again
Jeff (N1UWN)
JeffWalsh@prodigy.net

328. Re: Folded dipole enclosed by PVC pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Bigdad <Bigdad@Rworld.com>
Message-ID: <5b69j1$mvd@kirin.wwa.com>
Source record: 98729

n2ucn@router.n2ucn.ampr.ORG wrote:
>I want to enclose a folded dipole made with no. 12 bare copper wire
>inside a PVC pipe for weather proofing and to add stability.
>Will the electrical properties be affected significantly by the PVC?
>
>Chuck Curtis

In my experiences no it wont. There are plans for an antenna of
the folded dipole type but for the 137 MHz band in The Satellite
Handbook and it works quite well so i see no problems at all
using PVC to shroud a antenna at lower frequencies!

329. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5b6ba2mlg5@news3.microserve.net>
Source record: 98730
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

>No further email messages from you are welcome here and WILL be reported to
>your ISP admin as net abuse. THAT IS A PROMISE! I am sure that they, like
>most ISP's have a company policy against harrassment eminating from their
>customers. Learn to PAY ATTENTION TO A WHOLE THREAD before you go
>shooting your mouth off or keep your stupid mouth shut, twit!

Teddybear:
I sure hope you don't expect any more help on your helical antenna after you
pulled this asshole stunt.

Beggars can't be choosy.

Tyler

330. Re: Mobile sets in rental cars

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970110211200.QAA23409@ladder01.news.aol.com>
Source record: 98731

In article <32D50C90.75F0@hvsag01.nl.lucent.com>, "Frank W. van Wensveen"
<fvwensve@hvsag01.nl.lucent.com> writes:

>I used to drive my own car; an old clunker so drilling a hole in the
>dashboard was no problem at all. Now I drive a company car and
>(frequently) rental cars, and drilling holes for mounting brackets and
>such is no longer an option. I don't want to put the set in the clove
>compartment, because during sharp curves or emergency stops it tends to
>fall out. I've already lost a mobile telephone that way.
>
>The set needs to be fixed firmly so that it won't move while driving
>around. It also needs to be easily accessible or at least clearly
>visible. I don't want to have to stick my head under the dashboard while
>driving.
>That rules out the lower glove compartment, double sided tape or other
>adhesives, and anything that damages the car. (I can't simply drill a
>hole somewhere. If I do that, I'll be billed for repairs as soon as I
>have to turn in the car.)
>
>Suggestions anyone?
>
>

Depending upon the vehicle in question, what are called "bungee cords"
(elasticized rope with hooks) in the states might be a solution for
holding the mobile rig in the vehicle attached to let's say the center
column under the ashtray in most vehicles I've seen if the mobile rig is
small enough? Finding a good source of power may be a bigger problem as
even if you have a cigar lighter outlet, you probably will have ignition
or alternator noise. Other possible spots include between the two front
seats and strapped down once again with bungee cords.

I assume you'll either be using a through the glass antenna, or
alternatively a mag mount antenna for your antennas to prevent drilling
holes.

I might also say that there are restoration specialists, who can cover up
any holes in the vehicle if you're going to be using it for any long
length of time, especially for passing power directly from the battery to
power your rig! 73 de n8blk/3 -art clemons-

331. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5b6cc9$8pp$4@nadine.teleport.com>
Source record: 98732

In article <5b4nrl$e8u$4@news3.microserve.net>,
jackl@pinetree.microserve.com (WB3U) wrote:
> w7el@teleport.com (Roy Lewallen) wrote:
>
>>I'm really missing out here. Suppose I took my black spoon, used
>>some cleaned, dull-tipped probes, put them on the spoon and
>>measured 200 ohms. What's the resistivity of the coating?
>
>Hi Roy,
>
>Don't you have an RF ohmmeter? ;)
>
>73,
>Jack WB3U

Actually, I do. It's called an impedance bridge. Suppose I measure 200 ohms with the impedance bridge. Then what's the resistivity of the coating?

(and no, I didn't miss the smiley)

Roy Lewallen, W7EL

332. FOR SALE OR TRADE TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: k6rcl@aol.com
Message-ID: <19970110213400.QAA24098@ladder01.news.aol.com>
Source record: 98733

FOR SALE OR TRADE BRAND NEW IN THE BOX 4CX250K'S A PAIR OF THEM FOR YOU
FOLKS IN RIO LINDA....
DENNIS K6RCL
E-MAIL ONLY PLEASE
AT K6RCL@AOL.COM

333. Re: Folded dipole enclosed by PVC pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5b6c7m$8pp$3@nadine.teleport.com>
Source record: 98734

In article <540@router.n2ucn.ampr.org>, n2ucn@router.n2ucn.ampr.ORG wrote:
>I want to enclose a folded dipole made with no. 12 bare copper wire
>inside a PVC pipe for weather proofing and to add stability.
>Will the electrical properties be affected significantly by the PVC?
>
>Chuck Curtis

I would expect the effective length to be increased on the order of 3%. It will surely add some loss to the system, but I would expect the amount to be small.

Roy Lewallen, W7EL

334. Help FT-709R needs new keypad label

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: "R.E. Dodson" <rdodson@worldnet.att.net>
Message-ID: <32D6E775.9D9@worldnet.att.net>
Source record: 98735

I have a Yaesu FT709R HT and it could use a new keypad (stick on I believe) main label. Looks like I could peal off the old one and re-apply a new one. Any one know where I can get one of these. I surrounds all the keys on key pad. Also any idea what the part might cost.

Thnx
Bob

335. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <32D71823.48FC@erols.com>
Source record: 98736
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Nice troll!!

Teddy Bear wrote:
>
> I THOUGHT that these were newsgroups for radio science discussions, based
> upon factual information. But mostly all I see here are people's
> unsolicited opinions based upon conjecture.
>
> That's what happens when code skills are emphasized, hailed and
> rewarded instead of engineering skills. That's also why hams of today would
> rather buy equipment from a store than built it.
>
> Once upon a time iw was WE who invented everything elecronic! Now most of
> us have been reduced to clueless consumers, lead by the nose like dumb
> sheep... a sad legacy indeed to leave to future hams.
>
> When someone asks for calculations, instead they get speculation. But I
> must warn that if you were to try to build things out of speculation,
> you'll soon have a pile of failed projects stacked taller than you are.
>
> Amateur radio is a SCIENCE, not a realm of personal opinions! We are
> SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!
>
> I shouldn't even HAVE to tell you this! Half the hams I hear these days
> barely know how to even solder! WHAT the heck is happening to us? Who
> lowered the technical knowledge standards? Who said that they could? When
> did it become no longer required to demonstrate the ability to build and
> troubleshoot radio equipment? It's truely an embarrassment to amateur
> radio that this has happened! I honestly know of novices who understand
> electronics better than extras and extras who act like CB'ers!

336. Re: ATU ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <32D71BAD.43CD@erols.com>
Source record: 98737

w8jitom@aol.com wrote:
>
> Hi Alan,
>
> I can speak only in general terms, specific cases may very.
>
> In article <5b1207$gkt@canyon.sr.hp.com>, alanb@sr.hp.com (Alan Bloom)
> writes:
>
> >It is very difficult to get good Q from a roller inductor. One reason
> >is that optimum Q requires the coil to be reasonably close to the
> >optimum length/diameter ratio.
>
> Q change from a large L/D ratio change is generally not extremely large.
> Optimum L/D ratio is dependent on both the end application and the wire
> size of the winding. The thing that really "kills" roller inductor and
> other coil's Q is stray capacitance and dielectrics placed in areas of
> strong electric fields.
>
> The truth is virtually every roller has much less Q over its' entire than
> any poor to moderately well designed fixed coil. EVEN WHEN the L/D ratio
> is some "magic number".
>
> Roller inductors "stink" in applications wher high Q is required, but
> people still love them. Plus the thing to remember is it isn't the self Q
> of the inductor that is important in most tuners, it is the lack of enough
> capacitance range to keep the loaded Q low and efficiency high.
>
> >The L/D of a roller inductor is close
> >to zero at minimum inductance.
>
> Inductor Q matters LEAST on higher bands in a tuner. That's because of two
> factors, load impedances tend to moderate and the capacitance is generally
> so large that the tuner operates with a low ratio of unloaded Q to loaded
> Q. It is the ratio of loaded Q to unloaded Q that sets efficiency. Even
> if inductor Q drops to 50 or less on ten meters, efficiency and power
> handling is usually much better than on 75 meters where inductor Q might
> peak.
>
> > Small-inductance coils should have
> >fat tubing or wide strap for the conductors, whch you don't get with
> >a roller inductor.
>
> Certainly not flat conductors! Flat wide conductors force current out to

> the edges, the center area of the strip carries almost no current. Not
> only that, the useless surface area adds needless undesired capacitance. I
> just measured an edge wound roller inductor, and it had lousy Q and a very
> low series resonant frequency! With #8 wire, the same inductor had nearly
> 80% more Q than with a silver plated flat 3/8 inch wide inductor.
>
> Optimum Q for higher frequencies generally occurs with wire sizes between
> number eight and 14 are used. Large copper tubing coils often have LESS Q
> than coils of much thinner wire in applications requiring high
> self-resonant frequencies. With copper tubing, the thick conductor
> requires use of a larger diameter winding, pushing the length and diameter
> larger. A physically larger coil usually demonstrates increased
> distributed capacitance and radiation losses, as well as flux leakage and
> increased eddy current losses. The only place where I've seen copper
> tubing coil produce Q's over 300 is where frequency is at the lower end of
> HF where they are heavily loaded with intentional external capacitance and
> have a lot of physical space around them.
>
> >Finally, the contact resistance of the sliding or
> >rolling contact can easily be large enough to affect the Q. For example,
> >a 1 uH coil with a Q of 1000 on the 40 meter band has a series resistance
> >of only 44 milliohms. Any extra series resistance will kill the Q.
>
> I'd like to see a 1 uH inductor with a Q of 1000!!! The highest Q inductor
> I've ever measured had a Q approaching 400, and that took a lot of work.
> If the rolling contact was the primary source of dissipation (ie, Q loss
> or resistance), it would quickly overheat and be destroyed. The real loss
> of Q is from multiple causes. The reason why rollers, as a general rule,
> offer less performance in applications requiring high Q, is becasue of the
> distributed capacitance, necessity of sticking undesirable things in
> induction fields (both electric and magnetic fields), and to a lesser
> extent the lack of proper form factor.
>
> >: Roller Q is absolutely NOT a problem of cabinet size
> >: or anything external to the roller, it is a problem of materials used
> in
> >: the roller and the basic roller design.
> >
> >Coils with very high loaded Q can induce substantial circulating currents
>
> >in any nearby metal, so you don't want to get the cabinet TOO small.
> >What you really don't want to do is get any ferrous material in the
> coil's
> >magnetic field.
>
> First of all, most rollers have large metal end plates (notice I don't
> care if it's steel or gold). They have a wheel in the field, they have
> metal shafts and thick dielectric supports. All of these things reduce the
> effect of external objects.
>

> The Q change of an high Q airwound coil decreases much faster than a
> roller does when placed in any metallic cabinet.
>
> The rapidly time varying field could care less if the metal is ferrous or
> not. Eddy currents prevent any RF external magnetic effects. The real
> problem is the surface area excited by magnetic flux and the resistance of
> the material.
>
> >When I was working on the L-75 amplifier, I had used
> >steel screws to mount the main tank coil. They got way too hot to touch
> >in just a few seconds of amplifier operation. I replaced them with
> >brass screws which ran cool as a cucumber.
>
> The reason brass runs cooler is its resistivity is less than 10% of some
> steels, it has nothing to do with the fact it is non-ferrous. Eddy
> currents prevent any magnetic effects from occuring due to ferrous nature
> of the metal. Had you used lead screws, they would have been as hot as the
> brass. Had you used iron screws, they would have been almost as cool as
> the brass. Stainless steel screws that you couldn't pick up with a magnet
> would have gotten much hotter. it all relates to the RF resistance of the
> material, not the magnetic properties.
>
> So far as Q loss.... brass, aluminum, steel, copper or even silver will
> kill the Q of a coil when the material is placed in the wrong area. Any
> metal placed near the coil increases stray capacitance and acts like a
> shorted turn, reducing inductance and lowering Q.
>
> Any cabinet wall or metal placed too close to a coil....be it gold, steel,
> copper, or aluminum...will kill Q and efficiency. ALL cabinets should be
> kept away from RF coils. The performance difference caused by the "type"
> of metal is often immeasurable, it is the distance that really matters.
>
> >: As for power ratings, it is NOT correct to specify a power rating
> >: without specifying both a load impedance and a frequency. ANY
> >: manufacturer who says "this is a 3 KW tuner" without being band and
> load
> >: specific is just howling out a number that may not - and probably will
> >: not - mean anything to you. The only way to know for sure if a certain
> >: tuner will work is to try it with your own antennas.
> >
> >That depends on the circuit design. The above is true for most designs.
> >However, all the Drake tuners used a PI-L arrangement set up so that the
> >circulating current in the tank coil is independent of the load
> impedance.
> >That means you can specify the insertion loss and power capability
> without
> >specifying the load impedance. True, the load impedance does slightly
> >affect the RF voltage across the loading capacitor (the one in series
> with
> >the output), but it is not hard to figure out the worst-case condition

> and
> >design the capacitor accordingly.
>
> In any tank circuit, currents and voltages are greatly affected by load
> impedance. That current has to come from somewhere, it doesn't just
> "pop-up" at the output port. That includes the pi-L.
>
> For example, I have a common point impedance of 12 ohms in my 160 meter
> array. A number eight coil in a pi L circuit (used for bandwidth
> considerations) connected to the low Z output terminal gets so hot it
> actually stinks. The pi-L network in the MN-2700 would be just as bad,
> since it would have exactly the same current in the last inductor as my L
> network.
>
> Unless the MN 2700 used a number eight air wound inductor or larger, my
> 160 meter antenna (or any other antenna with a low impedance) would murder
> it.
>
> The MN 2700 was a good tuner, but it is no exception to network theory.
> The guy with the X-match complained also, but the number 12 or 14 inductor
> in the X-match would become history when feeding my 12 ohm load. I can
> guarantee there are a lot of hams that have even worse loads on 160 and
> 80.
>
> 73 Tom

Yea really! Try tuning a 120 long center fed on 160 meters! I managed
to do it by using the link and associated tuning caps from the final
amplifier of a scrapped out 1 KW AM broadcast tranmitter.

337. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.242.010E76F8@azstarnet.com>
Source record: 98738

In article <5b4umk$nd9$1@nadine.teleport.com> w7el@teleport.com (Roy Lewallen) writes:
>From: w7el@teleport.com (Roy Lewallen)
>Subject: Re: Silver salts & urban legends
>Date: Fri, 10 Jan 97 08:27:54 GMT

>In article <32d58ecf.829916@netnews.worldnet.att.net>,
> jfriley@worldnet.att.net (J. Fred Riley) wrote:
>>On Thu, 09 Jan 97 20:51:22 GMT, w7el@teleport.com (Roy Lewallen)
>>wrote:

>>>I consider the "fact" that silver sulfide, oxide or other salts are good
>>>conductors to be an urban legend. All attempts I've made to find the
>source
>>>have resulted in "I heard it from. . ." but never a pointer to an
>>>authoritative source.
>>We were, for many years, the only broadcast manufacturer to employ a
>>staff chemist. This exact question came up during his tenure. The
>>search for an "authorative source" was also fruitless at that time.
>>There were, however, measurements made here to confirm the legend.
>>The results were never published but they amounted to two
>>generalizations:
>>a) silver oxide is at least as good a conductor as silver, and
>>b) other contaminants could impair this conductivity.

[snip]

>Fred,

>You're the first person I've heard from with direct experience in measuring
>silver oxide. It's interesting that its conductivity is as good as silver,
>which I had thought to be the best conductor known (at room temperature).
>Did you also measure silver sulfide, perchance, since as Rich points out
>it's much more common as a contaminant.

>I personally do see a reason to research the point further, and so far I
>have yet to see any foundation at all for claims about silver sulfide
>(although I now have your experience as testimony that silver oxide is at
>least as conductive as silver). The possibility that one can oxidize silver
>to further increase its conductivity should excite some interest.
>Even if it's only as good as silver, this information may be
>important. Silver has some real problems as a conductor material on
>substrates due to metal migration. If silver oxide doesn't, and is at least
>as good a conductor, it may have some real advantages for this use. It's a
>shame the results of your experiments weren't published.

>Roy Lewallen, W7EL

I asked one of my metallugical engineer friends about this. He *thought* (no experimental evidence) that silver oxide would be a semi-conductor.

Now if somebody wants to donate some precision air-line coax with silver center conductors that I can oxidize, I will gladly make before and after measurements on an HP8510C network analyzer and we can put this to bed.

Any takers? I didn't think so. <g>

N7WS

338. "FINE" SCANNING is GROWING

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: confused@primenet.com
Message-ID: <confused-1001970352250001@ip174.lax.primenet.com>
Source record: 98739
Cross-posted to: rec.radio.amateur.equipment,rec.radio.scanner,alt.radio.scanner.uk,alt.radio.scanner,sci.geo.satellite-nav,rec.radio.amateur.misc,rec.radio.amateur.homebrew

```
Come visit a great scanning links site at:

http://www.primenet.com/~confused/scan.html

over 2000 scannists can't be wrong!!

?? or comments leave E-mail

Have fun
James
```

339. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Reed <radiohead.telis@news.telis.org>
Message-ID: <32D6FF5A.7EE2@news.telis.org>
Source record: 98740
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Pieter Ibelings wrote:
>
> Hi Mr. Teddy bear,
>
> I know this is not the design that you requested, but here it goes.
>
> Due to your "dream like" gain figures for this antenna, I recommend a
> supercooled,
> superconducting bifilar helical antenna. By using superconductive wires,
> you
> should be able to make the resistive losses of the antenna equal to zero.
> This
> should greatly increase the performance of the antenna.
>
> ... or you could use a yagi array. Let's use simple math to calculate the
> number
> of antennas required to achieve 30 dB of gain. For this example we will use
> a
> cushcraft antenna (13B2) with an approximate gain of 14dB. If you were to
> connect n of these antennas together, the gain would increase to 14 + 10
> Log (n).
> If we assume that for every antenna there is a loss of .25 dB in feedline
> and
> splitter losses, the above formula becomes 13.75 + 10Log(n) = 30dB. Solving
> the
> equation for n gives us :
>
> n=10^1.625
> How many antennas do you need?
> 42.17 antennas
> Since antennas come in whole units, I recommend you use 42 cushcraft
> antennas
> and 1 MFJ antenna. This should approximate the requirements. Care should be
> taken
> as to not skew the antenna pattern. I recommend placing the MFJ antenna
> dead center
> of the array. Actual results may vary if you use Radio Shack CB cable.
>
> On a last note,
> If you decide to go with the supercooled, superconducting bifilar helical
> antenna, I
> recomment that you build two of these antennas with opposite polarization.
> This will

> enable you to hear your own echos. See you on EME!
>
> 73's
>
> P.S. You owe me $300 in design fees... Puto!
>

Bien Dicho!

I loved it. I think I'll build one of them liquid cooled helicals!

73's

Reed

> Teddy Bear <teddyb@prog1.caprica.com> wrote in article
> <Pine.BSF.3.91.970109223539.20816E-100000@prog1.caprica.com>...
> > On 9 Jan 1997, Pieter Ibelings wrote:
> >
> > > Teddy Bear <teddyb@prog1.caprica.com> wrote in article
> > > <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>...
> > > > Duh.
> > >
> > > > That's an old XYL's tale.
> > >
> > > > I expect 25-30 bB.
> > >
> > > > I don't remember asking for criticism. nothing more.
> > >
> > > > You mean to say that you critiqued my idea when don't even HAVE a 2m
> > > > helical much less built one?
> > >
> > > > No thanks, I'll wait for someone who can offer exact formulas or
> > > > mesurements, rather than speculations. My time is valuable and my
> money
> > > > is sparse. This is not a game to me so I can't just wing it.
> > >
> > > You obviously have an attitude ploblem "teddy bear". Someone here is
> trying
> > > to help you and at
> > > the same time you are treating him like an idiot.
> >
> > Since you are addressing this to me more politely than John did, I will
> > reply more politely to you...
> >
> > DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
> > CRITICISM, SIR?
> >
> > > How can you expect anybody to help you when you treat people the way
> > > you do?
> >
> > Help MUST be the information that was ASKED FOR in order to qualify AS

> help.
> > Since it was CLEARLY what I had said in advance that I DON'T want, then
> > it is not help.
> >
> > If you are visiting someone working on something and they ask you to pass
>
> > them a screwdriver and instead you pass them a hammer then you are
> > annoying them, not helping them, RIGHT?
> >
> > > If you don't like the help that you are being offered for free then
> > > hire an engineer and pay him consulting fees. I am sure that he will
> put up
> > > with your **** if you pay him enough.
> >
> > With that language, young man, you just threw all politeness right out
> the
> > window. If you can't discuss it without cussing me out, get lost. This is
>
> > not email, it's a public forum and kids DO read the posts here.
> >
> > > By the way, if you are expecting 25-30 bB's of gain you are
> > > just dreaming.
> >
> > WHO ASKED YOU? DID I ASK FOR OPINIONS? NO! I WAS SPECIFIC IN WHAT I ASKED
>
> > FOR AND IN WHAT I DID NOT WANT TO HEAR! ALL I ASKED FOR WERE DESIGN
> SPECS!
> > IS THAT CLEAR???
> >
> > > Or do your bB's = MFJ dB's?
> >
> > Since you DID ask:
> >
> > MFJ makes crap. They are hung up on using half-wave designs which usually
>
> > ARE crap. When they figure out what a quad is they might have a clue, but
>
> > until then much of what they make is overpriced trash.
> >
> > > 73's
> >
> > What's the purpose of that? Don't tell me "73" after you just cussed me
> out.
> > 73 means best regards and you've displayed contempt, not best regards.
> >
> > TO EVERYONE: KEEP YOUR CRITICISMS AND CONTEMPT TO YOURSELVES! I DON'T
> > WANT IT AND I WON'T HAVE IT! I asked only for antenna design SPECS.
> >
> > If you can't give someone what they asked for then don't annoy them by
> > wasting their time and "bandspace" with unwanted opinions!

> >
> >

340. Need Heath Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: cpierce@usit.net
Message-ID: <cpierce-1001972017060001@col-max41.dynamic.usit.net>
Source record: 98741

I am in need of a manual for a Heath HP-1144 power supply. It rolled over and died (after the +/- touched). Aftr looking around I see that I need to replace some caps that have begun to leak. I will pay copy and postage costs.

Thanks Charles KD4HHX

341. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: cpierce@usit.net
Message-ID: <cpierce-1001972013280001@col-max41.dynamic.usit.net>
Source record: 98742

In article <32D52BF1.694B@arrl.org>, Jon Bloom <jbloom@arrl.org> wrote:

> Joe Subich wrote:
> >
> > In message <32C3C9CA.2572@star.enet.dec.com> - "L.Mark Pilant"
> > <pilant@star.enet.dec.com>Fri, 27 Dec 1996 08:06:19 -0500 writes:
> > :>
> > :>
> > :>If anyone wants to ask me questions about this software, feel free to
> > :>send me E-mail: pilant@seesaw.enet.dec.com.
> > :>
> > :>I apologize for being so long winded, but there are probably some folks
> > :>that would benefit from these CDs; crude as they are (at the moment).
> > :>
> >
> > In this day and age why would anyone publish what is exxentially a
> > database or infromation retrieval product that *required* its users
> > to use a specific operating environment? Particularly, when there are
> > at least three four other operating environments (DOS, Macintosh, Unix,
> > OS/2) in use among the product's target audience?
>
> I've heard from several Mac users who are, to put it mildly, highly
> incensed that the QST View product is Windows-only. And, of course,
> there are the comments that havwe appeared on this newsgroup.
>

----------snip-------------snip-------------snip---------------

We just can't afford to *pay* anyone to do it.
>
> --
> Jon Bloom, KE3Z | jbloom@arrl.org
> American Radio Relay League |
> 225 Main St., Newington CT 06111 |

Ever thought that sometimes you cannot afford not to pay.

A thought as a Dedicated Mac user and a Dedicated Ham.

Charles KD4HHX

342. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: "Aaron A. Collins" <collina@pop3.cris.com>
Message-ID: <32D72A84.1933@pop3.cris.com>
Source record: 98743

Roy Lewallen wrote:
>
> In article <32d58ecf.829916@netnews.worldnet.att.net>,
> jfriley@worldnet.att.net (J. Fred Riley) wrote:
> >On Thu, 09 Jan 97 20:51:22 GMT, w7el@teleport.com (Roy Lewallen)
> >wrote:
> >>I consider the "fact" that silver sulfide, oxide or other salts are good
> >>conductors to be an urban legend. All attempts I've made to find the
> source
> >>have resulted in "I heard it from. . ." but never a pointer to an
> >>authoritative source.

I can't quote anything on this except the statement I got from my
"Elmer";
the oxide conducts just as well as silver; evidenced by the fact that
crappy
oxidized N/BNC/PL-259 connectors work just as well as clean new ones!
Stuff
that in your empirical pipes and oxidize it!

343. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5b6av3mlg4@news3.microserve.net>
Source record: 98744
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

>This is the second time that you have seemed to make a big point about
>monofilar, big deal. This is by far the more common design compared to
>bifilar and quadrifilar.

I'm trying not to get in the middle of the flame wars here, but I was
wondering what the difference between monofilar, bifilar and quadrifilar is?
Mono is one and bi is two ect... How does this relate to a helical antenna?
TIA

Tyler
N3SPD

344. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <$1TCklAqXs1yEw8b@ifwtech.demon.co.uk>
Source record: 98745

Gary Coffman wrote:

>(if you hear the "click" just prior to the earthshattering boom and
>blinding flash, you're too damn close. The "click" is caused by direct
>induction into the auditory nerves from the strike current, and means
>you are very deep into the most intense part of the field.)

You could also be hearing the telephone company's spark gap firing due to a strike a few hundred yards away. The electrical surge arrives just before the sound wave.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

345. Re: MFJ-259 Mod - MORE POWER!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Jeff Hutchinson <w4pbc@digital.net>
Message-ID: <32D68AE5.2E4@digital.net>
Source record: 98746
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Amen! I didn't realize that the 259 was underpowered.

Thanks again, Gary.

73,
de Jeff N4JT

346. Re: Building A Repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <32D6A8B9.40EF@onramp.net>
Source record: 98747

JEFFWALSH wrote:
>
> Hello and thank you for reading this post.
> I have been trying to locate and all information on how a repeater works
> and ow o build one from scrach. Please let me kow any thing you might
> know that could help me in this attempt. I have been reading but to no
> avail. Please E-Mail me if possible if not I will check in here.
> Thanks Again
> Jeff (N1UWN)
> JeffWalsh@prodigy.net

Check the ARRL Handbook. last time I looked they discussed it. Also look
for the ARRL book I believe it's called FM and repeaters.

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

347. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5b6br2mlg6@news3.microserve.net>
Source record: 98748
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

>DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
>CRITICISM, SIR?

oh yea, I must have missed that with everyone else. I read your original post. I did not see any warning to the following:

WARNING: Anybody who does not give me exactly the answers that I asked for will be flamed!

>> If you don't like the help that you are being offered for free then
>> hire an engineer and pay him consulting fees. I am sure that he will put up
>> with your **** if you pay him enough.

Not likely....I'd tell him to fuck off and find himself another engineer.

>With that language, young man, you just threw all politeness right out the
>window. If you can't discuss it without cussing me out, get lost. This is
>not email, it's a public forum and kids DO read the posts here.

Yea, there are a LOT of kids who like to read Helical design for EME.

>
>> By the way, if you are expecting 25-30 bB's of gain you are
>> just dreaming.
>
>WHO ASKED YOU? DID I ASK FOR OPINIONS? NO! I WAS SPECIFIC IN WHAT I ASKED
>FOR AND IN WHAT I DID NOT WANT TO HEAR! ALL I ASKED FOR WERE DESIGN SPECS!
>IS THAT CLEAR???

IF YOU DON'T LIKE THE ADVICE GIVEN HERE, DON'T ASK FOR ADVICE HERE.

It's that simple.

Tyler

348. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5b6a2tmlg3@news3.microserve.net>
Source record: 98749

>The basic problem, which recurs for just about any software product we
>produce, is that the number of Mac users who might buy an ARRL product
>is miniscule.

Mac? Wasn't that an add on for the Commode 64 or was it the Texas Inst.
TI99a?
har de har har.
Tyler

349. Re: Mobile sets in rental cars

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: pauld@wrq.com
Message-ID: <5b69e4$soq@wrqnews.wrq.com>
Source record: 98750

In article <32D50C90.75F0@hvsag01.nl.lucent.com>,
fvwensve@hvsag01.nl.lucent.com says...
>
>*** Please CC to my Email address as well. Thanks! ***
>
>Does anyone have a good idea on how to mount a mobile set in a company
>car or a rental car?
>

>--
How about Velcro? Use the prickly side and attach it to your rig, then you
might be able to stick it to the seats, or carpeted areas of the car.

Paul Dunn
WRQ Reflection Software

350. Looking for tube tx schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Cesare.Lavazza@nemo.it
Message-ID: <32d6b507.3638854@news.interbusiness.it>
Source record: 98751

Where to find simple tube transmitter schematics?
Thanks.

Saluti.

E-mail: Cesare.Lavazza@nemo.it
WWW: http:\\radionostalgia.net\Users\Lavazza
http:\\www.geocities.com\CapeCanaveral\4573

351. Re: After some consideration...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.ch.intel.com>
Message-ID: <32D6980E.1BCB@ccm.ch.intel.com>
Source record: 98752
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear wrote:
> This is not a social newsgroup, it is a technical newsgroup.

I dunno, Teddy, if this was a technical newsgroup, it probably wouldn't have 'rec' and 'amateur' in the title. :-) I've found most of the guys on this group to be downright sociable.

73, Cecil, W6RCA, OOTC

352. Re: Coherer...What is it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: jcraig@morgan.ucs.mun.ca
Message-ID: <5b66aj$1k@coranto.ucs.mun.ca>
Source record: 98753

Frank W. van Wensveen (fvwensve@hvsag01.nl.lucent.com) wrote:
: pfriedr wrote:

: > I wonder if one of the old timers out there could tell me something about
: > "Coherers"---what were they exactly and how did they work?

: AFAIK, a coherer was a glass tube with two electrodes and filled with a
: granulate conductor or semi-conductor. (Iron filings?) An HF signal
: would make the granulate stick together somehow, which resulted in a
: significant lowering of resistance between the two electrodes. (Sorry if
: this is a little vague but so is my recollection of these old things.)

: > I get the impression that they functioned as detectors,
: In the sense that they could detect an HF signal, but AFAIK they didn't
: rectify it.

: > but I'm puzzled about
: > references to "tappers" and other key-wound mechanisms designed to > agitate them.
: The HF signal triggered an (increase of) electric current in the circuit
: that the coherer was part of. Because the granulate remained stuck
: together a mechanical means of separating them was needed. Therefore,
: the current (typically a received morse code signal) triggered a
: solenoid that activated a little hammer, that tapped the glass tube to
: shake loose the granulate.

: Those were the days...

: 73 Frank PA3GMP

There is evidence to indicate that one coherer that Marconi used
here in 1901 for the transatlantic experiment behaved as a diode.
It was called the Italian Navy coherer and comprised a drop of
mercury between two electrodes.

--
73 Joe VO1NA

353. Transmitter Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Gregg j Palmer <gregg_palmer@msn.com>
Message-ID: <01bbff2e$6425d4c0$048f2299@gjp1>
Source record: 98754

I am interested in acquiring a schematic for a transmitter in the 5-9mhz range. Any help in locating one would be appreciated.

354. Re: Mobile sets in rental cars

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: Costas Spanos <spanos@eecs.berkeley.edu>
Message-ID: <32D6DF69.41C67EA6@eecs.berkeley.edu>
Source record: 98755

Frank W. van Wensveen wrote:
>
> *** Please CC to my Email address as well. Thanks! ***
>
> Does anyone have a good idea on how to mount a mobile set in a company
> car or a rental car?
>
> I used to drive my own car; an old clunker so drilling a hole in the
> dashboard was no problem at all. Now I drive a company car and
> (frequently) rental cars, and drilling holes for mounting brackets and

Dear Frank

for a totally "portable" installation, I built a small (20x20cm) flat fixture with four suction cups that stick on the windshield. The CB is then mounted under this fixture. I power the CB from the lighter plug and use a magnetic mount antenna. This installation is very flexible, and you can usually find a spot so the your visibility is not obstructed. I made the fixture out of clear plexiglass, so it does not look too terrible. One dissadvantage is that the CB is very visible from the outside, so I do not leave it there when the car is parked.

Costas

355. Converter from TTY to RS232

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: d-cripps@dircon.co.uk
Message-ID: <5b516j$7pp@newsgate.dircon.co.uk>
Source record: 98756

I,m trying to build an interface to connect
my AR8000 or my Opto Cub to a serial port
on my PC, with the power being drawn from
the RS232 interface.

Both AR and Opton use TTY input levels
(the 8000 is full duplex the Scout half
duplex CI-V).

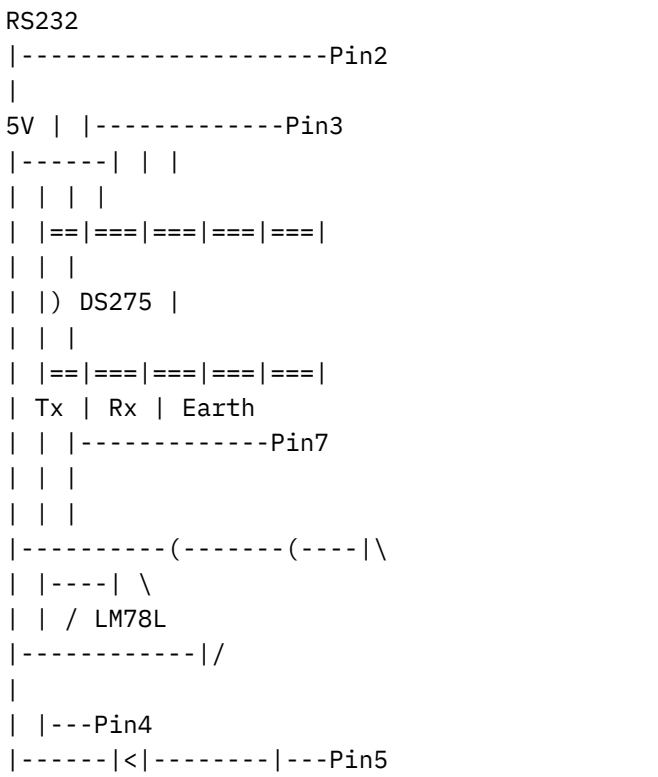
If possible I'd like to fit the lot into
the headshell of the 25pin plug!

One design I've seen uses one small chip
to convert 232 to TTY, one voltage regulator
and a diode for protection (see below)

I've heard of other designs (Edco and JCom
come to mind). Any hints/ideas/suggestions?

TIA

Dave Cripps



Diode

356. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5b5ooa$btv@techsrv1.tech>
Source record: 98757
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

James Leahy (jleahy@norwich.net) wrote:
: Hmm, someone who apparently is using a "handle" calling some of us CBers?
: IMHO, based on total conjecture, is that since the code was de-emphasised,
: we surely haven't gotten flooded with new engineers as we were promised by
: the no-code lobby. But we sure have created a boon for the 2 meter rig
: manufacturers as many of the 11 meter gang has moved up to the "major
: league".

What, and you think that being able to do code makes you an engineer?
I don't think so! Only about 1/10 of our club actually knows code
and over 3/4 of us are engineers. If you actually think that code
is a prerequisite to be an engineer, you should go back to school! CW is
only briefly mentioned in communications classes today.

And as for "Teddy Bear", there are quite a few of us that actually build
stuff yet.

--
/\
\ Michael Long || President /
/ Callsign: KB8WPE || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/

357. Good source for ideas for Energizer bunny commercial (was Re: Good source for amplifier tips)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-10 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5b4v0b$lvl@abyss.West.Sun.COM>
Source record: 98758

"They call us amplifier designers, but that really trivializes what
we do"......

;-)

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

358. PRO 26 MEMORY MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: yatkonj@ibm.net
Message-ID: <32D80B3B.3220@ibm.net>
Source record: 98643
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner

Is there a mod to expand the memory on the PRO-26?
Any help would be greatly appreciated.

359. Re: Electro Encephalo Graphy (EEG) info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: "James P. Meyer" <jimbob@acpub.duke.edu>
Message-ID: <Pine.SOL.3.91.970111164825.18403A-100000@godzilla3.acpub.duke.edu>
Source record: 98644
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew,sci.engr.biomed

On 11 Jan 1997, lbliao wrote:

> I am looking for any book or papers that talk about the electro enchphalo
> graphy. Specifically, I am looking for information of typical EEG, the
> voltage levels involved, the frequency range, and how to pick up the
> signal. If the signal can be displayed on an oscilloscope?

Signals are in the microvolt to milivolt range. The frequencies
are from 1 Hz to 50 Hz. An oscilloscope probably won't be suitable
unless you make a preamplifier to boost and filter the signals.

Jim

360. Re: Any tips on labelling cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>
Message-ID: <32D7A3D6.18F4@postoffice.worldnet.att.net>
Source record: 98645

Paul Mooney wrote:
>
> Thanks for reading.
>
> I'm just completing a homebrew project which I want to look good (not
> just perform well).
>
> Any tips for labelling on/off switch and other controls - more
> professional looking that Dyno or paper labels?
>
> Thanks in advance,
>
> Paul G7SPV

Press on transfer lettering is available in office or art supply stores.

Tom, KC8DGU

361. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: orion@capital.net**
Message-ID: <32d80960.20970424@news.capital.net>
Source record: 98646
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear <teddyb@prog1.caprica.com> wrote:

>On Fri, 10 Jan 1997, tyler wrote:
>
>> Teddybear:
>> I sure hope you don't expect any more help on your helical antenna after you
>> pulled this asshole stunt.
>>
>> Beggars can't be choosy.
>
>WHAT makes me a damn begger? I have info to give on other topics pal!
>Fair exchange is not robbery as the old saying goes. So get off your high
>horse because you do not have a corner on knowledge and even though I dont
>know it all, I certainly am not knowledgabley bankrupt!
>
>And AGAIN if I ask for a screwdriver and you give me a hammer then your
>idea of "help" is not help at all!
>
>What is so hard to understand about that? IT HAPPENS TO BE TRUE!
>
>
After reading some of your ravings, Teddy-poo, I think you should go
back on your medication.

--
73,
Butch N2YMJ
(To send mail, delete the
two stars at the end of my address.)

362. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5b941v$n87$1@nadine.teleport.com>
Source record: 98647

In article <1997Jan11.172556.14349@ke4zv.atl.ga.us>,
gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>Actually, Roy, if his data is correct (not in my 47th edition of CRC
>either), it means that oxidized or sulfided silver is about 6 orders
>of magnitude more conductive than oxidized copper. Thus it clearly
>demonstrates the advantage of silver plating copper in any environment
>which isn't oxygen free, such as those where our tank coils and cavities
>are found.
>
>Gary

Actually, lower resistivity isn't necessarily better. If the resistivity is zero, there's no loss because it's a perfect conductor. If it's infinite, there's no loss because it's a perfect insulator. There's a value in between at which the loss is greatest, and it decreases with higher or lower resistivity. The magic value depends on the coating resistivity, thickness, and frequency. As the resistivity increases, so does the skin depth. A thin, highly resistive coating won't have much current in it, hence won't have much loss. An example is aluminum oxide which quickly forms on any aluminum conductor. It's thin and an excellent insulator, so contributes no appreciable loss. The problem is similar to one of impedance matching.

I'll try to shake some time loose to look up references for current distribution or loss in plated materials. As I recall, it's not a simple problem. I suspect that both copper oxide and silver sulfide are sufficiently highly resistive that neither will contribute appreciable loss at HF and above, unless the coating thicknesses are greater than I think they'd be.

I'm not much of a chemist, but it seems that an important issue is whether the oxide is porous (as with iron oxide) or non-porous (as with aluminum oxide), since a non-porous coating would limit the depth of the coating.

Incidentally, copper sulfide is common in some industrial environments, and copper chloride is common near the sea. I know copper chloride is non-porous; exposure to salt air will turn wire into powder.

Roy Lewallen, W7EL

363. Telephone Interface / Phonepatch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: vincebucc@aol.com
Message-ID: <19970111202400.PAA26804@ladder01.news.aol.com>
Source record: 98648

I have degutted a very old rotary desk telephone unit. I think it is Western Electric. Dates back to about 1962.

Inside I find a black box that has labeling:

C NET 425B and is date-stamped 12-62.

The telephone line cord has Red @ term L2, Yellow @ term G and Green @ term L1.

The handset coiled line cord has White and Red @ term R, Black @ term B and White @ term GN.

The Hook-Lever switch mechanically controls a relay type device that has several wires going to other terminals on the CNET 435B box.

Other terminals on the box no longer have wires connected; they probably had wires from the ringing device connected at one time. Too long ago for me to recall now.

I would like to find out any and all info about this box. I am thinking that I should be able to make use of it as the main element in a telephone interface/phone patch. My intent is to interface HamComm generated tones (avail @ RS232 level on COM port of my PC) to the telephone line w/o disturbing the telco lines.....

I cannot be certain that this item is still in working order, as the telephone no longer worked when I put it aside. If schematic info or functional block diagram is available, please get in touch with me. With this info, I hope to check out the box and put together a suitable switching circuit.

Thanks.

364. Kilowatt Ten Tec Transceiver System For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: "David T. Messerschmidt" <messy@pcpros.net>
Message-ID: <32D82ED0.35F6@pcpros.net>
Source record: 98649
Cross-posted to: sci.geo.satellite-nav,rec.radio.amateur.misc,rec.radio.amateur.homebrew

My friend KA9DQQ (Dick) has the below equipment for sale.
He resides in Wausau, Wisconsin USA

Ten Tec Model 705/705A Electret Condenser Microphone
Ten Tec Model 585 Paragon All-Band HF Transceiver
Ten Tec Model 253 2 Kilowatt Automatic Antenna Tuner
Ten Tec 9420 Power Supply
Hercules II Model 420 Solid State Linear Amplifier

All Ownerï¿½s Manuals Included.
System Completely Rack Mounted.

Price $3,600.00 Plus Shipping/Handling/Insurance.

I am posting this for him, please call him for any additional
information.

Pricing on above equipment should be confirmed with KA9DQQ.
Final price is subject to his approval.
I reserve the right that if a typographical error occurred, it was
not made to misrepresent KA9DQQ or misguide the reader of
this posting. Laymanï¿½s termsï¿½ I am not the best of typists.

KA9DQQï¿½s personal information is as follows:

Email: elmer5@juno.com
Phone: 715-848-8095

Thank you for your time and attention.
Dave KB9OPQ

365. Re: BRAIN WAVES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: pkay@smartlink.net
Message-ID: <pkay-ya02408000R1101971656110001@news.smartlink.net>
Source record: 98650
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew,sci.engr.biomed

In article <5b90l6$d8v@gap.cco.caltech.edu>, lbliao@alumnae.caltech.edu
(lbliao) wrote:

> I am looking for any book or papers that talk about the electro enchphalo
> graphy. Specifically, I am looking for information of typical EEG, the
> voltage levels involved, the frequency range, and how to pick up the
> signal. If the signal can be displayed on an oscilloscope?
>
> Thanks a lot!
> lbliao

You need a high-gain differential amplifier and a tunable low-frequency
bandpass filter. Without the filter you will pick up alot of noise. I built
a biofeedback monitor in about 1974 from a Popular Electronics project that
was essentially this. I was able to view alpha waves with it. Can't help
you on the actual levels but they are probably in the microvolt level.
Maybe someone out there has a Popular Electronics collection with that
article.

--
Peter Kesselman

366. Re: Mobile sets in rental cars

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: Vincent Magguilli JR <vincejr@frontiernet.net>
Message-ID: <32D82D44.2463@frontiernet.net>
Source record: 98651

Heres an idea There is a product out called "SHELF -IT" you attach it to the sun visor screws you remove the sunvisors attavh shelf it and attach the sun visors to shelf it this way when the car goes back remove and no one will know
vince
F

367. Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: 74003.470@CompuServe.COM
Message-ID: <970111221107_74003.470_BHR42-2@CompuServe.COM>
Source record: 98652

w7el@teleport.com (Roy Lewallen) Wrote:
> Thank you, thank you! As I mentioned earlier, I've looked for years for
> this information without success, including in my CRC Handbook. Although
> it's terribly hard to find anything in this book, I'm pretty sure it's not
> in my 59th edition. (It does have a table of semiconductor properties, but
> not including resistivity.) What edition did you find it in?

My CRC Handbook is the 70th edition (1989-1990). The table is on page B-205.
Apparently CRC got this table from the "Handbook of Physical Properties of
Rocks," Vol. I, CRC Press, 1982.

> The data you quote turns the commonly-heard statement about the
> conductivity of silver sulfide from an urban legend to a very wrong
> statement.

Actually the conductivity is not that bad if the sulfide layer is relatively
thin compared to the contact surface area. Still, silver metal should conduct
100,000 times better than argentite. (And argentite conducts 3,000,000 times
better than copper oxide.)

I don't know what chemical or physical differences there are between the mineral
argentite vs. tarnished silver.

Paul

368. Re: Any tips on labelling cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: Alan Eldridge <ALAN.ELDRIDGE@DRAGONBBS.COM>
Message-ID: <32D8437B.6EC3@DRAGONBBS.COM>
Source record: 98653

> Any tips for labelling on/off switch and other controls - more
> professional looking that Dyno or paper labels?

Brother makes a thermal printer/labeler system called the Ptouch
in various models. The print media comes in various size catridges
and different colors, black letters on clear, white or multicolored
backgrounds, white letters etc.

369. Test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: italy <italian@aa.net>
Message-ID: <01bbff55$9b64d400$c28dc7cd@default>
Source record: 98654

Testing

370. power supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: italy <italian@aa.net>
Message-ID: <01bbff57$6a163ae0$c28dc7cd@default>
Source record: 98655

I have a 1.75A realistic regulated power supply that I would like to power my 2M
HT with, when hooked up it works however I seem to get a bad hum on both voice and tone while transmitting, is there a simple fix for this? any help would
be gratly appreciated, thanks in advance

73s KC7PWZ

371. Re: After some consideration...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: wwhite@southwind.net
Message-ID: <5b6lk2$38b@opal.southwind.net>
Source record: 98759

In article <Pine.BSF.3.91.970109235235.20816J-100000@prog1.caprica.com>,
Teddy Bear <teddyb@prog1.caprica.com> says:
>
>
>Maybe I expected too much of people's ability to give me only what I
>asked for or to leave the answering to those who CAN.
>
>If my high standards for engaging in scientific discussions seem to be
too
>much for some people who access these newsgroups to handle, I can only
>apologize for not realizing that. However, I will not apologize for
>having such high standards for engaging in scientific discussions. The
>latter is not a sin.
>
>Perhaps I just tend to sometimes forget that ham radio is just a hobby
to
>some people and that said people think that the phrase "just a hobby" is
>synonymous with the phrase "just a game".
>
>Ham radio cost a lot of money as you all know. I am not a rich man.
>Therefore I take it much more seriously than most, because I take my
>money much more seriously than John Q. Deep-Pockets might.
>
>To me ham radio is NOT a game. It is an educational laboratory in which
>we are supposed to hone our skills as elecronic engineers or something
>like that. I find that not many people look at it that way. To many, ham
>radio is just a more respectable version of a citizens band, and these
>kind of people are everywhere from novice class to extra class in
similar
>percentages from class to class. I find that frustrating sometimes,
>DEPENDING of the forum. "When in Rome..." you know. Well in THIS forum,
>the names of these three newsgroups lead me to believe I would be
talking
>to people who are as technically serious as I am. Now I see I may have
>read too much into the whole thing and thus formed unreal expectations
of
>some of you.
>
>Let me try to make it easier to avoid conflicts in the future:
>
>If you take ham radio and electronics VERY seriously, as I do, then I
>welcome you to share your studies and knowledge with me, and if you ask,
>I'll try to do likewise.
>

>But if you are a "weekend warrior" who enjoys a good ragchew discussion,
>but ham radio is just a high tech game to you, sorry, but I do not come
>to technical newsgroups for that so ignore my posts because I am not
>going to be like a friendly puppy and go play frisbee with you in here.
>I find that annoying and it provokes me into being cold and if you tell
>me off for being cold then I am going to be very mean and nasty. Thats
>just the way that I tick, so don't say I didn't warn you.
>
>However, in NON-technical newsgroups I can easily be just one of the
guys
>and be able to kid around and have fun like anyone else, but "I don't
mix
>my peas in my spuds" as they say. I am technical in technical newsgroups
>and I am human in non-technical newsgroups and never the twain shall
>meet. So don't try to make me be like you, running and hopping and
>skipping without regard to whether I am in a lab or on a playground.
>
>Business is business, pleasure is pleasure and science is science to me
>and you might like to mix them but I can't and I won't and you will piss
>me off if you try to force me to be like that. I am the same on the air.
>In a technical QSO I don't want to hear about what your favorite movie
is
>or what good gumbo your wife can make and in a SOCIAL QSO I don't want
to
>hear about which resistor you put on the emitter of which transistor.
>
>This is not a social newsgroup, it is a technical newsgroup. If it were
a
>social newsgroup I would be in an entirely different mindset. If you
don't
>like the mindset of "Just the FACTS" then PLEASE... leave me alone and I
>will return the favor! Is that too much to ask? It seems fair to me!
>

372. Re: Need help with HW-101

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5b6ng3$qae@rosenews.rose.hp.com>
Source record: 98760

: Gary Ritter (Highfrequency@msn.com) wrote:
: : I am in the process of repairing mu Uncles rig...WB5GSG...I found several
: : bugs
: : already ...receiver was very weak and meter was dead...found several
: : resistors
: : burned through.
: : Still have two problems though.
: : The bias reads high but appears to be in the normal range using a
: : voltmeter.

: : Gary Ritter...N2EAL

Check the wiring for the meter at the meter function switch.
I had a bias reading that was incorrect and when I thought
I was setting the bias current for the finals to 50mA it was
really about 350mA. Confirm this at the cathode resistor
for the finals. The two 6146's use this common cathode resistor.
You probably took a voltage reading at the resistor and found
the current. My problem was a cold solder joint. Probably
why your meter appears dead or reading incorrectly.

That was only one of 8 problems I found. Bought mine
here on the net. 'Worked the last time I turned it on.'

He didnt say that that was 25 years ago.

373. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970111021800.VAA01976@ladder01.news.aol.com>
Source record: 98761

In article <n7ws.236.00410F93@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) writes:

>
>I mentioned in private correspondence that I would post the info here, after
>each of them had a chance to review and comment upon the data. Clearly, Tom
>has not had this opportunity and I have not been able to present the data in
>what I hoped would be an impartial manner.
>
>I believe that until Tom reviews the information and I post the complete
>summary, it is only adding more confusion to the discussion to make
>references
>to it.

I received the Fax Wes, and find nothing unusual or out of line. Thanks for doing all the work, nice job.

In article <measures-0801971215460001@port22.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>Making a truthful statement that happens to be injurious to a person's
>reputation is not slanderous. It is part of the impeachment process.

Then in the next few lines comes yet another untruthful statement
.....

>No point in continuing this? Is it just a coincidence that you are
>bailing out shortly after you received Wes Stewart's measurements of a
>conventional (W8JI) vhf parasitic suppressor vs. a low vhf-Q (AG6K)
>parasitic suppressor?

It never ends, does it?

Just like the filament controls that weren't true, photons, 500 watt grids, Buzz Miklos' employment status, Marvin Born's statements about a 1500 that wasn't even really a 1500, Dave's TL-922 that was a parasitic (and it turned out to be a lightning suppression device causing the arc, something Measures has long maintained is impossible), it goes on and on and on.

73 Tom

374. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: jfriley@iadfw.net
Message-ID: <32d7128f.504452@news.airmail.net>
Source record: 98762

w7el@teleport.com (Roy Lewallen) wrote:
> Where were these experiments done?
They were done at Continental Electronics in the late 70's by Witt Griffith. Witt retired a few years ago. Connie Hardin participated with Witt in the research and related the information to me. (Sometimes I think Connie has a copy of every paper ever printed; he's also the one with the obscure text you need. He even has a copy of my favorite little amplifier tome by V.O. Stokes; I thought I was the only one outside of the old timers at Marconi who had that one.) The original question came up in connection with coil clamps on silver-plated coils that had tarnished. I was surprised that they found silver oxide conductivity "..at least as good..." as silver since we have problems with low-level signals when silver contacts are used. The sulphur in the silver tarnish must be a good fertilizer for organic material growth at these points. According to the guru's here, all sorts of bugs grow in the tarnish and their colonies are responsible for the contact resistance.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

375. -FS- Drake Parts - accessorys - 6jb6's - etc.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: Ron Sibbitt <n8lmt@usa.net>
Message-ID: <01bbff72$bc13f600$606794ce@ron-s-computer>
Source record: 98763
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

```
For Sale...

Drake W-4 wattmeter...few scratchs on sides
but works great, with manual....$45.00

Drake TV-3300-LP Low Pass Filter...
rated 1 KW...perfect condition..$20.00

Drake replacement Power-on/Function Switch
for R4C, new, never installed...$10.00

Crystals for 4-line, two 12.6mhz (for
getting on 160), one 20.800mhz, one
12.455mhz...all hc6/u..the lot, all for $10.00

Tubes: Pair of new-in-box GE 6JB6A $25/pair
Pair of new-in-box Sylvania 6JB6 $25/pair

DowKey model DK78-T manual transfer switch
new-in-box, real quality! rated 1KW to 500Mhz,
.............$40.00

I need $3. extra to ship any of the above....

call 810-679-3535 or E-Mail n8lmt@greatlakes.net

73,
Ron Sibbitt
5885 Galbraith Line Road
Croswell, MI 48422
E-Mail - n8lmt@usa.net
```

376. -FS- Heath Grid dip Meter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: Ron Sibbitt <n8lmt@usa.net>
Message-ID: <01bbff73$3a8c0f40$606794ce@ron-s-computer>
Source record: 98764
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Heathkit Model HD-1250 Dip Meter with carry case,
and 1.6-3.4, 3.2-6.6, 6.3-13, 12.5-26, 25-51,
48-100, 100-250 Mhz plug in coils. With manual.
Like new condition. Asking $ 40.00 or Best Offer
plus shipping.

73,
Ron Sibbitt
5885 Galbraith Line Road
Croswell, MI 48422
E-Mail - n8lmt@usa.net

377. F.S. - Tubes, radios and much misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970111060700.BAA08121@ladder01.news.aol.com>
Source record: 98765

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1500 different tube types in stock - E-mail Rog42@aol.com and ask for my latest offerings on RADIO list - #110-T.

378. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b7bcp$4ev$1@news3.microserve.net>
Source record: 98766
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Please take this to the Misc or Policy newsgroups.

Thanks,
Jack WB3U

379. Re: Source of 3-500z Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b7bpj$4ev$2@news3.microserve.net>
Source record: 98767

w8jitom@aol.com wrote:

>the Chinese 3-500 makes an excellent fishing line bobber if you
>cast it very gently so the weak envelope doesn't shatter.

Anyone know the name of the factory or where its located (city
and province)?

73,
Jack WB3U

380. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <01bbff54$52371d20$fd1479a8@wave.mindspring.com>
Source record: 98768
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hi Mr. Teddy bear,

I know this is not the design that you requested, but here it goes.

Due to your "dream like" gain figures for this antenna, I recommend a supercooled,
superconducting bifilar helical antenna. By using superconductive wires, you
should be able to make the resistive losses of the antenna equal to zero. This
should greatly increase the performance of the antenna.

... or you could use a yagi array. Let's use simple math to calculate the number
of antennas required to achieve 30 dB of gain. For this example we will use a
cushcraft antenna (13B2) with an approximate gain of 14dB. If you were to
connect n of these antennas together, the gain would increase to 14 + 10 Log (n).
If we assume that for every antenna there is a loss of .25 dB in feedline and
splitter losses, the above formula becomes 13.75 + 10Log(n) = 30dB. Solving the
equation for n gives us :

n=10^1.625
How many antennas do you need?
42.17 antennas
Since antennas come in whole units, I recommend you use 42 cushcraft antennas
and 1 MFJ antenna. This should approximate the requirements. Care should be taken
as to not skew the antenna pattern. I recommend placing the MFJ antenna dead center
of the array. Actual results may vary if you use Radio Shack CB cable.

On a last note,
If you decide to go with the supercooled, superconducting bifilar helical antenna, I
recomment that you build two of these antennas with opposite polarization. This will
enable you to hear your own echos. See you on EME!

73's

P.S. You owe me $300 in design fees... Puto!

Teddy Bear <teddyb@prog1.caprica.com> wrote in article
<Pine.BSF.3.91.970109223539.20816E-100000@prog1.caprica.com>...
> On 9 Jan 1997, Pieter Ibelings wrote:
>
> > Teddy Bear <teddyb@prog1.caprica.com> wrote in article
> > <Pine.BSF.3.91.970109123813.8779O-100000@prog1.caprica.com>...
> > > Duh.
> >
> > > That's an old XYL's tale.
> >
> > > I expect 25-30 bB.
> >
> > > I don't remember asking for criticism. nothing more.
> >
> > > You mean to say that you critiqued my idea when don't even HAVE a 2m
> > > helical much less built one?
> >
> > > No thanks, I'll wait for someone who can offer exact formulas or
> > > mesurements, rather than speculations. My time is valuable and my
money
> > > is sparse. This is not a game to me so I can't just wing it.
> >
> > You obviously have an attitude ploblem "teddy bear". Someone here is
trying
> > to help you and at
> > the same time you are treating him like an idiot.
>
> Since you are addressing this to me more politely than John did, I will
> reply more politely to you...
>
> DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
> CRITICISM, SIR?
>
> > How can you expect anybody to help you when you treat people the way
> > you do?
>
> Help MUST be the information that was ASKED FOR in order to qualify AS
help.
> Since it was CLEARLY what I had said in advance that I DON'T want, then
> it is not help.
>
> If you are visiting someone working on something and they ask you to pass

> them a screwdriver and instead you pass them a hammer then you are
> annoying them, not helping them, RIGHT?
>
> > If you don't like the help that you are being offered for free then
> > hire an engineer and pay him consulting fees. I am sure that he will
put up
> > with your **** if you pay him enough.

>
> With that language, young man, you just threw all politeness right out
the
> window. If you can't discuss it without cussing me out, get lost. This is

> not email, it's a public forum and kids DO read the posts here.
>
> > By the way, if you are expecting 25-30 bB's of gain you are
> > just dreaming.
>
> WHO ASKED YOU? DID I ASK FOR OPINIONS? NO! I WAS SPECIFIC IN WHAT I ASKED

> FOR AND IN WHAT I DID NOT WANT TO HEAR! ALL I ASKED FOR WERE DESIGN
SPECS!
> IS THAT CLEAR???
>
> > Or do your bB's = MFJ dB's?
>
> Since you DID ask:
>
> MFJ makes crap. They are hung up on using half-wave designs which usually

> ARE crap. When they figure out what a quad is they might have a clue, but

> until then much of what they make is overpriced trash.
>
> > 73's
>
> What's the purpose of that? Don't tell me "73" after you just cussed me
out.
> 73 means best regards and you've displayed contempt, not best regards.
>
> TO EVERYONE: KEEP YOUR CRITICISMS AND CONTEMPT TO YOURSELVES! I DON'T
> WANT IT AND I WON'T HAVE IT! I asked only for antenna design SPECS.
>
> If you can't give someone what they asked for then don't annoy them by
> wasting their time and "bandspace" with unwanted opinions!
>
>

381. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: faunt@netcom4.netcom.com
Message-ID: <FAUNT.97Jan10195745@netcom4.netcom.com>
Source record: 98769

From: cpierce@usit.net (C)
Newsgroups: rec.radio.amateur.homebrew
Date: Fri, 10 Jan 1997 20:13:28 -0600

In article <32D52BF1.694B@arrl.org>, Jon Bloom <jbloom@arrl.org> wrote:

----------snip-------------snip-------------snip---------------

We just can't afford to *pay* anyone to do it.
>
> --
> Jon Bloom, KE3Z | jbloom@arrl.org
> American Radio Relay League |
> 225 Main St., Newington CT 06111 |

Ever thought that sometimes you cannot afford not to pay.
A thought as a Dedicated Mac user and a Dedicated Ham.
Charles KD4HHX

Unfortunately, only one user out of 14 uses a Mac. Are you willing to
pay 14 times as much for the software?
That's based on the fact as stated in the SF Chronicle business
section that Apple has fallen to less then 7% of the PC market, due to
their perceived instability.

If the format of the data is available, then maybe a Mac user, a Unix
user, a DOS user on an OS-2 user will do the right thing.
73, doug

(about to become a Windows user, against my predilliction)

382. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5b7imnssr1@nadine.teleport.com>
Source record: 98770

In article <970110190603_74003.470_BHR56-1@CompuServe.COM>,
74003.470@CompuServe.COM (Paul Ostby) wrote:

>Look in the CRC Handbook of Chemistry and Physics. There is a table
entitled
>"Resistivity of Semiconducting Minerals". . .

Paul,

Thank you, thank you! As I mentioned earlier, I've looked for years for this information without success, including in my CRC Handbook. Although it's terribly hard to find anything in this book, I'm pretty sure it's not in my 59th edition. (It does have a table of semiconductor properties, but not including resistivity.) What edition did you find it in?

Thanks again!

The data you quote turns the commonly-heard statement about the conductivity of silver sulfide from an urban legend to a very wrong statement.

Roy Lewallen, W7EL

383. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5b7itessr2@nadine.teleport.com>
Source record: 98771

In article <32D72A84.1933@pop3.cris.com>,
"Aaron A. Collins" <collina@pop3.cris.com> wrote:

>I can't quote anything on this except the statement I got from my
>"Elmer";
>the oxide conducts just as well as silver; evidenced by the fact that
>crappy
>oxidized N/BNC/PL-259 connectors work just as well as clean new ones!
>Stuff
>that in your empirical pipes and oxidize it!

Actually, this is also proof that tin and lead conduct as well as silver.
When I slop solder all over the outside of the PL-259 (which I frequently
do), it still works as well, too.

Consider it stuffed and oxidized.

Roy Lewallen, W7EL

384. Re: After some consideration...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: Jim Leahy <jleahy@norwich.net>
Message-ID: <01bbffa9$6eb174a0$2c821cce@jleahy.norwich.net>
Source record: 98772
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Forgive us, oh Great One, for we are not worthy.
--
Jim Leahy K2JL
jleahy@norwich.net

385. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: jackl@pinetree.microserve.com
Message-ID: <5b7cdd$4ev$3@news3.microserve.net>
Source record: 98773

w7el@teleport.com (Roy Lewallen) wrote:

>Actually, I do. It's called an impedance bridge. Suppose I measure
>200 ohms with the impedance bridge. Then what's the resistivity of
>the coating?

Well, if you make the measurement at say, 20 MHz on a well-tarnished
piece, then remove the tarnish and do it again, the difference should
at least be sufficient to verify whether the legend is true.

73,
Jack WB3U

386. Icom IC-V68

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: itpint01@rad.net.id
Message-ID: <5b7br1$b78@server2.rad.net.id>
Source record: 98774

Does any one knows, all the function in handheald Icom IC-V68.
User guide book not explain all the function ICOM V68.
IF any one knows that list please send to me.

my E'mail address < yong_2@hotmail.com >

JH.Jong

387. Parasitic suppressor data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.243.004203BC@azstarnet.com>
Source record: 98775

As promised, I'm posting the data you all have been breathlessly awaiting.

It is on my home page (which is the first time I've done this) at:

http://www.azstarnet.com/~n7ws

I hope it works!

73, Wes -- N7WS

388. Re: Facts vs Opinions - Teddys opinion...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32D7D34E.112E@izzy.net>
Source record: 98776
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear wrote:
>
> I THOUGHT that these were newsgroups for radio science discussions, based
> upon factual information. But mostly all I see here are people's
> unsolicited opinions based upon conjecture.
>
> That's what happens when code skills are emphasized, hailed and
> rewarded instead of engineering skills. That's also why hams of today would
> rather buy equipment from a store than built it.

Oh I see Teddy, now I'm curious about this connection between rewarding CW skills and unsolicited opinions and conjecture. Do you have some research showing this connection or is this just YOUR UNSOLICITED OPINION?

Additionally I'd love to see what FACTUAL INFORMATION you have showing why hams build or buy. According to you, they buy because we have emphasized CW instead of engineering. For the record I have no formal education and my entire ham shack is either kit or homebrew. Was this just YOUR UNSOLICITED OPINION?

> Amateur radio is a SCIENCE, not a realm of personal opinions! We are
> SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!

It's not defined as a science by the FCC, they are the folks who issue licences.
They call it a SERVICE.

Teddy, the hobby or "science" as you prefer has changed. Sorry! And again thanks for sharing your PERSONAL UNSOLICITED OPINIONS on why hams buy instead of build and why emphasis on CW has caused unsolited opinions based on conjecture. Very interesting observation.

Sheeesh, go design a tranciever or something. I need a new winter project.

72,

Tim Hynde, ka8ddz

389. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan11.161031.13979@ke4zv.atl.ga.us>
Source record: 98777

In article <5aur2q$1v0s$1@news-s01.ny.us.ibm.net> subich@ibm.net (Joe Subich) writes:
>In message <measures-0501970116000001@port78.vcnet.com> -
>measures@mail.vcnet.com (R. L. Measures)Sun, 05 Jan 1997 01:16:00 -0800
>writes:
>:>**Virtually all commercial amplifiers use a rheostat or a Variac to
>:>continuously adjust filament voltage. If a commercial amplifier
>:>manufacturer produced an amplifier without a means of continuously
>:>adjusting filament voltage, it is unlikely that any knowledgeable :>engineer would
recommend purchasing such an amplifier.
>
>I have worked with high power (up to 250 KW) commercial transmitters
>for move than 25 years and have ***NEVER*** seen a rheostat used in
>a single one. In only one case did the transmitter use a Variac and
>that transmitter had a reputation for eating the Variac's brushes.
>
>One transmitter, an RCA G-line, used a regulated DC filament supply
>(with NO "normal operating range" indicated on the meter, by the way).
>The other transmitters used tapped filament transformers with taps
>spaced about 4% ... except one which didn't even bother with any
>filament adjustment (for tubes costing $30K each no less)!

Well, to be fair, the RCA TT50H did use rheostats to set the filament
voltage. The meter didn't have a normal operating range marked though.
The H-line was junk, however, and tended to burn up *everything* from
time to time, including rheostat brushes. It also had the most Rube
Goldberg tuning arrangement I've ever seen, and the packaged bias supply
was marked for use with model train layouts. Arrgh!

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

390. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970111101400.FAA12738@ladder01.news.aol.com>
Source record: 98778

Hi Gary,

In article <1997Jan9.181011.4098@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us
(Gary Coffman) writes:
>
>Well, I haven't measured the input impedance of many HF receivers, but I
>get the impression that they don't much care about a match. What I meant
>by voltage driven is in the same sense that a VOM is voltage driven.
>Of course it takes power to swing the pointer, but we usually don't think

>of it that way. With modern devices, HF receivers aren't internal noise
>limited, they are atmospheric noise limited, so they don't need a match
>to achieve best MDS.

It doesn't matter what we think, it only matters what it is.

Most receivers do not have bridging inputs for several reasons.

The main one is input filters require termination to maintain correct
frequency response.

Second, an improper high Z termination would allow the transmission line
length to wildly control voltage appearing at the open end of the line. On
some frequencies there would be a large step-up of voltage at the receiver
end of the line, and at others a step down of voltage. That would
radically change the receing systems sensitivity with frequency. Remember
it is the receiver that sets the systems SWR when receiving, not the
antenna. I use this effect to advantage in my very broadband arrays of
multi-element phased receiving loops.

>>If the capacitor passes HF RF, then I suspect it is almost useless for
>>lightning. It would only be effective at VLF frequencies and lower as an
>>isolating device. Lightning and nearby stroke induced EMF has a rise
time
>>that is very fast, so the cap looks like it is not even there.
>
>No. It is precisely because the risetime is so fast that the capacitor
>works. It has to have a time constant such that its dV/dt charging slope
>is 350volts/2nS or more. That allows the gas tube time to fire before the

>surge gets clamped by the receiver input shunt impedance, IE a cavity or
>helical filter with an input loop.

I have trouble understanding what you mean. The capacitor is in SERIES
with the transmission line. Current leads voltage, so the capacitor looks
like a short at the first application of voltage. Only after the capacitor
charges, can the gas tube fire.

If the capacitor was in SHUNT with the feedline, it would help. But it would also reduce desired signals.

What did you mean by the above dV/dt thing Gary?

73 Tom

391. Re: Building a phone-patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32D7E8BB.36E7@izzy.net>
Source record: 98779

Teddy Bear wrote:
>
> On 8 Jan 1997, Vincebucc wrote:
>
> >
> > I'm looking for circuit schematic that will allow coupling the audio
> > generated by a PC program to the telco line.
> >
> > I want to eliminate the relay operator when calling a deaf person who
> > uses a text telephone and to use the HamComm program to generate the
> > required tones.
>
> > QRV @ 7085kHz (FSK) Baudot RTTY
>
> I'm sure you heard of an invention called a "modem"! And most modern
> 28800 and even 14400 modems have more than one FSK standard built-in these
> days. In fact, my 15 year old Lynx 2400 SmartModem had them built in!

Yes I'm sure he has heard, interesting thought Teddy Bear, did you
notice he was using the HamComm program to generate the RTTY code?, RTTY
being the standard used by many deaf people. Since the HamComm program
is a dedicated DOS program just how exactly do you expect him to use one
of these modems, just whip up a TSR to control the modem eh?

Tim, ka8ddz

392. Re: After some consideration...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32D7DA63.644D@izzy.net>
Source record: 98780
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear wrote:

> Ham radio cost a lot of money as you all know. I am not a rich man.

Oooh, more FACTUAL information from Teddy. I'm getting ready to build a 4 watt 30m tranciever from the NorCal radio club. It cost me $25 + $3.50 S/H, yep that sure is alot of moola Teddy. Of course my 40m DC reciever I built cost me almost $30 so, yea, I guess thats getting up there.

> This is not a social newsgroup, it is a technical newsgroup. If it were a
> social newsgroup I would be in an entirely different mindset.

By the way Teddy who are YOU to make the descision that this is not a social newsgroup? First, you've posted this to several groups so I'm not sure which one your talking about but you'll notice they all begin with REC. (recreation, get it?)

Your problem is your wound just a little too tight regarding this "technical discussion" thing. Unfortunatly your going to cheat yourself out of learning something new because the teacher at the other end may not take this as seriously as you do. There are alot of very smart people who hang out here, but along with the technical discussion there is alot of ribbing too. Lighten up a bit Teddy, it gets easier as you go along.

Tim, ka8ddz

393. A message to Mr. Trevor Hopps VK8TH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5b8bue$a2q$1@news3.microserve.net>
Source record: 98781

Mr. Trevor Hopps (VK8TH) has taken it upon himself to report me for Email Abuse. Since I really don't know what law I have broken, I'd like for him to explain himself to me. Who did he report me to? For what? Language? Is this not the internet? Who is policing it? Why? If I was using abusive or offensive language over the air on a ham band, I could see his point. BUT, THIS IS NOT THE HAM BANDS. THIS IS THE INTERNET. He left me no Email address to reply to him to counter his accusation. I am apparently GUILTY until proven otherwise in this US of A!!

Mr. Hopps states: "The type of critisism and language contained in your email is not fit for public consumption."

This is YOUR opinion Mr. Hopps. Who are you to police what I write? If you do not like my use of 4 letter words, a polite email would have done much more than this "I tattled on you." email. I would like to debate this issue further with you. I will not use any abusive language at your previous request. However, I would like to discuss the reporting of my email address to whoever you reported it to.
Thank you
Tyler
N3SPD
tyler@cyberia.com

394. Re: help with MC1350

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <32d62f4e.3144675@news.gv.net>
Source record: 98782

Zack Clobes <zclobes@southwind.net>
shared these priceless pearls of wisdom:

->I'm working on a 20M SSB receiver and I'm working on the IF amplifier.
->I chose to use the mc1350 because of it's simplicity.

Others have posted on the circuit design question you asked. One thing you need to be absolutely aware of is that the 1350's gain goes to hell in a handbasket when Vcc is less than 12 volts. It is a nice stable device at 15 volts, pretty good at 14, marginal at 13, and rolls off the table like an orange at 11.9999....

Jim

Jim Weir VP Engineering | You bet your sweet patootie I speak for the
RST Engineering | company -- and I'm damned proud to do so.
Grass Valley CA 95945 | Airport: O17 (Grass Valley Intentional Airpatch)
http://www.rst-engr.com | AR Adv WB6BHI--FCC 1st phone---C-182A N73CQ
jim@rst-engr.com | Comm'l/CFI-Airplane/Glider-A&P-FAA Counselor

395. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970111174500.MAA22134@ladder01.news.aol.com>
Source record: 98783

In article <5b7cdd$4ev$3@news3.microserve.net>,
jackl@pinetree.microserve.com (WB3U) writes:

>
>>Actually, I do. It's called an impedance bridge. Suppose I measure
>>200 ohms with the impedance bridge. Then what's the resistivity of
>>the coating?
>
>Well, if you make the measurement at say, 20 MHz on a well-tarnished
>piece, then remove the tarnish and do it again, the difference should
>at least be sufficient to verify whether the legend is true.
>
>73,
>Jack WB3U
>
>

You forgot to cut the spoon in half and use a yardstick to measure the
thickness of the oxide layer!

73 Tom

396. Re: Building a phone-patch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32D7E3A5.3971@izzy.net>
Source record: 98784

Vincebucc wrote:
>
> I'm looking for circuit schematic that will allow coupling the audio
> generated by a PC program to the telco line.
>
> I want to eliminate the relay operator when calling a deaf person who
> uses a text telephone and to use the HamComm program to generate the
> required tones.
>
> Vince ~ WA2RSX
> Deer Park, Long Island
> New York
>
> QRV @ 7085kHz (FSK) Baudot RTTY

Vince, I've done this, unfortunatly I don't have any documentation to offer. There a tons of 300 and now 2400 baud modems (external are prefered) that you can pick up for a song or $5, that already have the audio transformer and audio amps built in. Since the Hamcomm program has the capability of reading audio tones directly you can simply tap into the sections on the pc board where those signals are present.

I did it with an old 300 baud modem, keep in mind the baud rate is not important since your not using the modem's tones. I played music in to a telephone with the modem connected at the other end, using a old tube signal tracer I found several spots where the audio was I took a tap from the strongest one, thats my RX. I tried to pick a spot that was just on the other side of the transformer. I did the same thing for TX, I put the hamcomm in the rtty mode and let it fly, I probed with the audio signal on a couple op amps close to the transformer and voila, Hamcomm tones on the other phone.

I did have to power the unit for it to work and I did have to cut a few traces to keep the modems tones from interfearing but it was worth the effort. About 2 hrs of work, and my project was already in a box!!

Good luck,

Tim, ka8ddz

397. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: Teddy Bear <teddyb@prog1.caprica.com>
Message-ID: <Pine.BSF.3.91.970111104142.4787D-100000@prog1.caprica.com>
Source record: 98785
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Fri, 10 Jan 1997, tyler wrote:

> Teddybear:
> I sure hope you don't expect any more help on your helical antenna after you
> pulled this asshole stunt.
>
> Beggars can't be choosy.

WHAT makes me a damn begger? I have info to give on other topics pal!
Fair exchange is not robbery as the old saying goes. So get off your high
horse because you do not have a corner on knowledge and even though I dont
know it all, I certainly am not knowledgabley bankrupt!

And AGAIN if I ask for a screwdriver and you give me a hammer then your
idea of "help" is not help at all!

What is so hard to understand about that? IT HAPPENS TO BE TRUE!

398. Any tips on labelling cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: pmooney@onyx.octacon.co.uk
Message-ID: <5b7up9$5qm@runswick.octacon.co.uk>
Source record: 98786

Thanks for reading.

I'm just completing a homebrew project which I want to look good (not just perform well).

Any tips for labelling on/off switch and other controls - more professional looking that Dyno or paper labels?

Thanks in advance,

Paul G7SPV

399. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32D7EFDE.5510@izzy.net>
Source record: 98787
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

The Ted-ster wrote:

> DID I NOT WARN EVERYONE IN MY INITIAL MESSAGE, THAT I DID NOT WANT
> CRITICISM, SIR?

Uh, actually no Teddy you did not. Are you forgetting what your original post said?
Where exactly is the warning? Your starting to drift on us Teddy...

I bet your the kind of guy someone could give a million dollars to and you'd bitch cause you had to pay the taxes on it!!

Can ANYONE here give me a computer-designed plan to make a beam antenna that
fits the following "rough-draft" parameters?

A 30 turn, logarythimic-spaced, Right-Hand Circularly-Polarized (RHCP) beam
antenna for 144.3 MHz, on a manually-swiveling rear-mount boom,(made of 2" OD Aluminum tubing), with a mono-filar element,(made of bare #6 solid copper wire, commonly used by electricians as ground wire for a building's
main box), with insulating "spreaders",(made of either 1/2" PVC, fiberglass
rods or wood dowels).

My idea is to mount the boom vertically on a universal joint, which itself is mounted atop a 10' mast,(5' of the mast actually being below ground level in concrete), and to use pullies and counter-weights with the
non-conductive guy ropes to actually TILT the antenna at the moon,(using a boom-mounted 3X rifle scope to aim it), so by turning 2 lockable cranks
I can track the movement of the moon manually anywhere in it's path anywhere within 60 degrees from plumb,(by "plumb" I mean an exactly vertical position). The mechanics of it are much the same as those of the
older mobile cranes they used to use on rural construction sites.

BTW: I am not open to the idea of using a yagi, so please don't suggest it.

Please reply via both, the newsgroup and email.

Thank you.

400. I'd like to talk to a Mr. Trevor Hopps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5b8h3d$bi4$1@news3.microserve.net>
Source record: 98788

I'd like to talk to a Mr. trevor Hopps by email if he would please.
This is in reference to turning my email address to the Net police.
(communists)

Thank you.
Tyler

401. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan11.172556.14349@ke4zv.atl.ga.us>
Source record: 98789

In article <5b7imnssr1@nadine.teleport.com> w7el@teleport.com (Roy Lewallen) writes:
>In article <970110190603_74003.470_BHR56-1@CompuServe.COM>,
> 74003.470@CompuServe.COM (Paul Ostby) wrote:
>
>>Look in the CRC Handbook of Chemistry and Physics. There is a table
>entitled
>>"Resistivity of Semiconducting Minerals". . .
>
>Paul,
>
>Thank you, thank you! As I mentioned earlier, I've looked for years for
>this information without success, including in my CRC Handbook. Although
>it's terribly hard to find anything in this book, I'm pretty sure it's not
>in my 59th edition. (It does have a table of semiconductor properties, but
>not including resistivity.) What edition did you find it in?
>
>Thanks again!
>
>The data you quote turns the commonly-heard statement about the
>conductivity of silver sulfide from an urban legend to a very wrong
>statement.
>
>Roy Lewallen, W7EL

Actually, Roy, if his data is correct (not in my 47th edition of CRC either), it means that oxidized or sulfided silver is about 6 orders of magnitude more conductive than oxidized copper. Thus it clearly demonstrates the advantage of silver plating copper in any environment which isn't oxygen free, such as those where our tank coils and cavities are found.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

402. FS: Five New Bud chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: yerke@csrlink.net
Message-ID: <5b8keocpt1@news3.microserve.net>
Source record: 98790
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I have the following new Bud chassis for sale
10 x 12 x3 inches aluminum
10 x 12 x 3 inches metal chassis
8 x 12 x 3 inches aluminum
4 x 6 x 2 inches aluminum
4 x 17 x 3 inches aluminum
al five for $30 plus $5 shipping
--
Rick Yerke
42 Williams St.
P.O. Box 392
Moscow Pa. 18444 Phone (717)842-4857 yerke@csrlink.net
USA

403. Re: After some consideration...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-11 00:00:00 UTC
From: "Robert R. Koblish" <n3hat@erols.com>
Message-ID: <32D71862.7E4C@erols.com>
Source record: 98791
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Jim Leahy wrote:
>
> Forgive us, oh Great One, for we are not worthy.
> --
> Jim Leahy K2JL
> jleahy@norwich.net

Or is that O Grate One?
(lighten up, TB; it's only a hobby! it's supposed to be FUN!)
Bob Koblish N3HAT

404. Re: If I had no life at all.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: djfinn@ibm.net
Message-ID: <32d965c8.788266@news-s01.ca.us.ibm.net>
Source record: 98593
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On Sun, 12 Jan 1997 08:44:39 -0500, Burt Fisher <k1oik@ccsnet.com>
wrote:

>If I had no life at all.
>I would debate the merits of code.

Well then,
your welcome to join in.

Dan Finn

405. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970112224001.RAA06456@ladder01.news.aol.com>
Source record: 98594

Hi Gary,

Most of what you say below is very nebulous, and does not support any claims.

In article <1997Jan12.163113.18881@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>Well, in the IC-735 the filter bank is terminated by R29. The signal
>is then top coupled into the first RF stage input tank by C354. In
>other words, the first RF amp bridges.

It bridges a RESISTOR. What is the value of the resistor? What is the input impedance of the amplifier?

>In the IC706 the HF receive
>filter bank is terminated by R10 with IC1 bridged off of that via R11.

That one I can measure. The input impedance of my 706 is nominally about 100 ohms, although it varies with frequency.

>My Drake 2B and National NC-190 don't even pretend to offer a 50 ohm
>match.

My Drake 2 B does. When the preselector is tuned to resonace the input impedance is 20 ohms j zero on 80 meters, my NC-300 is 70 ohms on 80 meters j zero when resonant.

>The screw terminals for the antenna connection go to loose
>coupled tuned circuits in the preselectors, IE they present a high
>impedance load to the antenna.

Loose coupling? How do you know that without measuring it?

>Now all of my VHF and UHF receivers appear to try for a power match
>with the input of the first active device, but none of my HF receivers
>do.

Mine all do, including my 751A (20 ohms unless the pad is in, then it's 50). My R4C does, 35 ohms j zero at resonance on 160. My 706 does, my NC300 does, my 747 does, my 706 does, my Heath Mohawk does.....

>As I noted above, at VHF+, internal noise determines the floor of
>the receiver, so as much signal power as possible must be coupled to
>the first amp to overcome that. But at HF, atmospheric noise dominates,
>so a power match is not needed, and would hurt strong signal handling
>in the receiver. For the HF receivers I have with fixed tuned filters,
>a resistor terminates them. For the receivers with tunable preselector

>filters, loose coupling is used. For my own little experimental I/Q
>receiver, I use a loose coupled tunable preselector. In all cases, the
>first active device bridges the source impedance just as a VOM bridges
>the impedance of the device under test when you take a voltage
measurement.
>
>Those examples don't cover the universe of HF receivers of course,
>there may be some which do attempt to power match to the first
>active device. I haven't examined one that does, however.

If you say so.

The absolute fact remains if the manufacturer did NOT attempt to terminate
the input:

Ripple would be very bad in the filters
Sensitivity would vary wildly with frequency and transmission line length.

>>I have trouble understanding what you mean. The capacitor is in SERIES
>>with the transmission line. Current leads voltage, so the capacitor
looks
>>like a short at the first application of voltage. Only after the
capacitor
>>charges, can the gas tube fire.
>
>Well, the circuit isn't exactly like that. Here is a crude equivalent
>circuit:
> Cs Lc
>Ant-------x----||---x--)))----x
> | | |
> (G) = Cc /
> | | \ Rx input impedance
> | | /
> _|_ _|_ _|_
> /// /// ///
>
>Cs is the suppressor capacitor, Cc and Lc are the equivalent coax
>capacitance and inductance, and Rx is the reciever input impedance.
>If Cs were directly shunted across G, the gas tube, then it would
>behave as you say. But as you can see, it isn't.

Wait a minute. **I'm** the one who said capacitor Cs was in series. No
matter what, it can ONLY speed up the response time of the path to the
receiver. It can not possibly slow down the response time of the receiver
path. That would require an inductor.

Cs does NOTHING good at the leading edge of the waveform. It would take a
series inductor to do that! It does limit the steady state or low
frequency response, but to say it allows the gas tube time to ionize
BEFORE coupling energy to the receiver is a complete mis-statement.

73 Tom

406. ELECTRONICS RESOURCE DIRECTORY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Todd Peterson <elab@netins.net>
Message-ID: <32D96B45.3691@netins.net>
Source record: 98595
Body handling: HTML body converted to readable text

You'll want to bookmark this!

Our Embedded Electronics Directory - a free, comprehensive listing of over
500 Web sites ofinterest to electronics enthusiasts and engineers, is
available on our web site at:

http://www.netins.net/showcase/elab

If you have an electronics-related web site and would like to add a link to our
resource directory from your site, just cut-and-paste the following HTML into
your page's source code:

This will place an attractive 'Electronics Resource Directory' logo onto your page
that will hot-linked to our Directory for your and your visitor's convenience and use.

We thank you for your time and hope the Electronics Directory will be useful to you.
Please let us know if your company would like a free listing for your page in our
directory!

Todd Peterson
E-LAB Digital Engineering, Inc.
elab@netins.net
(712) 944-5344

http://www.netins.net/showcase/elab

407. misc. radio/cellular equipment and parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Walter Dunckel <wdunckel@ix.netcom.com>
Message-ID: <32D96F46.1220@ix.netcom.com>
Source record: 98596

Please visit my web site if your interested in various parts like
DTMF encoder/decoders UHF amplifier modules, freq syth. and more.

http://pw1.netcom.com/~wdunckel/index.html
Thanks,

Walt

408. I like to make a Frequency Counter for 137-137 Mhz, does anyone have some diagrams and layout's ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Geert Pirens <pass@glo.be>
Message-ID: <01bc00e0$14024a60$LocalHost@default>
Source record: 98597

Hello

Does somebody have diagrams and or layout's for making a frequency counter
that works on 137-138 Mhz ?

4, 5 or 6 digits or more is also good !!

All information is welkom!

Thanks.

73!

Geert Pirens ONL2057

409. Re: Lookin for powdered iron rod (no ferrite)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5bbtml$9m9@hpscit.sc.hp.com>
Source record: 98598

In article <32D87EF0.3FD@atl.org>, BOB DUCKWORTH <bob@atl.org> wrote:
>Hi-
>I'm looking for some powdered iron (not ferrite)
>rod. Any leads? Couldn't find with search engines.
>-bob

I've never seen powdered iron in rod form, but I've had
pretty good luck making my own rods by stacking up small
toroids on a plastic rod.

Just out of curiousity, why do you feel that ferrite
wouldn't work in your application? IMHO, anything you
can do with powdered iron can be done better with ferrite
except for inductors with DC bias. However, I am willing
to learn about the merits of powdered iron if I am missing
something here.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

410. Telequipment D66 scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: DENNYV <DENNYV@clarityconnect.com>
Message-ID: <32D9B49E.391E@clarityconnect.com>
Source record: 98599

I am looking for a Schematic for a Telequipment D66 ocilloscope. If any one has a schematic I would be happy to pay for repro and mailing costs Is there any other sources I could look for this document. Thanks and 73 Denny AD3O

411. wireless remote

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Paul <kelleypf@tiac.net>
Message-ID: <32D9A888.1070@tiac.net>
Source record: 98600

I'm trying to come up with a small wireless remote single function transmitter and receiver acceptable under part 95 that is coded in some way to prevent interference

412. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Bill Newkirk <wnewkirk@iu.net>
Message-ID: <32D9A377.79F0@iu.net>
Source record: 98601

Doug Faunt N6TQS +1-510-655-8604 wrote:
>
> From: cpierce@usit.net (C)
> Newsgroups: rec.radio.amateur.homebrew
> Date: Fri, 10 Jan 1997 20:13:28 -0600
>
> In article <32D52BF1.694B@arrl.org>, Jon Bloom <jbloom@arrl.org> wrote:
>
> ----------snip-------------snip-------------snip---------------
>
> We just can't afford to *pay* anyone to do it.
> >
> > --
> > Jon Bloom, KE3Z | jbloom@arrl.org
> > American Radio Relay League |
> > 225 Main St., Newington CT 06111 |
>
> Ever thought that sometimes you cannot afford not to pay.
> A thought as a Dedicated Mac user and a Dedicated Ham.
> Charles KD4HHX
>
> Unfortunately, only one user out of 14 uses a Mac. Are you willing to
> pay 14 times as much for the software?
> That's based on the fact as stated in the SF Chronicle business
> section that Apple has fallen to less then 7% of the PC market, due to
> their perceived instability.
>
> If the format of the data is available, then maybe a Mac user, a Unix
> user, a DOS user on an OS-2 user will do the right thing.
> 73, doug
>
> (about to become a Windows user, against my prediliction)

and for that matter, the existing Mac operating system may also be
heading for the scrap heap with the NeXT acquistion. off hand, w/o
actually getting a disk and looking at it, it appears that it's not
hopeless given jon bloom's description of what was done. does sound like
the information is in a format that should be readable in some fashion
on any computer. having an index tool could be more of a problem.

Jobs lost the macintosh war when he failed to include some inexpensive
way
to expand the capacity of the original mac. sure all the shortcomings of
the orginal 128k machine have been addressed and all that, but those
that reviewed the initial machine some 10+ years ago and dismissed it,

probably still think it's the same closed shop box.

Microsoft will lose the dominance of the desktop just as soon as Gates can force companies to pay for his software by the number of seconds it's in use plus a fee for every computer connected to a network..

--
Bill Newkirk WB9IVR The Space Coast Amateur Technical
Group
Melbourne, FL duty now for the future of amateur
radio
Lombardi's 1st Law of Business:
Companies succeed in spite of their best effort. If they succeed at
all.

413. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.245.01AE4DAA@azstarnet.com>
Source record: 98602

In article <1997Jan12.163113.18881@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
>From: gary@ke4zv.atl.ga.us (Gary Coffman)
>Subject: Re: Good source for amplifier tips
>Date: Sun, 12 Jan 1997 16:31:13 GMT

[snip]

> As I noted above, at VHF+, internal noise determines the floor of
>the receiver, so as much signal power as possible must be coupled to
>the first amp to overcome that.

No, there is an optimum source impedance which the active device wants to see to deliver the lowest noise figure. More often than not, the input match is very poor. I have seen VSWRs of >6:1 on some LNAs. This is a terrible match, but delivers the best noise figure.

This property also gives rise to considerable uncertainty in the measurement of noise figure; a property often overlooked by those who quote NFs to 0.01 dB accuracies. But all of this is the subject for another thread, isn't it.

[snip]

>Gary

N7WS

414. Re: Parasitic suppressor data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.246.01B0D376@azstarnet.com>
Source record: 98603

In article <32D9093D.26D4@imaxx.net> Chuck KD9JQ <kd9jq@imaxx.net> writes:
>From: Chuck KD9JQ <kd9jq@imaxx.net>
>Subject: Re: Parasitic suppressor data
>Date: Sun, 12 Jan 1997 09:54:38 -0600

>Wes Stewart wrote:
>>
>> As promised, I'm posting the data you all have been breathlessly awaiting.
>>
>> It is on my home page (which is the first time I've done this) at:
>>
>> http://www.azstarnet.com/~n7ws
>>
>> I hope it works!
>>
>> 73, Wes -- N7WS

>FYI:

>Wes...Your Home Web Page wants a userid and password!

>Chuck KD9JQ

I dunno...

I called my ISP and they were baffled. The support guy did change the link address to the complete path name so maybe that will help.

Others have said to input anything (or nothing) for a password and it works.

Sorry about the problem.

73, Wes N7WS

415. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5bbp7j$3f2$2@nadine.teleport.com>
Source record: 98604

In article <19970112011300.UAA05213@ladder01.news.aol.com>,
commquart@aol.com wrote:
>In article <5b941v$n87$1@nadine.teleport.com>, w7el@teleport.com (Roy
>Lewallen) writes:
>
>>Incidentally, copper sulfide is common in some industrial environments,
>and
>>copper chloride is common near the sea. I know copper chloride is
>>non-porous; exposure to salt air will turn wire into powder.

>I wonder if this isn't a result of electrolysis?

I've personally seen copper wire turn into green powder at a location on
the coast. It was suspended, so I don't believe there was a path for
electrolysis.

Roy Lewallen, W7EL

416. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5bbp2c$3f2$1@nadine.teleport.com>
Source record: 98605

Thanks again, Paul. I'll see if I can find a later edition of the CRC handbook at the library.

Roy Lewallen, W7EL

417. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970112011300.UAA05213@ladder01.news.aol.com>
Source record: 98656

In article <5b941v$n87$1@nadine.teleport.com>, w7el@teleport.com (Roy Lewallen) writes:

>Incidentally, copper sulfide is common in some industrial environments, and
>copper chloride is common near the sea. I know copper chloride is
>non-porous; exposure to salt air will turn wire into powder.
>
>Roy Lewallen, W7EL
>
>

I wonder if this isn't a result of electrolysis?

Peter

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

418. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: kt4wz <kt4wz@hotcc.com>
Message-ID: <01bc002f$c0521900$249a81cd@993137520WORLDNET>
Source record: 98657
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

a-men to what he said,I am a V.E. and I see it every test session. what can we as a
group do about it??I love to build and experiment but all to often our fellow hams don't
have a clue as to which end to solder to what ,but fear not with the younger generation, I have seen a renewed interest in hard core electronics experimentation
so it will come back around ,I just hope its not too late....73's all
kt4wz

419. Re: Need Filament transformer for SB-220 Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5ba1sj$1n9k$2@news-s01.ny.us.ibm.net>
Source record: 98658

In message <measures-1001970519420001@port14.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures)Fri, 10 Jan 1997 05:19:42 -0800
writes:
:>
:>In article <o6fFNGO#7GA.353@cobia.tng.net>, dwinn@tng.net wrote:
:>
:>> Does anyone know of a source for a Filament/bias Transformer used in the
:>> SB-220 and SB-2200 Amplifiers made by Heath.
:>>
:>> Thanks,
:>>
:>> Don AF4Z
:>> AF4Z@TNG.NET
:>
:>You might try Peter W. Dahl in El Paso. 915 751 2300. However, to the
:>best of my knowledge, he does not make current-limiting type transformers,
:>like the one Heath used---

Did you even bother to check the Dahl catalog?

From the Peter Dahl amateur catalog available at www.pwdahl.com shows:

| HEATH SB-220 FILAMENT XFMR EXACT REPLACEMENT TRANSFORMER EI-137 X
| 1.375 05 6 $88.00 PR) 120/240 VAC 60 HZ 1 PH S1) 5.0 VCT @ 30A CCS
| S2) 90 VAC @ 0.1A CCS DM) HT = 3.438 WT = 4.125 DT = 3.108 MD =
| 2.750 MW = 2.375 WT = 5.8 LBS

Since Dahl builds replacement transformers for a wide variety of high
power commercial equipment, I expect "EXACT REPLACEMENT TRANSFORMER"
means exactly what it says and that the performance characteristics are
identical in every way to the original.

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==

420. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5ba1sc$1n9k$1@news-s01.ny.us.ibm.net>
Source record: 98659

In message <32D52BF1.694B@arrl.org> - Jon Bloom <jbloom@arrl.org>Thu, 09 Jan 1997 12:33:37 -0500 writes:
:>
:>The fact is, if we had decided to do this product only if we could make
:>it multi-platform, the product wouldn't exist at all. The only way we
:>were able to do this economically was by means of a good deal with a
:>third-party shop that does the scanning and the software; "normal"
:>commercial providers of these kinds of services are vastly more
:>expensive. The people we are working with supply only Windows software,
:>so that's what's available.

The people you worked with used the wrong tools. The text should have been scanned using OCR and converted to text rather than to graphics files. The pictures, schematics and charts could have been scanned individually as JPEG files and stored linked to the text.

The text would have needed only minor editing for format ... editing that could probably have been automated by using any of a number of word proccssing or DTP programs now available with HTML output filters.

:>The basic problem, which recurs for just about any software product we
:>produce, is that the number of Mac users who might buy an ARRL product
:>is miniscule. That's not an assumption; we know it from market research.

It's not just Mac users, but OS/2 users, *.nix users, people with older DOS systems that can't run Windows ... all of them are excluded by a Windows only product.

:>Of course, if we could find low-cost, off-the-shelf multi-platform
:>products that would provide the capabilities we need, we'd use them.
:>We've not found any such as yet. (We're always interested in hearing
:>about any you know of.)

Netscape Navigator, Microsoft Internet Explorer, the various flavors of Mosiac, are about as inexpensive, off-the-shelf, and multi-platform as one can get.

:>Ummm... how does one implement a searchable database in HTML? You need
:>an HTTP server with CGI and a database application. And of course, that
:>software would have to be multi-platform.

Every browser I've looked at (Netscape Navigator, Internet Explorer, IBM's Web Explorer for OS/2) all support searching a document. With that support in the reader, one need only provide a properly (HTML) coded index much like the annual index already included with QST.

A significantly expanded index is almost trivial using the indexing functions of modern word processors (all of which will create an index over multiple documents or chapters).

:>The image files on the QST View CD-ROMs are standard TIFF files (using
:>CCITT Group 3 compression). And the database for each set is contained
:>in a comma-delimited ASCII file on the first disk of the set. (The file
:>contains a few SQL engine commands you can ignore.) If some enterprising
:>Mac (or OS/2, or *nix, or...) software type wants to write an
:>application for his/her favorite platform that will search and display
:>the files, I'd be delighted. Heck, I'll gladly make it available from
:>ARRL's Web site. We just can't afford to *pay* anyone to do it.

Your requirements sound rather easy to accomplish, at least for OS/2, using V-REXX and the graphics display capability (MMOS/2) built into the operating system. I'm sure nobody even bothered to check it out before pressing the CD.
It's a shame I don't have the V-REXX developer package and a little free time.

Another option to consider ... since QST is typeset with a Psotscript process, if you DON'T use HTML, save the postscript source and convert everything to PDF files. The CD can be published using ADOBE'S ACRROBAT. Acrobat readers are free or low cost, are available for a large number of platforms, and are rapidly becomimg a portable standard. I believe that Adobe also include functions for generating indexes and tables of content.

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Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==========

421. Re: FM broadcast in phone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: jazab6ne@aol.com
Message-ID: <19970112082400.DAA16282@ladder01.news.aol.com>
Source record: 98660

Beyond the filters, some phones are more susceptable than others.
suprisingly price or the manufacturer is not a good indication. Some
Panasonic phones are good others are bad, same with Radio Shack. There was
an article some time back in QST reviewing various phones. I'll try to
find it and send you more info.
Jeff Zimmer, AB6NE
San Diego, CA
KECR / KFRN

422. Re: What is packet & amateur radio. Help me

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: jazab6ne@aol.com
Message-ID: <19970112084400.DAA16807@ladder01.news.aol.com>
Source record: 98661

We all have to start somewhere. Check with your local Radio Shack, or other electronics parts store and find out if there are any clubs in your area. Many clubs are more than happy to help folks just like yourself find out more and help them get their license. If you don't have any stores in your area, often the engineers at local radio or TV stations are also Hams and can direct you.
The other responses to the question are very good.
Good Luck and hope to hear you on the air.
Jeff Zimmer, AB6NE
San Diego, CA
ab6ne@juno.com

423. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Jim <jim.parnell@nzart.org.nz>
Message-ID: <32D9683D.1975@nzart.org.nz>
Source record: 98662

This is not amateur radio, but is pertinant to silver sulphide.

Silver Sulphide is a disaster in a telecommunications environment.

Back in the 1960s I was involved with the changing of a manual exchange to an automatic one at our (New Zealand) resort town of Rotorua. The air in this town has a very high H2S concentrations from local geothermic activity.

The maintenance effort on the manual exchange was very heavy as the silver switch and relay contacts, and the plated plug and socket contacts were continually being sulphided causing noisy connections and poor speech. Silver contacts would drop out of nickel silver springs.

The administration were very concerned that an automatic exchange with its multiplicity of contacts would not be a maintenance nightmare.

The new automatic exchange was a step by step exchange from Ericssons of England (at that time, we were committed to the English step by step exchange systems, Crossbar and electronic were years into the future). It was of conventional construction except that critical contacts were to be of palladium which is more resistant than silver.

We chose to pressurise the exchange building and pass the air entering the building through activated charcoal filters which removed the H2S by adsorption.

Also, the switch racks were enclosed covers behind which air which had been subjected to a third stage of filtering was circulated.

I was heavily involved in the air conditioning filtering systems in the building and for a time was THE expert in H2S removal from air in the coountry. Years later the system was still doing its thing and there were no problems with contact contamination in the exchange.

BTW, TV sets had a heavy mortality from H2S corrosion.

73

Jim.ZL2APE
jim.parnell@nzart.org.nz

424. Re: F.S. - Tubes, radios and much misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: John Bowers <bowers@tyrell.net>
Message-ID: <Pine.SUN.3.91.970111234141.699B-100000@tyrell.net>
Source record: 98663

I am looking for an audio output transformer for the SP-600-17J. The primary in my transformer opened up. This transformer is a gray painted unit of the same style as the power transformer (ie a hex sided drawn case with four maouning corners on the flange.

Anyone got one in the junkbox??

de K9UTK
John

On 11 Jan 1997, Rog42 wrote:

> FOR SALE: Tubes, test equipment, radios including Hallicrafters,
> Hammarlund, and Philco. Other older tube type radios and radio related
> publications. Schematics for many older radios just $1. Tube Manuals,
> Tube Substitution books, Service Manuals, QST magazines, much more from
> the 30's, 40's, 50's, 60's. Now over 1500 different tube types in stock -
> E-mail Rog42@aol.com and ask for my latest offerings on RADIO list -
> #110-T.
>
>

425. Need Man for Tek 581 scope w/86 plug-in

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: bboone@mindspring.com
Message-ID: <5bagql$tab@camel5.mindspring.com>
Source record: 98664

I have a functioning scope, would would like any manuals (operation or service) available. If you have some that would would be willing to sell or photocopy please send me an email. Thanks -- Bobby kr4bu

426. Lookin for powdered iron rod (no ferrite)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <32D87EF0.3FD@atl.org>
Source record: 98665

Hi-
I'm looking for some powdered iron (not ferrite)
rod. Any leads? Couldn't find with search engines.
-bob

427. Re: Mobile sets in rental cars

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: WA8GHZ /5 Jack Dougherty <jdougher@wt.net>
Message-ID: <32D9C3A3.23E6@wt.net>
Source record: 98666

I use big tie wraps around my QRP rig and tuner to make a big "LOOP" and
then hang the loop around the pulled out ashtray. I add a paperback
book to take up the slack room underneath all, and jam the paperback
in. Seems to hold the rig in place in my '79 caddy, that I want to keep
stock.

--
WA8GHZ /5 / === === o === o === o o === === o
Jack /Houston / "I know the guy who built my radio."

428. If I had no life at all.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Burt Fisher <k1oik@ccsnet.com>
Message-ID: <32D8EAC7.1318@ccsnet.com>
Source record: 98667
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
If I had no life at all.
I would debate the merits of code.

#================#=======================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=======================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=============================================================#
```

429. ICOM-240 Service Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: RKisKan@dk-online.dk
Message-ID: <5bajsd$q43@news.uni-c.dk>
Source record: 98668

Can anyone help me with service documentation, or even specs. for the
IC-240 VHF radio ?

73's

Robin
OZ6ABM

rkiskan@dk-online.dk

430. Re: Need Filament transformer for SB-220 Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: w6tg@aol.com
Message-ID: <19970112141600.JAA21746@ladder01.news.aol.com>
Source record: 98669

Fair Radio had some listed on the web sheets a little while back.
Terry - W6TG

431. FS: IFR1500 RADIO SERVICE MONITOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: mega@i1.net
Message-ID: <5b9bce$1vn$9@radius1.stlnet.com>
Source record: 98670

IFR 1500 SERVICE MONITOR GOOD CONDITON $5,000.00
BOB RICK
ST LOUIS MO.
314-291-7618

432. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1201970617310001@port27.vcnet.com>
Source record: 98671

In article <19970106184100.NAA02712@ladder01.news.aol.com>,
w8jitom@aol.com wrote:

> In article <measures-0501970116000001@port78.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
...snip...
> Rich, there is no point in continuing this. You apparently have no more
> technical points, and a slander campaign generates little support for
> anyone participating.
>
> Tom

EPILOGUE (?)

I guess you could say that Tom Rauch and I didn't exactly hit it off from the git-go---i.e., when he telephoned me in 1990 at the urging of QST's Paul Pagel. The telephone rang. The caller identified himself as Tom Ranch and somewhat brusquely demanded to know whether I was tape recording the conversation. I said "no". However, "no" apparently wasn't good enough for Mr. Rauch, so he pressed me on the matter. After repeated assurances that I was not recording the conversation, he began to talk. Mr. Rauch was evasive about the issue of parasitic-oscillation in amplifiers he designed, such as the SB-1000 and the AL-1200 (which I knew had exhibited what appeared to be VHF parasitic arcing during testing in the ARRL lab). When I realized that this route was a dead-end, I tried discussing the SB-220---which Mr. Rauch did NOT design. This seemed to do the trick . Mr. Rauch loosened up. He said that he had worked on over 400 SB-220s and that he had seen plenty with parasitic damage. I asked Mr. Rauch why amplifiers he designed don't oscillate, while other amplifiers like the SB-220 occasionally oscillate? He said that they don't oscillate because Tom Rauch designed them. However, when I asked him how does one go about designing a stable amplifier?---he made statements that didn't seem to wash. When I pointed out that the SB-1000 and the SB-220 use virtually the same VHF parasitic oscillation suppressor design, Mr. Rauch 'lost it' and he began shouting. // When Mr. Rauch later denied this, I realized that henceforth anything he said probably needed to be checked out. Nevertheless, I was surprized when I struck paydirt on the first thing I decided to check out in this debate---the alleged 'R+D engineering manager' at Eimac's Salt Lake City plant who turned out to be an 'Engineer B', who apparently disagreed with most of what I wrote in QST, who still has not appeared on this debate as proffered.

Free, unsolicited advice:

1. Anyone who demands to know whether you are tape recording the conversation, is not trustworthy.

2. The surest way to become marginalized in a debate is to prevaricate.

3. If you want to be an "amplifier expert", it helps if you: understand algebra, trigonometry, scientific notation, and AC circuit analysis. You should know the capabilities of oscilloscopes, understand the difference between a true-RMS meter and an averaging meter, have a modicum of understanding about thermodynamics. However, most importantly, NEVER claim to be an "amplifier expert".

IMO, a milestone in this debate was the AC circuit analysis problem Mr. Rauch challenged me with:
An 85nH suppressor inductor (Ls) is in parallel with a suppressor resistor (Rs) of 100 ohms. At 160MHz, relatively how much current flows in Ls and in Rs. Presumably, Mr. Rauch *presumed* that this problem would prove that his statement in the 9/94 QST was correct. Mr. Rauch's statement:

"In a typical parasitic suppressor, the coil is in parallel with a low-value resistor. This combination is in series with the signal path, usually in the anode circuit between the tube and the plate tuning capacitor. The coil's reactance increases with frequency, and at VHF most of the signal path is through the resistor."

However, when the calculated VHF current in Ls turned out to be about 10% greater than the calculated VHF current in Rs, in Mr. Rauch's own problem no less, he quickly dismissed the results for technical reasons that did not make sense. Apparently "amplifier experts" are unlikely to admit to making mistakes, and some of them seem to cover their mistakes with techno-blather

IMO, another milestone in this debate was when Mr. Rauch quietly cancelled his post of 28 November. In this post, Mr. Rauch estimated that an Ls made from Ni-Cr alloy (nichrome) wire might exhibit 5 ohms of ESR at VHF. At first glance, a few ohms of ESR in Ls does not appear to be significant---especially if one *presumes* that insignificant VHF current flows through Ls. However, Wes Stewart's measurements** show that at 100MHz, a typical Ls made from nichrome-60 exhibits 1.73 ohms of ESR. When this Ls was paralleled with a 100 ohm Rs, whose ESL=9nH, Wes measured a parallel equivlent resistance (Rp) that was about 61% of the Rp that a conventional (W8JI) parasitic suppressor measured. The VHF Rp on the anode controls the VHF voltage gain of the amplifier. More VHF Rp means more VHF voltage gain. Theoretically, this means that the VHF voltage gain obtained when a low VHF Q (Ni-Cr alloy Ls) suppressor is used is about 61% of the VHF voltage gain of when an otherwise similar, conventional (W8JI) parasitic suppressor is used. However, this is not the whole story. As those of you know who have installed a 'low VHF Q parasitic suppressor retrofit kit', the parasitic suppressor is not the only item that is replaced in the anode's VHF-resonant circuit. Most of the 'heavy-duty' copper or silver strap and buswires in the anode circuit are replaced with parallel, unequal-length Ni-Cr alloy wires spaced about

1cm apart. This adds additional VHF ESR to the anode resonant circuit, which additionally decreases Rp, which additionally decreases the VHF voltage gain of the amplifier.

I am gressing that the reason Mr. Rauch cancelled the 28 Nov. post is that he somehow became aware of the effect a few ESR ohms in Ls would have in lowering Rp and lowering VHF voltage gain.

Mr. Rauch said:
"Rich, there is no point in continuing this. You apparently have no more technical points, ..."

VHF Rp (the parallel equivalent of an Ls/Rs VHF suppressor) is a technical point, if not the central technical issue of this debate. Now that we have Wes Stewart's measurements of Rp in a conventional (copper Ls) suppressor and Rp in a nickle-chromium alloy Ls suppressor, I think I see a light at the end of the tunnel. Will Mr. Rauch debate the central technical issue, or will Mr. Rauch try to flood the tunnel with smoke? I'm guessing that, henceforth, Mr. Rauch will cheerfully discuss anything and everything ..... except Wes' Rp measurements.

End

**Wes Stewart's parasitic suppressor measurements are available at:
http://www.azstarnet.com/~n7ws
This Web site will ask you for a name and a password. Any password seems to work.

--
--Rich-- ag6k, 805-386-3734

433. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: philk5pc@connect.net
Message-ID: <5bb0s0$669@dallas1.connect.net>
Source record: 98672

In article <n7ws.236.00410F93@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) says:
>
>...snip...>
>Rich sent me some samples of his nichrome alloys and Tom, W8JI, sent me a
>sample suppressor from an AL1500 amplifier.
snip....

Hmmmmm.....it must have been a prototype sample...the AL-1500 does not
use any suppressors.

(((73)))
Phil, K5PC

434. Re: Parasitic suppressor data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <32D9093D.26D4@imaxx.net>
Source record: 98673

Wes Stewart wrote:
>
> As promised, I'm posting the data you all have been breathlessly awaiting.
>
> It is on my home page (which is the first time I've done this) at:
>
> http://www.azstarnet.com/~n7ws
>
> I hope it works!
>
> 73, Wes -- N7WS

FYI:

Wes...Your Home Web Page wants a userid and password!

Chuck KD9JQ

--

Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net
---

435. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1201970753520001@port12.vcnet.com>
Source record: 98674

In article <5ba1sc$1n9k$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) wrote:

> In message <32D52BF1.694B@arrl.org> - Jon Bloom <jbloom@arrl.org>Thu, 09
> Jan 1997 12:33:37 -0500 writes:
> :>
> :>The fact is, if we had decided to do this product only if we could make
> :>it multi-platform, the product wouldn't exist at all. The only way we
> :>were able to do this economically was by means of a good deal with a
> :>third-party shop that does the scanning and the software; "normal"
> :>commercial providers of these kinds of services are vastly more
> :>expensive. The people we are working with supply only Windows software,
> :>so that's what's available.
>
> The people you worked with used the wrong tools. The text should have
> been scanned using OCR and converted to text rather than to graphics
> files. The pictures, schematics and charts could have been scanned
> individually as JPEG files and stored linked to the text.
>
snip.....

A thorough explanation, Joe. It's like the lights are on a 225 Main St., but no one is home.

--
--Rich-- ag6k, 805-386-3734

436. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan12.163113.18881@ke4zv.atl.ga.us>
Source record: 98675

In article <19970111101400.FAA12738@ladder01.news.aol.com> w8jitom@aol.com writes:
>In article <1997Jan9.181011.4098@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us
>(Gary Coffman) writes:
>>
>>Well, I haven't measured the input impedance of many HF receivers, but I
>>get the impression that they don't much care about a match. What I meant
>>by voltage driven is in the same sense that a VOM is voltage driven.
>>Of course it takes power to swing the pointer, but we usually don't think
>>of it that way. With modern devices, HF receivers aren't internal noise
>>limited, they are atmospheric noise limited, so they don't need a match
>>to achieve best MDS.
>
>It doesn't matter what we think, it only matters what it is.
>
>Most receivers do not have bridging inputs for several reasons.
>
>The main one is input filters require termination to maintain correct
>frequency response.
>
>Second, an improper high Z termination would allow the transmission line
>length to wildly control voltage appearing at the open end of the line. On
>some frequencies there would be a large step-up of voltage at the receiver
>end of the line, and at others a step down of voltage. That would
>radically change the receing systems sensitivity with frequency. Remember
>it is the receiver that sets the systems SWR when receiving, not the
>antenna. I use this effect to advantage in my very broadband arrays of
>multi-element phased receiving loops.

Well, in the IC-735 the filter bank is terminated by R29. The signal
is then top coupled into the first RF stage input tank by C354. In
other words, the first RF amp bridges. In the IC706 the HF receive
filter bank is terminated by R10 with IC1 bridged off of that via R11.
My Drake 2B and National NC-190 don't even pretend to offer a 50 ohm
match. The screw terminals for the antenna connection go to loose
coupled tuned circuits in the preselectors, IE they present a high
impedance load to the antenna.

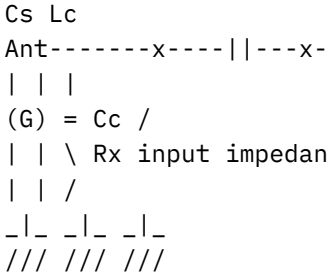
Now all of my VHF and UHF receivers appear to try for a power match
with the input of the first active device, but none of my HF receivers
do. As I noted above, at VHF+, internal noise determines the floor of
the receiver, so as much signal power as possible must be coupled to
the first amp to overcome that. But at HF, atmospheric noise dominates,
so a power match is not needed, and would hurt strong signal handling
in the receiver. For the HF receivers I have with fixed tuned filters,
a resistor terminates them. For the receivers with tunable preselector

filters, loose coupling is used. For my own little experimental I/Q receiver, I use a loose coupled tunable preselector. In all cases, the first active device bridges the source impedance just as a VOM bridges the impedance of the device under test when you take a voltage measurement.

Those examples don't cover the universe of HF receivers of course, there may be some which do attempt to power match to the first active device. I haven't examined one that does, however.

>>>If the capacitor passes HF RF, then I suspect it is almost useless for
>>>lightning. It would only be effective at VLF frequencies and lower as an
>>>isolating device. Lightning and nearby stroke induced EMF has a rise
>time
>>>that is very fast, so the cap looks like it is not even there.
>>
>>No. It is precisely because the risetime is so fast that the capacitor
>>works. It has to have a time constant such that its dV/dt charging slope
>>is 350volts/2nS or more. That allows the gas tube time to fire before the
>>surge gets clamped by the receiver input shunt impedance, IE a cavity or
>>helical filter with an input loop.
>
>I have trouble understanding what you mean. The capacitor is in SERIES
>with the transmission line. Current leads voltage, so the capacitor looks
>like a short at the first application of voltage. Only after the capacitor
>charges, can the gas tube fire.

Well, the circuit isn't exactly like that. Here is a crude equivalent circuit:



Cs is the suppressor capacitor, Cc and Lc are the equivalent coax capacitance and inductance, and Rx is the reciever input impedance. If Cs were directly shunted across G, the gas tube, then it would behave as you say. But as you can see, it isn't.

The capacitor looks like an open to the main body of the pulse, which is at a frequency equivalent of about 25 kHz, IE 10 uS pulse duration. The capacitor gives the gas tube time (less than 2nS) in which to fire before the receiver Rx can clamp the voltage to less than the gas tube's firing potential. When the tube does fire, it is a very low impedance short on the line and drains the accumulated charge back off the capacitor at the same time it shunts the main pulse energy.

You've got to remember that although we talk of the lightninq components as frequencies, because to a Fourier analysis they are, there is only a

unipolar pulse present at the protector *at all component frequencies*.
There is no +/- AC signal to couple energy across the capacitor as there
is during RF transmission. The only energy that gets coupled is the area
under the capacitor's dV/dt curve during the 2nS it takes for the gas tube
to fire. The receiver can tolerate that. It is a tiny fraction of a joule.

We don't need this capacitor unless the receiver input circuit has
DC continuity, such as via cavity filters or a shunt inductor.
Otherwise the capacitor input coupling of the receiver will serve
to prevent clamping the pulse to a voltage below the gas tube firing
potential. It is only in cases where the receiver has DC continuity
that the capacitor is needed in the suppressor. But it doesn't hurt
to have it there even if the receiver isn't DC coupled.

The main body of the lightning pulse can be considered as an 8000
ampere constant current source backed by a billion volts of reserve
potential. So you can figure its source impedance as about 125 kohms.
It would take a shunt capacitor of about 0.03 uF to yield 2nS delay to
the 350 volt level. What's actually used in a HF suppressor is a chip
capacitor of about 0.1 uF in series with the parallel combination of
the coax Cc and the series pair of the coax Lc and the receiver Rx.
So there is about a 3x (or greater) time margin for the gas tube to
fire before Rx could clamp the voltage below the gas tube's firing
potential and carry the bulk of the surge current itself. That's
what we're trying to prevent of course.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

437. Re: Parasitic suppressor data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: John Siegel <JohnASiegel@worldnet.att.net>
Message-ID: <32D91822.4833@worldnet.att.net>
Source record: 98676

Chuck KD9JQ wrote:
>
> Wes Stewart wrote:
> >
> > As promised, I'm posting the data you all have been breathlessly awaiting.
> >
> > It is on my home page (which is the first time I've done this) at:
> >
> > http://www.azstarnet.com/~n7ws
> >
> > I hope it works!
> >
> > 73, Wes -- N7WS
>
> FYI:
>
> Wes...Your Home Web Page wants a userid and password!
>
> Chuck KD9JQ
>
> --
> --
> Charles H. Reichert 847-358-3827 Home
> KD9JQ 847-632-6669 Work
> 955 Concord Lane http://www.imaxx.net/~kd9jq
> Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net
> --
I found that just not entering one still allowed access to the link.
73 John

438. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1201970928300001@port17.vcnet.com>
Source record: 98677

In article <5bb0s0$669@dallas1.connect.net>, philk5pc@connect.net (Phil Clements) wrote:

> In article <n7ws.236.00410F93@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) says:
> >
> >...snip...>
> >Rich sent me some samples of his nichrome alloys and Tom, W8JI, sent me a
> >sample suppressor from an AL1500 amplifier.
> snip....
>
> Hmmmmm.....it must have been a prototype sample...the AL-1500 does not
> use any suppressors.
>
> (((73)))
> Phil, K5PC

Maybe, just maybe, Tom got to wondering why everyone else's 8877 amplifier design has a VHF parasitic oscillation suppressor and his design doesn't. Thanks to Wes' measurements, Tom should be aware of an easy way of reducing the suppressor's VHF Rp, which reduces VHF voltage gain, which just might make the AL-1500 more stable, Phil.

--
--Rich-- ag6k, 805-386-3734

439. Re: Kilowatt Ten Tec Transceiver System For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Elmer_Mooring@jhuapl.edu
Message-ID: <Elmer_Mooring-1201971301410001@f1-eem.jhuapl.edu>
Source record: 98678
Cross-posted to: sci.geo.satellite-nav,rec.radio.amateur.misc,rec.radio.amateur.homebrew

In article <32D82ED0.35F6@pcpros.net>, "David T. Messerschmidt"
<messy@pcpros.net> wrote:

> My friend KA9DQQ (Dick) has the below equipment for sale.
> He resides in Wausau, Wisconsin USA
>
> Ten Tec Model 705/705A Electret Condenser Microphone
> Ten Tec Model 585 Paragon All-Band HF Transceiver
> Ten Tec Model 253 2 Kilowatt Automatic Antenna Tuner
> Ten Tec 9420 Power Supply
> Hercules II Model 420 Solid State Linear Amplifier
>
> All Owner's Manuals Included.
> System Completely Rack Mounted.
....(snip)....

And this has exactly WHAT to do with satellite navigation?????
Elmer

440. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.244.00CD03A0@azstarnet.com>
Source record: 98679

In article <5bb0s0$669@dallas1.connect.net> philk5pc@connect.net (Phil Clements) writes:
>From: philk5pc@connect.net (Phil Clements)
>Subject: Re: Good source for amplifier tips
>Date: 12 Jan 1997 15:44:00 GMT

>In article <n7ws.236.00410F93@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart)
>says:
>>
>>...snip...>
>>Rich sent me some samples of his nichrome alloys and Tom, W8JI, sent me a
>>sample suppressor from an AL1500 amplifier.
> snip....

> Hmmmmm.....it must have been a prototype sample...the AL-1500 does not
> use any suppressors.

True. This was my mistake. Tom and I also discussed the grid protective
circuitry of the AL1500 and he sent me a circuit diagram for same. I
incorrectly assumed the suppressor was also from that amp. It is not; it's
from an AL80B.

Shows the danger of jumping to conclusions, doesn't it?

N7WS

441. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970112184300.NAA29364@ladder01.news.aol.com>
Source record: 98680

In article <32D72A84.1933@pop3.cris.com>, "Aaron A. Collins"
<collina@pop3.cris.com> writes:

>I can't quote anything on this except the statement I got from my
>"Elmer";
>the oxide conducts just as well as silver; evidenced by the fact that
>crappy
>oxidized N/BNC/PL-259 connectors work just as well as clean new ones!
>Stuff
>that in your empirical pipes and oxidize it!

My lead coated PL-259s work just as well as my silver plated ones!

442. Re: Ham-Homebrew Digest V97 #10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: dave@cds1.NET
Message-ID: <32D93709.1EE9@cds1.net>
Source record: 98681

> From: Litco@webtrak.com (Peter Figielski)
> Subject: YIG sphere
>
> Would somebody know a source for YIG (yttrium iron garnet) spheres.
> These spheres will be used for tuning cavaties in the 2-4Ghz region.
> Thanks, Peter

Hi Peter,

It's a longshot but you might try Hewlett Packard (What was the Network Measurement / Tech Center Divs.) (707)577-1400 here in Santa Rosa, CA. You'll have to shotgun whoever is working the phones as they won't have a clue as to what a YIG is. I spent 5 years in HP's Microelectronics department building / testing S-band ocs., YTO's (which use YIGs) & 1300 mhz amps. HP use to make YIGS in Tech Center (now called somthing else), & build them in ito YTO's & S-band osc.

Another long shot is a small company started by the one of the guru's of the YIG world (also in Santa Rosa) called MICROSOURCE. (Ganeish Balsnalapotna (spelled the way it sounds) was the inventor of YIGS (so I was told), & was HP's YIG expert but left to start Microsource.) Sorry you'll have to call SR info as I don't have a phone number. They supply HP w/ alot of Microwave Osc. (All mill spec stuff so it isn't cheap.)

Wish I could give more details as to who to talk to, but I haven't been into that stuff since 1983.

Hope this helps.

--
Dave Willey Engineering Technician
Marinco - SWD / Marine / AFI / Nicro Divisions
2655 Napa Valley Corporate Drive
Napa, CA. 94558
work e-mail: dwilley@marinco.com
personal e-mail: dave@cds1.net
amateur e-mail: kd6kwm@cds1.net
amateur packet : kd6kwm@kd6kwm.#nocal.ca.usa
--

443. WTD: HP 313 Osc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <32D93919.421F@calweb.com>
Source record: 98682
Cross-posted to: sci.electronics.equipment,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi Mates,

Would like to find a Hewlett Packard 313 Tracking Oscillator to go with my Hewlett Packard 312B Selective voltmeter. Doing some home brew filter work and the tracking oscillator would sure speed testing up. I may be off on the model number, but the Tracking Oscillator nomenclature is correct.

444. 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: hacker@flash.net
Message-ID: <32d9ea53.145883882@news.flash.net>
Source record: 98683

does anyone have the plans to make a device in which I could drop next
to a offending 27mhz operator? I am looking for a device that will key
and buzz with stronger signals <say above 8 s units> so the person
will not be able to hear his local cohorts. <high school kids>
I appreciate any and all replies.
looking forward to hamming it up in the NEAR future....
countdown to test time!

445. Re: Air Flow Measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1201971125430001@port17.vcnet.com>
Source record: 98684

In article <32CEF602.7F4C@deltanet.com>, bryden@deltanet.com wrote:

> A question for an experienced power amplifier builder. When using the
> 3-500z toward its maximum dissipation limit, Eimac requires a chimney
> assembly and and forced air cooling.

If you do not use forced air cooling with the 3-500Z, the filament power alone will melt the solder on pins 1 and 5.

>If the CFM airflow is specified,
> how do you measure the airflow in CFM.

A manometer is used to measure the air pressure drop between the under side of the tube socket and the atmosphere. On p.112 of *Care and Feeding of Power Grid Tubes*, Eimac shows you how. On the 3-500Z spec. sheet, Eimac says how many inches of manometer pressure corresponds to CFM when an Eimac air system socket and chimney are used. .

> Blowers are rated at some CFM,
> but I assume that is with no back pressure unlike the situation you
> would find forcing air around a tube. Is it better to measure tube
> envelope temperature directly since that is the parameter of interest.
> ?? Thanks, Dan

At elevated temperatures, the red marking ink that Eimac uses on glass tubes changes from red to brown. Of all the 3-500Zs I have seen that were removed from amplifiers, on average, the 3-500Zs that were removed from Heath SB-220s had the reddest marking ink. Heath does not use air system sockets and chimneys. A detailed discussion of Heath's clever and quiet cooling method can be found in an article on the SB-220 in the November/December 1990 issues of QST magazine.

--
--Rich-- ag6k, 805-386-3734

446. Re: Wanted: Info on 1296Mhz ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <32D94A25.7C0C@earthlink.net>
Source record: 98685

Check out the HATS (Houston ATV Society) web page at www.stevens.com...
They have 1.2G FM TX kits available......good quality and good cost!

Chris
WB5ITT
(tell them I sent ya)

Mike wrote:
>
> I am looking for any info on 1296Mhz ATV transmitters and receivers
> using FM modulation. If you have built it I would like to here about it
> and if there are any plans/kits out there that you know about, please email
> me.
>
> Thanks a bunch in advance,
> Mike
>
> --
> /\
> \ Michael Long || President /
> / Callsign: KB8WPE || for HARC (W8YY) \
> \ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
> / Phone: (906)487-5664 || Majors: EET and EMT \
> \/

447. Re: Help FT-709R needs new keypad label

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <32D94917.9DA@earthlink.net>
Source record: 98686

R.E. Dodson wrote:
>
> I have a Yaesu FT709R HT and it could use a new keypad (stick on I
> believe) main label. Looks like I could peal off the old one and
> re-apply a new one. Any one know where I can get one of these. I
> surrounds all the keys on key pad. Also any idea what the part might
> cost.
>
> Thnx
> Bob

Ahhh have you tried Yaesu????

Chris
WB5ITT

448. Re: A message to Mr. Trevor Hopps VK8TH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: thopps@accessnt.com.au
Message-ID: <32d82469.194050699@news.ozemail.com.au>
Source record: 98687

On 11 Jan 1997 15:34:38 GMT, tyler@cyberia.com (tyler) wrote:

(In the veritable style of Mr Tyler I will sub quote this message
leaving the contents intact for those lucky/unlucky enough to have to
read this garbage. If at this stage your not interested I suggest you
Trash this message now :)

>
>
>Mr. Trevor Hopps (VK8TH) has taken it upon himself to report me for Email
>Abuse. Since I really don't know what law I have broken, I'd like for him to
>explain himself to me.

Since you have found it necessary to post a reply to my (Personal
Email) on a newgroup I will further explain myself Mr Tyler, although
normally I would not , if you just didnt get it the first time.

> Who did he report me to? For what? Language?

Yes for language content mainly, a complaint was sent to
Webmaster@cyberia.com. The complaint on the basis that
foul language was present in messages that are for general perusual.

>this not the internet? Who is policing it? Why? If I was using abusive or
>offensive language over the air on a ham band, I could see his point. BUT,
>THIS IS NOT THE HAM BANDS. THIS IS THE INTERNET.

Tyler i dont see your point here. "If I was using abusive or
offensive language over the air on a ham band, I could see his point."

The audience is significantly larger than any that may accidentally
come across a conversation on a Ham Band, and additionally the header
to your message gave no indication of the sarcastic/foul contents.
Does'nt that only compound your error ?

> He left me no Email address to reply to him to counter his accusation. I am apparently
GUILTY
>until proven otherwise in this US of A!!

How long have you been on the Net ? By virtue of the fact you received
my Email, you have my Personal Email Address. The message was a
personal email not a newgroup posting (A forum I dont consider
suitable for this type of rediculous verbal mongering) I suggest you
check the header information of my original reply.

>
>Mr. Hopps states: "The type of critisism and language contained in your email
>is not fit for public consumption."

>
>This is YOUR opinion Mr. Hopps. Who are you to police what I write? If you
>do not like my use of 4 letter words, a polite email would have done much more
>than this "I tattled on you." email

Again Tyler the original email was personal (Not to a Newsgroup)
and I did consider it polite. As to whether it is "Tattling" or not,
perhaps it is, but I think if we put it into contect. If newspaper,
telephone calls or letters directed to me contained that sort of
content I would certainly take some sort of action to stop it.
I have 2 choices , unsubscribe to the media or do something about
the author. You are aware of my choice.

>. I would like to debate this issue
>further with you. I will not use any abusive language at your previous

As I mentioned in my original email to you, there is nothing to
debate. I have read all postings from you to various newsgroups and I
dont consider that I wish to receive email from you. I have yet to
see a message from you that wasnt sarcastic, or helpful, or better yet
"In the Spirit Of Ham Radio"

>request. However, I would like to discuss the reporting of my email address
>to whoever you reported it to.

I suggest if you think the action unwarranted you send a followup
message to Webmaster@cyberia.com.

449. Re: If I had no life at all.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: docdc@ix.netcom.com
Message-ID: <5bbgrj$lai@sjx-ixn2.ix.netcom.com>
Source record: 98688
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
In <32D8EAC7.1318@ccsnet.com> Burt Fisher <k1oik@ccsnet.com> writes:
>
>If I had no life at all.
>I would debate the merits of code.
>
>#================#=========================================================#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#=========================================================#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#=====================================================================#

Not sure...but did anyone ask?
```

450. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32D95DF9.3587@wco.com>
Source record: 98689

I have used a simple circut from an old RS RC transmitter. I made a few small changes to the board to create oscillation, changed the xtal to the channel this jerk would 'puke' on and peaked the output to a full 50 Milliwatts. I put the whole unit with a pair of 9V in parallel into a cigarette hard pack with 108" of magnet wire to work as an antenna and hung it in the guys pine tree about 20 yds from his Antron. He could be heard but he couldn't hear anyone over the osclilator. The bug lasted almost a week-until it rained and soaked thru the cigarette pack.

]not disclosed wrote:
>
> does anyone have the plans to make a device in which I could drop next
> to a offending 27mhz operator? I am looking for a device that will key
> and buzz with stronger signals <say above 8 s units> so the person
> will not be able to hear his local cohorts. <high school kids>
> I appreciate any and all replies.
> looking forward to hamming it up in the NEAR future....
> countdown to test time!

451. Re: power supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32D95ECE.7ECF@wco.com>
Source record: 98690

italy wrote:
>
> I have a 1.75A realistic regulated power supply that I would like to power

Better check that PS.. The ones I've seen have no regulation.

Jim..

452. Re: power supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-12 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32D95E85.75EF@wco.com>
Source record: 98691

I had the same problem with my RS 1.75.

I replaced the filter cap with a 40,000MF @ 25V and the hum went away.

italy wrote:
>
> I have a 1.75A realistic regulated power supply that I would like to power
> my 2M
> HT with, when hooked up it works however I seem to get a bad hum on both
> voice and tone while transmitting, is there a simple fix for this? any help
> would
> be gratly appreciated, thanks in advance
>
> 73s KC7PWZ

453. How's it mixed? Two crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32DAC565.6982@izzy.net>
Source record: 98543

I've got an old G.E Porta Mobile I've been looking for info on for a long time, still don't have it all but:
The TX uses a crystal multiplied 8 times, (5.590 Mhz = 44.720Mhz) the recieve uses 13.126666 Mhz mixed with 4.805 Mhz to come up with 44.720 Mhz

I know the rx is on 44.720 for sure.

I have tried every combination I know of to figure out the mixing sheme but I can't.
I have isolated the rx portion of the rig and there are only those two crystals on board. I want to put it on 6 FM but just can't figure out mixing scheme between these two rocks.

Additionally anyone with a manual for the G.E Porta Mobile, I will pay for a copy.

73, Tim, ka8ddz

454. Re: MFJ-259 Mod - MORE POWER!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970113185100.NAA05046@ladder01.news.aol.com>
Source record: 98544

In article <5bdqc3$7tb@dawn.mmm.com>, grhosler1@mmm.com (Gary Hosler) writes:

>So what's your point Tom? The bottom line is that the MFJ-259 is a
>great tool for use with MOST antennas. As a GDO is has serious
>limitations.

My point, Gary, was to explain the REASON the dip function has a low coefficient of coupling. A statement like this:

>Amen! I didn't realize that the 259 was underpowered.

demonstrates a complete lack of understanding of the problem and the root cause.

>I don't care if the limitation is a lack of battery,
>operating Q, the need for an outboard higher current supply.

I'm sorry. I was only trying to give a factual answer that actually explained the problem, instead of a wild guess or improper conclusion.

>I was simply wondering if anyone else had
>tried to overcome these limitations.

As my explaination of the problem points out, the problem is not correctable by changes in power. If you need a dip device that works with normal sensitivity via coupled fields, you will have to use a real dip meter.

As I consider this further, even if you raised the RF power it would not correct the complaint. Any conclusion "power is too low" is just plain wrong. If you put a dual quad tunnel port 800 cubic inch twin over head camshaft hemi-head 14:1 compression engine driving a generator in it it still wouldn't be any better as a GDO. Although it would make a great jammer.

But even with a penlite cells, the 259 can be used to effectivelyand accurately measure traps. Correct trap tuning involves checking the resonant frequency of the trap as a separate enity, either with a GDO or the 259. The 259 can be directly coupled to the external trap leads.

Never depend on the trap resonance reading with the trap installed in the antenna. That reading will likely be far different than where the trap is really resonant.

73 Tom

455. Super Keyer II Chips Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: dfroula@oxywhite.interaccess.com
Message-ID: <5bebbt$995@oxywhite.interaccess.com>
Source record: 98545

The Super Keyer II is a deluxe, single-chip microprocesor-based CW keyer based upon the Motorola 68HC705C8 microcontroller. I have twelve pre-programmed microcontrollers with construction details and complete operation manuals, left over from a club group-purchase. Only a crystal and a handful of other common parts are needed to construct a full-featured memory keyer.

Cost of the chip and documentation, post paid, is USD 10.00 to domestic US addresses. Please email me at:

dfroula@interaccess.com

to be sure some are still available, and for ordering instructions.

Note that this is not the newer muliple-chip Superkeyer with the external memory chip.

Features of the keyer include:

- Operational commands sent to keyer in CW with paddles
- Iambic, with dot and dash memories
- Four 48-character memories
- Timed pauses within messages
- Messages may call other messages and contain operational commands
- Message loop capability for continuous play
- Message break-in to allow for paddle-inserted text
- Input queue to store multiple message activation
- Contest serial numbering and control (000-9999)
- Digital and linear analog speed control (6-60 WPM)
- Adjustable weighting (25%-75%)
- 700 HZ sidetone, switchable
- Transmitter key function
- Hand key mode
- Compensation for transmitter key-up delay distortion
- Selectable automatic character spacing
- Keyer-status inquiry functions
- Ultra-power consumption for battery operation
- Many other features

See November 1990 QST for more details.

D. Froula
dfroula@interaccess.com

456. 117L7 tube data needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: Cesare.Lavazza@nemo.it
Message-ID: <32daabd3.5952804@news.interbusiness.it>
Source record: 98546

Does anyone know the data of this tube?
Which are the possible substitutes for the 117L7 tube?
Thanks.
Saluti.

E-mail: Cesare.Lavazza@nemo.it
WWW: http:\\radionostalgia.net\Users\Lavazza
http:\\www.geocities.com\CapeCanaveral\4573

457. Re: Wanted: Tips for constructing water coole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: larry33414@aol.com
Message-ID: <19970113010800.UAA10746@ladder01.news.aol.com>
Source record: 98606

Most loads will have changing values as a function of their
temperature
coefficient. Most heat sinks, solid or liquid, take time to "respond".
Thus, you may want to consider another approach that is used in
testing
batteries... that is some feedback circuit to compensate for the changing
load. This can be relay controlled or solid state. The relay control
approach switches in ,or out, more or less load to maintain a relatively
constant load. The solid state approach at 300 khz would require more
complex circuitry but would act in the same but more continuous manner.

E-mail me for more info.

Larry

458. Re: Need Filament transformer for SB-220 Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: bohnovic@worldnet.att.net
Message-ID: <32d992c1.32731291@netnews.worldnet.att.net>
Source record: 98607

A friend of mine needs one also. He called Peter W. Dahl Company and
they have them for about $80.00 +/- . Check them out at:

http://www.1eagle1.com/commercial/pwdco/

73..de John/K8PXG waiting for a new 1x2 vanity call

w6tg@aol.com (W6TG) wrote:

>Fair Radio had some listed on the web sheets a little while back.
>Terry - W6TG

John/K8PXG in Pembroke Pines, FL

459. Re: Wanted: Tips for constructing water cooled load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: larry33414@aol.com
Message-ID: <19970113010900.UAA10784@ladder01.news.aol.com>
Source record: 98608

Most loads will have changing values as a function of their
temperature
coefficient. Most heat sinks, solid or liquid, take time to "respond".
Thus, you may want to consider another approach that is used in
testing
batteries... that is some feedback circuit to compensate for the changing
load. This can be relay controlled or solid state. The relay control
approach switches in ,or out, more or less load to maintain a relatively
constant load. The solid state approach at 300 khz would require more
complex circuitry but would act in the same but more continuous manner.

E-mail me for more info.

Larry

460. Tubes for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: marchini@i-2000.com
Message-ID: <32d9b5b6.9928947@news.i-2000.com>
Source record: 98609

I have a collection of tubes I'd like to get rid of, please email if interested. Thanks 73 Scott

Tube Alias1 Alias2 Manu Qnty Asking
03DG4 RCA 15 $4.00
03DG4 Zenith 5 $0.00
03EH7 XF183 RCA 14 $2.00
03EJ7 XF184 RCA 3 $3.00
03HQ5 RCA 3 $3.00
04BQ7A 04BZ7 RCA 5 $0.00
04DE6 RCA 5 $3.00
04EH7 LF183 RCA 7 $3.00
06AF11 RCA 6 $4.00
06AF9 RCA 1 $5.00
06AG5 RCA 6 $2.00
06BA6 EF93 RCA 3 $3.00
06BH11 RCA 1 $4.00
06BH6 RCA 9 $3.00
06BH8 RCA 5 $3.00
06CL8 RCA 3 $4.00
06CS7 RCA 5 $4.00
06CT3 Zenith 10 $9.00
06DE4 06CQ4 RCA 3 $3.00
06DQ5 RCA 5 $10.00
06EH4A RCA 20 $5.00
06EH7 RCA 49 $3.00
06EJ7 EF184 RCA 10 $4.00
06EV5 RCA 8 $5.00
06EW7 RCA 3 $5.00
06GY5 RCA 20 $5.00
06HB6 RCA 1 $4.00
06HB6 06HA6 RCA 4 $4.00
06HM5 06HA5 RCA 5 $4.00
06HS5 RCA 3 $7.00
06JB5 06HE5 RCA 14 $5.00
06JB6A RCA 27 $19.00
06JC8 RCA 26 $3.00
06JD6 RCA 2 $4.00
06JF6 RCA 15 $7.00
06JH5 06HZ5 06JD5 RCA 4 $8.00
06JM6A RCA 12 $5.00
06JT6A RCA 3 $24.00
06KN6 RCA 16 $7.00
06LQ6 06JE6C RCA 6 $35.00

06LR6 RCA 49 $29.00
06LU8 RCA 1 $4.00
06LW6 Zenith 18 $24.00
06MF8 RCA 9 $9.00
06MJ6 06LQ6 06JE6C RCA 2 $49.00
06MN8 RCA 9 $5.00
09A8 PCF80 RCA 29 $2.00
09AQ8 RCA 2 $4.00
09AU7 RCA 23 $2.00
10BQ5 RCA 5 $3.00
12T10 RCA 10 $7.00
15KY8A RCA 22 $4.00
17AB10 17X10 RCA 1 $4.00
17BB14 RCA 1 $5.00
17GJ5A RCA 5 $5.00
17GV5 RCA 3 $4.00
17GW6 17DQ6B RCA 16 $6.00
17JB6A RCA 1 $8.00
17JG6A RCA 4 $7.00
17JM6A RCA 1 $8.00
17JN6 RCA 1 $5.00
17KV6A RCA 5 $9.00
17Y9 RCA 5 $8.00
17Y9 Zenith 2 $8.00
17Z3 DY81 RCA 5 $3.00
21KQ6 Zenith 6 $6.00
21KQ6 LL521 RCA 22 $6.00
22JF6 RCA 5 $9.00
22JG6A RCA 13 $7.00
22JU6 RCA 3 $8.00
25EH5 RCA 1 $3.00
30KD6 RCA 7 $24.00
30MB6 RCA 4 $11.00
31AL10 RCA 30 $5.00
31JS6C RCA 2 $12.00
31LR8 RCA 30 $1.00
36KD6 40KD6 RCA 3 $20.00
36LW6 RCA 1 $12.00

Please ignore leading zeros in tube numbers, they were
for sorting purposes only....tnx

461. Re: Wanted: Info on 1296Mhz ATV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5bcgij$6bg@techsrv1.tech>
Source record: 98610

Christopher (Chris) W. Boone (cboone@earthlink.net) wrote:
: Check out the HATS (Houston ATV Society) web page at www.stevens.com...
: They have 1.2G FM TX kits available......good quality and good cost!
:
: Chris
: WB5ITT
: (tell them I sent ya)
:
Thanks for all of the info everybody supplied! It is greatly appreciated.
Mike KB8WPE

--
/\
\ Michael Long || President /
/ Callsign: KB8WPE || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/

462. Sevick book *not* out of print

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: rmote@rain.org
Message-ID: <5bcrhe$9jc$1@news.rain.org>
Source record: 98611

Been getting "it's out of print" & "can't get it" from the usual sources. Not so! Jerry Sevick said his second edition of TRANSMISSION LINE TRANSFORMERS *is* being printed & sold by Noble Publishing, of Tucker, Georgia. Try 'em at (770) 908-2320. (Jerry was having trouble with dim light in reading, so you may end up having to check the info operator for the correct number.)

73 & good luck.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

463. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1301970048330001@port3.vcnet.com>
Source record: 98612

In article <32D244D3.2429@staffnet.com>, rlewis@staffnet.com wrote:

> R. L. Measures wrote:
>
> > > >In this day and age why would anyone publish what is exxentially a
> > > >database or infromation retrieval product that *required* its users
> > > >to use a specific operating environment?
>
> COST COST COST! If you want to maximize profit you write software for
> the largest market - which happens to be Windows at the moment.

True enough. The good news is that the sociopaths who write computer viruses, tend to concentrate on writing viruses for the largest market.

Since Windows is basicly ancient MS-DOS, which is nearing the end of its useful life, and the Mac OS is also nearing the end of its useful life, it will be interesting to see what the operating systems of the future will be. Computers of the future are likely to be able to run any OS, so Dollar Bill's, Intel's, virtual monopoly may be on shaky ground. IBM's upcoming CHRP platform will reportedly run OS-2, Unix, Windows/DOS, Macintosh and BE.

--
--Rich-- ag6k, 805-386-3734

464. Re: Vacuum Tube QRP Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5bd6v1$3lc@news1.mnsinc.com>
Source record: 98613

To: N0KIB

You and your daughter have every right to build a tube CW transmitter and operate it on the ham bands! Hundreds of us are doing just that, and quite frequently! We have nets, an Internet mailing list, and we help each other with designs, parts, reprints of articles etc.

To subscribe, send an e-mail message to:
listserv@theporch.com
with no subject, and the text:
subscribe GLOWBUGS YOURNAME

You will love it!

Also, if you want to see some great schematics and articles on the web, point your browser to:
http://www.mnsinc.com/bry/hamfiles.htm

Enjoy! - Bry, AF4K

|>In article <32CFD604.4160@access.usa.net>, hazeh@access.usa.net says...
|>> My daughter and I would like to build a 3-7 tube, monoband, QRP CW rig
|>> as a starting project in getting her license. Rather than re-invent the
|>> wheel, I am looking for a proven project from an old ARRL Handbook, CQ,
|>> QST, etc. Any help???
|>>
|>> 73 - N0KIB
|>>

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

465. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: bboone@mindspring.com
Message-ID: <5bd589$2nl@camel0.mindspring.com>
Source record: 98614
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear (teddyb@prog1.caprica.com) wrote:

: I THOUGHT that these were newsgroups for radio science discussions, based
: upon factual information. But mostly all I see here are people's
: unsolicited opinions based upon conjecture.

This fellow is trolling ....
Much like keying up on ch19 (CB) and yelling 'All truckers are idiots'
at which point, 30 key up and prove him right

The more you raise sand and respond, the more he enjoys it. --Bobby

466. 2 tone or commercial type paging, can I add it to a 2M rig?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: Bret Svoboda <slabsoco@usa.net>
Message-ID: <01bc0106$151599e0$6868d4a5@slabsoco>
Source record: 98615

Help!

I have called Yaesu, Kenwood, and Alinco with no luck. I am a tech class licensee and also a vol firefighter. Need to replace my O2 AT that died. Want to have a ham handheld come on when the paging system activates. The manufacturers just want to sell me $800 commercial radios. I would be content even with a simple scanner or pager circuit that I could make/modify as a standalone to come on with the calls. The FD just says to leave their radio on all night, but the static and chatter disturbs family.

You can respond via fax if only couple pages to my work QTH.

FAX (719) 584-4929

Thanks
Bret

467. 2 tone paging (commercial type). Can it be added to a 2M handheld?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: Bret Svoboda <slabsoco@usa.net>
Message-ID: <01bc0107$b38d1de0$6868d4a5@slabsoco>
Source record: 98616

Hello:

I am a tech class amateur and vol firefighter. My O2 AT died and I want to replace it. Some of the newer rigs have DTMF and CTCSS paging. I want to modify or add a way to decode the commercial type 2 tone fire pages to alert me to a call.

The Fire Dept told me to leave their radio on all night, but the static and chatter disturbs my family. I would even be happy with a scanner modification or simple add on to act as a pager. I called Kenwood, Yaesu, and Alinco, but they want to sell me a $700 to $800 radio. HELP!

You can EMAIL at slabsoco@usa.net or fax short items to me at work QTH (719) 584-4929.

Thanks and 73's

Bret

468. GLOWBUGS ! !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5bdbu9$3lc@news1.mnsinc.com>
Source record: 98617

EVERYONE ought to give this a try!

This is REAL RADIO at its raw level. It is easy, inexpensive and
TONS of fun!

|>To: N0KIB

|>You and your daughter have every right to build a tube CW transmitter and
|>operate it on the ham bands! Hundreds of us are doing just that, and quite
|>frequently! We have nets, an Internet mailing list, and we help each other
|>with designs, parts, reprints of articles etc.

|>To subscribe, send an e-mail message to:
|>listserv@theporch.com
|>with no subject, and the text:
|>subscribe GLOWBUGS YOURNAME

|>You will love it!

|>Also, if you want to see some great schematics and articles on the web,
|>point your browser to:
|>http://www.mnsinc.com/bry/hamfiles.htm

|>Enjoy! - Bry, AF4K

|>|>In article <32CFD604.4160@access.usa.net>, hazeh@access.usa.net says...
|>|>> My daughter and I would like to build a 3-7 tube, monoband, QRP CW rig
|>|>> as a starting project in getting her license. Rather than re-invent
the
|>|>> wheel, I am looking for a proven project from an old ARRL Handbook,
CQ,
|>|>> QST, etc. Any help???
|>|>>
|>|>> 73 - N0KIB
|>|>>

|>73 from Bry (((Amateur Radio G3XLQ / AF4K)))
|>http://www.mnsinc.com/bry
|>E-mail: bry@mnsinc.com
|>Home of MEGALIST ham radio files, SWL info. etc. etc.

469. Sevick book (baluns, etc.) - more info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: rmote@rain.org
Message-ID: <5bdpbf$ca4$1@news.rain.org>
Source record: 98618

Called today to confirm phone number, etc. Jerry Sevick's book
(TRANSMISSION LINE TRANSFORMERS, 2nd edition) can be purchased from:

Noble Publishing
2245 Dillard Street
Tucker, GA 30084
(770) 908-2320

Their price is $34 plus $5 UPS, and they'll take plastic (AMEX, VISA, MC).

Since Amidon, ARRL, and the CQ bookstore all claim it's out of print, this
looks like the only place you'll find it. (I even tried Powell's
Technical Bookstore in Portland OR for a used copy -- no dice.)

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

470. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan13.164841.24248@ke4zv.atl.ga.us>
Source record: 98619

In article <5b941v$n87$1@nadine.teleport.com> w7el@teleport.com (Roy Lewallen) writes:
>In article <1997Jan11.172556.14349@ke4zv.atl.ga.us>,
> gary@ke4zv.atl.ga.us (Gary Coffman) wrote:
>>Actually, Roy, if his data is correct (not in my 47th edition of CRC
>>either), it means that oxidized or sulfided silver is about 6 orders
>>of magnitude more conductive than oxidized copper. Thus it clearly
>>demonstrates the advantage of silver plating copper in any environment
>>which isn't oxygen free, such as those where our tank coils and cavities
>>are found.
>
>Actually, lower resistivity isn't necessarily better. If the resistivity is
>zero, there's no loss because it's a perfect conductor. If it's infinite,
>there's no loss because it's a perfect insulator. There's a value in
>between at which the loss is greatest, and it decreases with higher or
>lower resistivity. The magic value depends on the coating
>resistivity, thickness, and frequency. As the resistivity increases, so
>does the skin depth. A thin, highly resistive coating won't have much
>current in it, hence won't have much loss. An example is aluminum oxide
>which quickly forms on any aluminum conductor. It's thin and an excellent
>insulator, so contributes no appreciable loss. The problem is similar to
>one of impedance matching.

Yeah, I recall we went over this in the antenna group last year.

>I'll try to shake some time loose to look up references for current
>distribution or loss in plated materials. As I recall, it's not a simple
>problem. I suspect that both copper oxide and silver sulfide are
>sufficiently highly resistive that neither will contribute appreciable loss
>at HF and above, unless the coating thicknesses are greater than I think
>they'd be.

The skin depth is 1/(sqrt(pi*f*u*uo*a))

Where f is frequency, u is the relative permeability of the material
(1 for all these materials), uo is the premeability of free space,
and a is the conductance of the surface, IE 1/ohms-meter. Here are
the skin depths for the materials in question at a frequency of
100 MHz:

silver 6.37E-6 meter
copper 6.56E-6 meter
silver sulfide 2.25E-3 meter
copper oxide 3.90 meter

It would appear that you are correct. The skin depths for silver sulfide
and copper oxide are both so great that the underlying material will carry

the bulk of the current along the surface of the conductor in either case. This still gives the edge to silver plate, since it will be the underlying material in the sulfide case, but the edge isn't large, about 1.38:1 in favor of the silver plating if it is at least 18 micrometers thick (3 skin depths) below the sulfide coating.

Now contact resistance is a different matter, since the current flow is normal to the surface coating. Silver sulfide is about 6 orders of magnitude less resistive than copper oxide for similar coating thickness. For thin coatings, that may still be insignificant, but it does explain why silver plated contacts are often used.

>I'm not much of a chemist, but it seems that an important issue is whether
>the oxide is porous (as with iron oxide) or non-porous (as with aluminum
>oxide), since a non-porous coating would limit the depth of the coating.
>
>Incidentally, copper sulfide is common in some industrial environments, and
>copper chloride is common near the sea. I know copper chloride is
>non-porous; exposure to salt air will turn wire into powder.

I think you mean that copper chloride is *porous*. It is, and it is also soluable in a weak acid, such as the typical pH of rainwater in many areas downwind of industrial activities. This is what happened to the Statue of Liberty, and why it had to be restored. Acid rain was literally washing it away.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

471. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970113163800.LAA01283@ladder01.news.aol.com>
Source record: 98620

In article <n7ws.244.00CD03A0@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) writes:

>
>Shows the danger of jumping to conclusions, doesn't it?
>
>N7WS

Jumping to an incorrect conclusion is a rare event for you Wes.

I notice Rich used your incorrect assumption as a springboard to attack me and the 1500, once again without having all the facts.

In his case, that seems to be a way of life.

73 Tom

472. Info: FT-101B AM Filter Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: Ron.Trepka@chirondiag.com
Message-ID: <32DA654E.3C08@Cibadiag.com>
Source record: 98621

Does anyone have the instructions to modify the Yaesu FT-101B from the CW filter to the AM filter. I have almost all the Fox Tango newsletters from 1974 and 1975 except the one issue that has the article on this mod. The mod is also included when one purchased the filter from the factory. Any info on this would be appreciated.
Thank you.

Ron - WB8QGE - Cleveland, Oh.

473. Re: 2 tone paging (commercial type). Can it be added to a 2M handheld?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: Allen Wallace <allen_wallace@powertalk.dtint.com>
Message-ID: <32da804d.0@itchy.itsnet.com>
Source record: 98622

In article <01bc0107$b38d1de0$6868d4a5@slabsoco> Bret Svoboda,
slabsoco@usa.net writes:
>I am a tech class amateur and vol firefighter. My O2 AT died and I want to
>replace it. Some of the newer rigs have DTMF and CTCSS paging. I want to
>modify or add a way to decode the commercial type 2 tone fire pages to
>alert me to a call.

Communications Specialists has a 2 tone decoder for $54.95.
1-800-845-0547.

474. Re: MFJ-259 Mod - MORE POWER!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970113163800.LAA01277@ladder01.news.aol.com>
Source record: 98623

In article <32D68AE5.2E4@digital.net>, Jeff Hutchinson <w4pbc@digital.net>
writes:

>
>Amen! I didn't realize that the 259 was underpowered.
>
>Thanks again, Gary.
>
>73,
>de Jeff N4JT

Come on now guys. You are reaching conclusions without facts.

Higher power increases battery drain. The bulk of current demand in the
259 is the RF amplifier stage driving the antenna port. At 100 mA of
battery drain is at the limit of what penlitre cells will take.

Going to higher power would require a 120 volt power supply connection, or
a larger battery system like gel cells or lantern batteries.

The 259 has MORE RF output than any other competing analyzer, and couples
fine to any antenna in a normal fashon. The TRUTH is that it is a Q
problem that causes reduced coupling to external resonant circuits via the
grid dip adaptor, not a lack of power.

In a conventional GDO the external coil is part of a resonant circuit in
the oscillator. It has extremely high field levels because of the
operating Q of the oscillating circuit. In ANY antenna analyzer with a dip
adaptor coil, the sense coil is NOT part of an oscillating circuit. ANY
analyzer using this type of dip adaptor will have much less coupling than
a conventional dip meter, and the manual even warns of this.

Get your facts right.

73 Tom

475. CA3054 application.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: maroof@cybersys.net
Message-ID: <5bdqtt$24s@post.servtech.com>
Source record: 98624
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Need design examples of CA3054 as double balanced modulator, Quadrature detector, product detector, RF oscillator/converter.

PLEASE EMAIL!

Thanks
Maroof
<maroof@cybersys.net>

476. Re: Any tips on labelling cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <32DAA7F6.43A6@hevanet.com>
Source record: 98625

Paul Mooney wrote:
>
> Thanks for reading.
>
> I'm just completing a homebrew project which I want to look good (not
> just perform well).
>
> Any tips for labelling on/off switch and other controls - more
> professional looking that Dyno or paper labels?
>
> Thanks in advance,
>
> Paul G7SPV

Use a drafting program like AutoCAD (I suppose any paint program would
also work) to make the front panel you want.
Print it on paper with the background color you want. Cover it with
stick-on laminating plastic. Cut out the slots/ holes with an Xacto
knife and glue it on. I usually just print it on plain white
paper and spray it with clear paint after it's installed.

I've also done this with a plotter directly on the metal front panel.
Obviously this only works if you have a flat single-panel facade
and have not yet drilled it.

This will give you much more detail and accuracy than you can get with
any stick-on-letter process.

If you do the panel first, you also have a drill template that's
guaranteed to match the holes in the panel.

miker

PS check the accruacy of your printer/plotter to make sure it's
calibrated
to EXACTLY 1:1. Very tiny errors can make it not fit.

477. Re: wireless remote

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <32DAA9FC.B94@hevanet.com>
Source record: 98626

Paul wrote:
>
> I'm trying to come up with a small wireless remote single function
> transmitter and receiver acceptable under part 95 that is coded in some
> way to prevent interference

Smart Clapper
Garage Door Opener
Remote Light Switch
X10 RF remote controller
440 transceiver with tone on.
Cordless telephone
Panic Button
Car Alarm Remote Control
Ir Remote

Should be at least a dozen such devices available from RadioShack.

478. re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: lhalliday@creo.COM
Message-ID: <9700138531.AA853185279@mail.creo.com>
Source record: 98627

Joe Subich wrote:

> (snip snip snip)
> Another option to consider...since QST is typeset with a PostScript
> process, if you DON'T use HTML, save the PostScript source and
> convert everything to PDF files...
> (snip)

This might be a nice option for future releases. PDF is (in theory, anyway... :-) platform independent, and readers are available for all major systems. If you need one that doesn't exist, you can get the specs from Adobe and write your own.

> ...I believe that Adobe also include functions for generating
> indexes and tables of content.

They do. And it all works very nicely. No, I don't work for Adobe. But I *do* work professionally with digital prepress.

BTW: can we slow down a bit on the ARRL bashing, please? At least they did *something*, rather than sitting around on their backsides and whining. The fact that their first attempt was imperfect means exactly that. With some constructive criticism, future CDs will be better.

Laura Halliday VE7LDH "C'est une femme mutine, assez
lhalliday@creo.com elegante, grave et legere, ayant le
ve7ldh@amsat.org sens du confort et du plaisir
Locator: CN89mg en tout." - C. Deneuve

479. Source for Dentron Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: John Holliman <jchol@mail.acadian.net>
Message-ID: <32DAF21A.65C0@mail.acadian.net>
Source record: 98628

Can anyone suggest a source for parts to Dentron tuners, etc?

Tnx and 73 de John, WA5TWL

480. Re: homebrew security system using toy walkie-talkies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: johng@comm.mot.com
Message-ID: <johng-ya023180001301971824440001@news.cig.mot.com>
Source record: 98629
Cross-posted to: rec.radio.scanner,alt.radio.scanner,rec.radio.amateur.homebrew

I bought a device like this, made for the U.S. Army, which does exactly what is described in Bret's posting. The device has a seismic probe that you stick in the ground. You set the sensitivity of the seismic probe with a switch. You unfold the metal tape antenna and install 2 9V batteries. The device emits a series of audible beeps on a VHF frequency (I forget the exact one) when the device is activated. Several of these devices came in a set, each device used a different series of coded beeps. Each device is in a very attractive olive drab, water-tight case. At Dayton several years ago, I belive I paid around $10.

The device is called a "personnel seismic intrusion device." I don't remember the AN/... military part number. I believe that they are available from Fair Radio sales. I occasionally see them at hamfests.

--

John Gilbert

johng@comm.mot.com

481. Source for Wafer Switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: John Holliman <jchol@mail.acadian.net>
Message-ID: <32DAF29D.3A52@mail.acadian.net>
Source record: 98630

Can anyone suggest a source for ceramic rf type wafer switches? I need a 2 position, double pole double throw ceramic wafer switch.

Tnx and 73 de John, WA5TWL

482. Killer scanning links page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: confused@primenet.com
Message-ID: <confused-1301971714190001@ip32-056.lax.primenet.com>
Source record: 98631

Come visit One of the best Scanning links pages on the WEB!!!
at:
http://www.primenet.com/~confused/scan.html

enjoy your stay.

If you need a fast loading version (no graphics)
go to:
http:www.primenet.com/~confused/scanplain.html

thanks and 73
James
KE6YJQ

483. Re: homebrew security system using toy walkie-talkies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <32DB213C.623E@wenzel.com>
Source record: 98632
Cross-posted to: rec.radio.scanner,alt.radio.scanner,rec.radio.amateur.homebrew

I have a schematic for a seismic intrusion sensor in our technical library at www.wenzel.com. The sensor is made from two round Radio Shack magnets and a molded inductor. The output is a timed pulse which could be used to power a low-power transmitter.

484. Re: PRO 26 MEMORY MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: Bill Higdon <billhigdon@earthlink.net>
Message-ID: <32DADAEB.23EC@earthlink.net>
Source record: 98633
Cross-posted to:
alt.radio.scanner,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.scanner

yatkonj@ibm.net wrote:
>
> Is there a mod to expand the memory on the PRO-26?
> Any help would be greatly appreciated.

Try this for availible mods:
http://www.demon.co.uk/javiation/

485. Heath Light Green Paint?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <32DA9AF4.D03@primenet.com>
Source record: 98634

Anyone have any idea where the light green Heath paint
to match SB-220 cabinet (not front panel) can be found?

Thanks, Brian ke7gh@primenet.com

486. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1301970834300001@port43.vcnet.com>
Source record: 98635

In article <n7ws.244.00CD03A0@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) wrote:

> In article <5bb0s0$669@dallas1.connect.net> philk5pc@connect.net (Phil Clements) writes:
> >From: philk5pc@connect.net (Phil Clements)
> >Subject: Re: Good source for amplifier tips
> >Date: 12 Jan 1997 15:44:00 GMT
>
> >In article <n7ws.236.00410F93@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart)
> >says:
> >>
> >>...snip...>
> >>Rich sent me some samples of his nichrome alloys and Tom, W8JI, sent me a
> >>sample suppressor from an AL1500 amplifier.
> > snip....
>
> > Hmmmmm.....it must have been a prototype sample...the AL-1500 does not
> > use any suppressors.
>
> True. This was my mistake. Tom and I also discussed the grid protective
> circuitry of the AL1500 and he sent me a circuit diagram for same. I
> incorrectly assumed the suppressor was also from that amp. It is not; it's
> from an AL80B.
>
> Shows the danger of jumping to conclusions, doesn't it?
>
> N7WS

According to what I have heard about the AL-1500, it shows the danger of jumping to the conculsion that the 8877 does not need a VHF parasitic-oscillation suppressor. .

This morning, I removed the anode-cooler from one of the three kaput 8877s I received from Lon, K5JV. Before anode-cooler removal, this particular 8877 exhibited a relatively minor amount of loose gold, acoording to the degree of positive leakage current in the Funderburg test.

I can see four places on the 8877's grid where the gold has melted and pooled into large melt balls, and other places on the grid where smaller melt-balls formed. One of the four larger melt-balls has apparently blistered and lost some of its gold. All of the gold melt-balls that were stuck to the grid were toward the grounded end of the grid. The other end of the grid (beyond the mid-point horizonal support wire) exhibited no

evidence of gold having melted. IMO, the relative position of the gold melt-balls is not consistent with the distribution of HF grid current. To me, UHF current seems to be more likely to produce such a result.

Now that we have Wes Stewart's VHF suppressor measurements, why has Mr. Rauch apparently lost interest in the matter? Hmmmmmmm.

--
--Rich-- ag6k, 805-386-3734

487. Re: A message to Mr. Trevor Hopps VK8TH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5bdde5$9pj$3@news3.microserve.net>
Source record: 98636

>> He left me no Email address to reply to him to counter his accusation. I
am apparently GUILTY
>>until proven otherwise in this US of A!!
>
>How long have you been on the Net ? By virtue of the fact you received
>my Email, you have my Personal Email Address. The message was a
>personal email not a newgroup posting (A forum I dont consider
>suitable for this type of rediculous verbal mongering) I suggest you
>check the header information of my original reply.

Yea, I did check it. You also stated at the bottom of your email that all
replies from me would go into /null/void or some place like that. Thanks for
lying. It does your self righteousness some credit.

>Again Tyler the original email was personal (Not to a Newsgroup)
>and I did consider it polite. As to whether it is "Tattling" or not,
>perhaps it is, but I think if we put it into contect. If newspaper,
>telephone calls or letters directed to me contained that sort of
>content I would certainly take some sort of action to stop it.
>I have 2 choices , unsubscribe to the media or do something about
>the author. You are aware of my choice.

Do you run into convience stores and steal the porno mags off the shelf and
destroy them because they offend you? What gives? You can snuff me out? Is
that it? Did you see the movie "The people -vs- Larry Flint?" It's a real
eye opener. It deals with the first amendment. You should read that
sometime.

>As I mentioned in my original email to you, there is nothing to
>debate. I have read all postings from you to various newsgroups and I
>dont consider that I wish to receive email from you. I have yet to
>see a message from you that wasnt sarcastic, or helpful, or better yet
>"In the Spirit Of Ham Radio"

IF YOU DON'T LIKE WHAT I WRITE, I WON'T FORCE YOU TO READ ANYTHING I HAVE
WRITTEN.

My grandfather has a comic on his fridge that goes something like the
following:

To get rid of offensive TV in today's society, 1. make a fist, 2. extend index
finger, 3. push. "click" (the TV goes off) (the comic is from the late 70s)

As do you Mr. Communist Big Brother.

488. Re: Electrolytic COMPACI-CHEWERS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5bdcdc$3lc@news1.mnsinc.com>
Source record: 98637

"Robert R. Koblish" <n3hat@erols.com> whistled a happy tune like:

|>Mike Willis wrote:
|>>
|>> w8jitom@aol.com wrote:
|>>
|>> >
|>> > My dad drove a tractor, he told me there was one important lever.
|>> > Leave-her B.
|>> >
|>> > 73 Tom
|>>
|>> This pun does not work in US English, was your father English?<snip>

|>It works for me, and I speak US English! (Also a Flanders & Swann fan)

|>Why wouldn't it work -- does it depend on whether you learned to say
|>'lever' with a long or short E?

|>73,
|>Bob N3HAT

Bob, this is only a problem for the certain segment of Americans who learned
to pronounce EVERYTHING wrong!!
They say "LEVVER" instead of "LEEVER"
The same people say "RUUT" with a short "OO" instead of "ROOOT" (grin!)

For a complete pronunciation guide, see the "U.K. English to U.S. English
Dictionary" and Pronunciation Guide section.)

It is all FREE at:

http://www.mnsinc.com/bry/

This frequency will now return to normal amateur usage, he he!

de AF4K / G3XLQ

489. Re: Electro Encephalo Graphy (EEG) info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5bdcv1$3lc@news1.mnsinc.com>
Source record: 98638
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew,sci.engr.biomed

With the correct amplifiers and electrode application, you certainly can get EEG signals.

Typically they will be on the order of a few millivolts 3-5 mV is normal. Frequency depends on brain activity and whether the subject is asleep or awake. Typically you can expect to see 5-25 Hz waves and components.

If you need more detail, I would recommend getting a book on the subject. I am just responding because I didn't see any repplies to your article, and I work with sleep study equipment that looks at EEG among other parameters.

Bry

lbliao@alumnae.caltech.edu (lbliao) whistled a happy tune like:

|>I am looking for any book or papers that talk about the electro enchphalo
|>graphy. Specifically, I am looking for information of typical EEG, the
|>voltage levels involved, the frequency range, and how to pick up the
|>signal. If the signal can be displayed on an oscilloscope?

|>Thanks a lot!
|>lbliao

490. Amateur Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5bdd31$3lc@news1.mnsinc.com>
Source record: 98639

I have a number of great ham radio resources, files, links, mods, repairs, trades, swapnets and much more available for your enjoyment at:

http://www.mnsinc.com/bry/

Regards - G3XLQ / AF4K

All the best - from bry
bry@mnsinc.com
http://www.mnsinc.com/bry/
http://www.mnsinc.com/litlcaps.html

491. Re: power supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan13.155308.23982@ke4zv.atl.ga.us>
Source record: 98640

In article <01bbff57$6a163ae0$c28dc7cd@default> "italy" <italian@aa.net> writes:
>I have a 1.75A realistic regulated power supply that I would like to power
>my 2M
>HT with, when hooked up it works however I seem to get a bad hum on both
>voice and tone while transmitting, is there a simple fix for this? any help
>would
>be gratly appreciated, thanks in advance

Sounds like the filter capacitors in the supply have gone south.
Or you're getting RF back into the power supply regulator.
Either one would give this symptom. If the filters have dried up,
you get more hum when you put more load on the supply, IE when
transmitting. And if it is RF getting into the regulator, then
obviously it only happens on transmit. RF feedback into a supply
can sound a lot like AC hum. It is often difficult to tell which
is which by ear.

If you know someone with a scope, he can check the supply for
hum due to faulty filter capacitors. Just put a load on the
supply and scope the output. Or you can try putting a fairly
large filter capacitor in parallel with the existing capacitors
and see if that solves the problem.

If it is RF, putting a 0.001 uf disc ceramic across the output
terminals of the supply may solve the problem, and/or wrapping
the AC cord on a ferrite rod or one of those Radio Shack snap
together toroids may do the job depending on how the RF is
getting into the supply.

If you're using the rubber ducky antenna, try using an external
antenna. That'll get the RF away from the supply and will probably
cure the problem if it is RF feedback. I've seen this cure a number
of odd problems with power supplies.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

492. Re: ICOM-240 Service Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5bdrhk$gf9@news1.mnsinc.com>
Source record: 98641

RKisKan@dk-online.dk whistled a happy tune like:

|>Can anyone help me with service documentation, or even specs. for the
|>IC-240 VHF radio ?

|>73's

|>Robin
|>OZ6ABM

|>rkiskan@dk-online.dk

Yes, Robin. You can find help in the file MANUALS.TXT
available at:
http://www.mnsinc.com/bry/
in the ham radio resources section

ENJOY!

Bry, G3XLQ / AF4K

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

493. Re: Any tips on labelling cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-13 00:00:00 UTC
From: Philip Peake <philip@vogon.rain.com>
Message-ID: <32DA8BDA.D97@vogon.rain.com>
Source record: 98642

Paul Mooney wrote:
>
> Thanks for reading.
>
> I'm just completing a homebrew project which I want to look good (not
> just perform well).
>
> Any tips for labelling on/off switch and other controls - more
> professional looking that Dyno or paper labels?

If you have access to a laser or inkjet printer, consider making
a transparent "cover" for the front pannel by printing on an
overhead transparency, and putting this over your pannel.

If you use a color printer, the effects could be really nice.

Philip

494. FM transmitter wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: nkysk@pc.jaring.my
Message-ID: <32db5f2a.2031181@news.jaring.my>
Source record: 98547

Hi !

Anybody have long rang (about 1KM) FM transmitter ?
Working at 12V are preferable.

All reply are be appreciate.

NKY

495. Re: Transmitter Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: jean-claude.bacon@gmn.ulaval.ca
Message-ID: <5besm0$2p2$1@athena.ulaval.ca>
Source record: 98548

"Gregg j Palmer" <gregg_palmer@msn.com> wrote:

>I am interested in acquiring a schematic for a transmitter in the 5-9mhz
>range. Any help in locating one would be appreciated.

Look for any old hamradio handbook from arrl.
but in hamfest your should have a cw transmitter tuned at this
frequency for few bucks.

but better be a ham in order to get rig...73/

496. Re: Folded dipole enclosed by PVC pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: jean-claude.bacon@gmn.ulaval.ca
Message-ID: <5besat$2ni$1@athena.ulaval.ca>
Source record: 98549

n2ucn@router.n2ucn.ampr.ORG wrote:

>I want to enclose a folded dipole made with no. 12 bare copper wire
>inside a PVC pipe for weather proofing and to add stability.
>Will the electrical properties be affected significantly by the PVC?
Don't use ABS because 2 meters waves and over will be greatly
abosorbed. I have try it ...

Gud luck on PVC , I have not try...
jean/ve2bee

>Chuck Curtis

497. 10/11m homebrew TX ATU ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: Bowes@CEU
Message-ID: <Bowes.27.000A4FFE@CEU>
Source record: 98550

Dear all,

Just like to ask if anyone has built a 10/11m TX ATU ??? I'm thinking about putting one together but only have some basic plans with scratchy details. If someone has done this with success could they please contact with any hints, tips, details, of parts etc etc. I am finding particularly difficult to find out what variable capacitors I would need to cover 10 & 11m bands. I have a bunch of V. capacitors at home but they have no details of rating. Also is it possible to use capacitors salvaged from old radios for TX ops or do the vanes need to be wideley spaced ??? If you can see the kind of small dilemmas I have here and you think that you could help me then it would be greatly appreciated.

Thanks alot

Jonathan

****
Jonathan Bowes Czech Ecological Institute
Environmental Scientist & GIS specialist Kaplanova 1931 / 1
E-mail: Bowes@ceu.cz Prague - 4 Chodov
Institute web page: www.ceu.cz 143 00
Ministry of Environment: www.env.cz Czech Republic
Tel: (00 42 2) 67910786
****

498. ? Oszi and Spectrum Analyzer using Sound

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: guenter.koellner@oen.siemens.DE
Message-ID: <1997Jan14.130300.1895.156077@descn121.oen.siemens.de>
Source record: 98551

Hello,

is there any SW that allows to use a soundblaster card as a oszilloscope
or a spectrum analyzer? Where can I get it?

Thanks for your help=21

vy 73, Guenter, DL4MEA=40DB0KCP.=23BAY.DEU.EU (AX.25)
dl4mea=40amsat.org (Internet)
http://www.scn.de/=7Ekoellner (WWW)

499. PC lpt1 interface info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: hamster@loose.org
Message-ID: <5bg26g$si3$1@hammer.msfc.nasa.gov>
Source record: 98552

I would like to interface a DTMF decoder chip, M8870, to my LPT1. Has anyone done this and have info or ideas? I am decoding large tone sequnces and need to capture about 1000 40ms tones. I figure the best way is to connect ouput of chip to parallel port and read into Qbasic or equiv. Any help is greatly appreciated.

Reply here or direct to

paul.dumbacher@msfc.nasa.gov

THANKS!
Paul
KC4YOB

500. 1250 MHz ATV FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: George Keller <gakeller@worldnet.att.net>
Message-ID: <32DB8CFE.60E1@worldnet.att.net>
Source record: 98553

I am selling a 23cm (1296 MHz) ATV transmitter home brew, amplifier, and receivers, and beam. This ready to plug in and
play. E-mail me later for full details on this outfit.

George Keller W3SAP
Ocala, FL
gakeller@worlnet.att.net

501. Re: Source for Dentron Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32DBA9F1.1946@izzy.net>
Source record: 98554

John Holliman wrote:
>
> Can anyone suggest a source for parts to Dentron tuners, etc?
>
> Tnx and 73 de John, WA5TWL

John:

Dentron Radio Co. used to buy capacitors from All Star Products in Edgerton, OH.
The company is now called Oren Elliot Products and last time I checked they were still making variable caps. They also made a ton for Heath in their hayday.

Additionally, (a bit of radio history) Dentron Radio was moved to Edgerton, OH around 1983. They were chapter 11 but allowed to operate while under the direction of Oren Elliot. They closed the doors about 1 yr. later. There is a new amp/tuner company currently advertising from Bryan, OH. Since Bryan is only 15 min. down the road I wonder if they may have bought some of the remaining stock?

Good Luck, Tim, ka8ddz

502. Re: Source for Wafer Switches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: mlc@izzy.net
Message-ID: <32DBAA73.7D13@izzy.net>
Source record: 98555

John Holliman wrote:
>
> Can anyone suggest a source for ceramic rf type wafer switches? I need a
> 2 position, double pole double throw ceramic wafer switch.
>
> Tnx and 73 de John, WA5TWL

Call Great Lakes Electronics in Battle Creek, MI 616-963-6282
They are a distributor and I know they have a line of ceramic
(EXPENSIVE) type wafer switches.

Tim, ka8ddz

503. Traders Nets??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5bfrp5$q1k@news1.mnsinc.com>
Source record: 98556

Does any one know about any Traders Nets on HF or VHF?

If you can tell me the UTC TIME and FREQUENCY
that these nets meet on I would really appreciate it.

I keep alist here for anyone that would like to see what I already
have:

It's in the ham radio resources area at the URL below.
Under HAM FILES/ SWAP NETS.

Let me know what you can guys. Thanks
Bry, AF4K

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

504. Re: Any tips on labelling cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: kc5ng@dlep1.itg.ti.com
Message-ID: <5bgcft$7k6@sf18.dseg.ti.com>
Source record: 98557

I use rub-on transfer lettering from Amateur Electronic Supply.
Radio Shack also sells some suitable rub-on lettering sheets.
In either case, clear-coating will be required.

73 de K5DH

In article <5b7up9$5qm@runswick.octacon.co.uk>, pmooney@onyx.octacon.co.uk
says...
>
>Thanks for reading.
>
>I'm just completing a homebrew project which I want to look good (not
>just perform well).
>
>Any tips for labelling on/off switch and other controls - more
>professional looking that Dyno or paper labels?
>
>Thanks in advance,
>
>Paul G7SPV
>

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

505. Re: ? Oszi and Spectrum Analyzer using Sound

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: hamster@loose.org
Message-ID: <5bgcja$4gt$1@hammer.msfc.nasa.gov>
Source record: 98558

In article <1997Jan14.130300.1895.156077@descn121.oen.siemens.de>,
guenter.koellner@oen.siemens.DE says...
>
>Hello,
>is there any SW that allows to use a soundblaster card as a oszilloscope
>or a spectrum analyzer? Where can I get it?
>
Yes: I cannot recall the URL for downloading, but the file name of a DOS
Spec Anal is freq51.zip. A great WIN95 file is called COOL96.zip. The
latter is a multifile download with instructions for proper install. I
found them doing searches on SOUND CARD SPECTRUM ANALYSIS or something
very similar!! The files are large, but I have your e-mail and will
attempt emailing them direct to you!
Paul

506. Re: Any tips on labelling cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: griffin@jgfl1.allcon.com
Message-ID: <E4025w.47L@jgfl1.allcon.com>
Source record: 98559

Paul Mooney (pmooney@onyx.octacon.co.uk) wrote:
> Thanks for reading.

> I'm just completing a homebrew project which I want to look good (not
> just perform well).

> Any tips for labelling on/off switch and other controls - more
> professional looking that Dyno or paper labels?

Try printer's film from an imagesetter. Your local print shop
might help you there. Just print to a PostScript-file and take
this file to the print shop. The resulting film is strong and
protects the lettering/graphics/symbols from scratches.

You can also use this film for making PCBs.

Hope that helps,
73, Jens, DB9LL
--
at work: jg@combtx.com, bofh@combtx.com (http://barbara.combtx.com/~jg)
at home: griffin@jgfl1.allcon.com
at play: jg@beach, griffin@rpg, db9ll@g-qrp/darc
"You beeped me for WHAT?"

507. Re: Heath Light Green Paint?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: Jim Strohm <jstrohm@texas.net>
Message-ID: <32DB87FB.2A6B@texas.net>
Source record: 98560

I'm surprised that nobody has figured THIS one out --

take a paint chip to your local automotive paint supplier and
have them match it. Then get a gallon of Heath green and
put it in your airbrush or spraygun when you need to restore
a rig.

N6OTQ

508. Military Surplus WWW INFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5bfrr5$q1k@news1.mnsinc.com>
Source record: 98561
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

There used to be a GREAT listing and description of MANY models of
military surplus equipment available on the web at:

http://linux.cec.army.mil/hamradio/equipment/mi.html

It no longer works! Does anyone have any idea where it has been moved
to or has it just disappeared?

ANY help would be appreciated!

Thanks! Bry, AF4K

509. Re: Military Surplus WWW INFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: "Robert R. Koblish" <n3hat@erols.com>
Message-ID: <32DBBAEB.134D@erols.com>
Source record: 98562
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Brian Carling wrote:
>
> There used to be a GREAT listing and description of MANY models of
> military surplus equipment available on the web at:
>
> http://linux.cec.army.mil/hamradio/equipment/mi.html
>
> It no longer works! Does anyone have any idea where it has been moved
> to or has it just disappeared?
>
> ANY help would be appreciated!
>
> Thanks! Bry, AF4K

I clicked the URL in your post and it worked. Rumors of its demise
appear to be exaggerated. Seems slow, though.

-rrk

510. VHF/UHF NF optimization

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: michaelm@doruk.COM.TR
Message-ID: <9701132210.aa00434@bbs.doruk.com.tr>
Source record: 98563

N7WS wrote:

>Subject: Good source for amplifier tips
>
>In article <1997Jan12.163113.18881@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman)
writes:
>>From: gary@ke4zv.atl.ga.us (Gary Coffman)
>>Subject: Re: Good source for amplifier tips
>>Date: Sun, 12 Jan 1997 16:31:13 GMT
>
>[snip]
>
>> As I noted above, at VHF+, internal noise determines the floor of
>>the receiver, so as much signal power as possible must be coupled to
>>the first amp to overcome that.
>
>No, there is an optimum source impedance which the active device wants to see
>to deliver the lowest noise figure. More often than not, the input match is
>very poor. I have seen VSWRs of >6:1 on some LNAs. This is a terrible match,
>but delivers the best noise figure.
>
>This property also gives rise to considerable uncertainty in the measurement
>of noise figure; a property often overlooked by those who quote NFs to 0.01 dB
>accuracies. But all of this is the subject for another thread, isn't it.
^^

By all means. Please.

>
>[snip]
>
>>Gary
>
>N7WS

In the days when I was on 2m EME and constantly building/testing/using
low-noise preamplifiers, I had access to a good lab and could do those
"0.01 dB" noise figure measurements. For whatever they were worth.

It used to bother me that the real system was probably never anything
like the source impedance presented by the NF measurement setup, and I
always wondered whether optimizing the NF on a lab setup was really the
way to go.

I had thought about bringing a SINAD meter home sometime, setting up a
distant weak-signal source that would give me 6 or 8 dB SINAD at the

receiver audio output (SSB, tuned for 1 kHz tone or so to find the notch in the SINAD meter) and then going to work adjusting the LNA and maybe transverter front end for the best SINAD. It seemed to me that this technique would always ensure the best possible noise figure for the system, regardless of whether I knew an exact value for it.

Alas, I never got a "round tuit" and now it seems that I never will.

Has anyone else thought of or tried this technique? I never saw it written up anywhere...

It always seemed to me that this would be the way to ensure that the system was adjusted for the best possible NF, regardless of whatever the LNA measured at the latest NF party. Bring it to the party, test it, adjust it, laugh or cry over the results - but then, bring it home and use a SINAD meter to retune it in the actual system to its best performance.

Comments?

73 -

de Mike (TA2ZG/W2AV) Remote Sysop TA2EM BBS - first PRBBS in Turkiye
Amateur Packet Radio: TA2ZG@TA2EM.#IST.TUR.EU
Internet (email only): Michael C. McHugh <MichaelM@doruk.com.tr>

511. Graymark SW radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5bh5ul$p2j@rosenews.rose.hp.com>
Source record: 98564

Hi, I came across an old Graymark AM/shortwave kit from
the 60's, I think. Uses 7 and 9 pin miniatures, and it does
not have any model number on it anywhere.

I have the AM plug-in coil, but this regenerative
receiver has the capability of rcv'ng shortwave
with the proper coils.

Does anyone have any instructions/manual for something
like this that might tell me how to wind coils for
shortwave?

I have been messing around with winding my own coils,
using standard coil-winding info from several references
but have not had much luck, the last coil I wound got
me around the 160 meter wavelength in the middle of
the dial and each coil takes a while to wind.

This kit must have been pretty common and was probably
standard high-school project material.

Any info would be appreciated.

Thanks. Tony

512. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1401970906200001@port25.vcnet.com>
Source record: 98565

In article <19970113163800.LAA01283@ladder01.news.aol.com>,
w8jitom@aol.com wrote:

> In article <n7ws.244.00CD03A0@azstarnet.com>, n7ws@azstarnet.com (Wes
> Stewart) writes:
>
> >
> >Shows the danger of jumping to conclusions, doesn't it?
> >
> >N7WS
>
> Jumping to an incorrect conclusion is a rare event for you Wes.
>
> I notice Rich used your incorrect assumption as a springboard to attack me
> and the 1500, once again without having all the facts.
>
> In his case, that seems to be a way of life.
>
> 73 Tom

Getting all the facts from Mr. Tom Rauch would try the patience of Job. .

Tom:
Does the AL-1500 currently use a vhf parasitic suppressor? If not, are
you going to add a vhf parasitic suppressor?
Are all of the reported 8877 failures in AL-1500s Eimac's fault?
Who is Eimac's Mr. XXX?
Are you tiptoeing around Wes' suppressor measurements?
Can you explain the gold melt pattern I observed on the grid of the kaput
8877 I recently opened?
Where is Mr. Miklos?

BTW, Tom, one of the phone numbers for Harris Alloys, Inc. is 201 483
0092. According to Wes' measurements, the nichrome-60 alloy offers a
slight advantage over the 80/20 'pure' nichrome alloy. #20 gauge should
be about right for 3-500Zs. The 95/5 alloy 430 deg. F silver solder and
stainless steel soldering flux are available at welding supply stores.

--
--Rich-- ag6k, 805-386-3734

513. Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: Monty Wilson <nospam@see.signature.part>
Message-ID: <E40spL.282@twisto.eng.hou.compaq.com>
Source record: 98566

I'm interested in hearing from anyone who has built
a screen grid modulated HF transmitter.

--
.........Monty N5NVM.
mwilson @ flex.net (with spaces deleted)

514. Save on phone bills

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: Fred Durham <fdurham@htcomp.net>
Message-ID: <01bc0237$5197f020$79bc11cf@FredDurham>
Source record: 98567

If I could show you how to have virtually unlimited
long-distance calling time
without ever having to write a check for it and
show you how to make some serious money,
wouldn't that interest you?

Contact:

Fred & Shirley Durham

fdurham@htcomp.net

515. Re: VHF/UHF NF optimization

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <+1BCEZAvZ82yEwkt@ifwtech.demon.co.uk>
Source record: 98568

Michael C. McHugh (TA2ZG/W2AV) wrote:
>
>In the days when I was on 2m EME and constantly building/testing/using
>low-noise preamplifiers, I had access to a good lab and could do those
>"0.01 dB" noise figure measurements. For whatever they were worth.
>
>It used to bother me that the real system was probably never anything
>like the source impedance presented by the NF measurement setup, and I
>always wondered whether optimizing the NF on a lab setup was really the
>way to go.
>
>I had thought about bringing a SINAD meter home sometime, setting up a
>distant weak-signal source that would give me 6 or 8 dB SINAD at the
>receiver audio output (SSB, tuned for 1 kHz tone or so to find the notch
>in the SINAD meter) and then going to work adjusting the LNA and maybe
>transverter front end for the best SINAD. It seemed to me that this
>technique would always ensure the best possible noise figure for the
>system, regardless of whether I knew an exact value for it.
>
>Alas, I never got a "round tuit" and now it seems that I never will.
>
>Has anyone else thought of or tried this technique? I never saw it
>written up anywhere...
>
>It always seemed to me that this would be the way to ensure that the
>system was adjusted for the best possible NF, regardless of whatever
>the LNA measured at the latest NF party. Bring it to the party, test
>it, adjust it, laugh or cry over the results - but then, bring it home
>and use a SINAD meter to retune it in the actual system to its best
>performance.
>
>Comments?
>
It's a fairly common technique to dangle a dipole somwewhere inside the
array/dish and feed it from the ordinary noise source through a wideband
amplifier (a few milliwatts seems to be enough). Then you can use a NF
test set to maximize the S/N. Readings will only be relative but it will
be a true maximum.

It is very important is that the impedance of the noise source does not
change between the on/off states while you're actually optimizing the
preamp, because that will give you a false optimum. The reason is that
the gain of the preamp is very sensitive to the impedance connected to
its input. Note that it's the gain change that causes the error in the

NF displayed by the meter - the true NF actually changes very little.

This topic of sensitivity to input impedance was discussed at some length a few years ago in DUBUS. DJ9BV proved fairly conclusively that it isn't a large effect. Even for high-input-reflection GaAsFET preamps like we use on 144 and 432, and antenna VSWR of about 1.5 is only likely to add less than 0.1dB to the NF.

In other words, you can set up the preamp in the lab, and see very little change in NF when it's installed on a real antenna. I'm likely to make bigger errors by trying to optimize the NF from the top of a ladder!

The outcome of the DUBUS-inspired debate was that if there really is a big change in performance with input impedance, it's more likely to be due to oscillation breaking out in the GHz region. Personally I'd rather have an unconditionally stable preamp I can rely on, than a flaky one with 0.1dB better NF.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

516. Need Info: FT-101B CW to AM filter mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: Ron.Trepka@chirondiag.com
Message-ID: <32DBF74D.59C0@Cibadiag.com>
Source record: 98569

Does anyone have the instructions to modify the Yaesu FT-101B from the CW filter to the AM filter? I have almost all the Fox Tango newsletters from 1974 and 1975 except the one issue that has the article on this mod. The mod is also included when one purchased the filter from the factory. Any info on this would be appreciated.
Thank you.

Ron - WB8QGE - Cleveland, Oh.

517. DXER.COM Update

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <32dc4917.42908135@news.primenet.com>
Source record: 98570

DXER.COM updates. With additions to Contest Clubs,
DX Clubs, Ham Radio Clubs, Satellite and DX Newsletters.

"http://www.dxer.com"

Check it out, if you have any sites you would like to
see added email us at "support@dxer.com"

Thanks for all the support.

518. Re: Heath Light Green Paint?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: "R.E. Dodson" <rdodson@worldnet.att.net>
Message-ID: <32DBD49F.203A@worldnet.att.net>
Source record: 98571

You can also buy a spray bottle that has a CO2 cartridge that you add paint too. That way you don't need an air brush or spray paint compresser rig. You can find these where they sell automotive paint. Some automotive paint store's will match your color and put it in a spray can for you.

WB5APD
Bob

519. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1401971053470001@port23.vcnet.com>
Source record: 98572

In article <32D9A377.79F0@iu.net>, wnewkirk@iu.net wrote:

snip....

> Microsoft will lose the dominance of the desktop just as soon as Gates
> can force companies to pay for his software by the number of seconds
> it's in use plus a fee for every computer connected to a network..

ROFL, L, L. Very good, Bill. This is precisely where Mr. Gates is
headed. His strategy appears to be
[1] build a big market share.
[2] steal your competition's best ideas,
[3] run them out of business.
[4] reach way, down deep into everyone's pockets.

Does Gates support the idea of a free market place?
"If two people provide equivalent software, its value
is zero." -----Bill Gates

"There are people who don't like capitalism, and there are
people who don't like PCs, but there's no one who likes the PC
who doesn't like Microsoft." -----Bill Gates

OTOH, people who dislike monopolies, don't seem to like Microsoft.

--
--Rich-- ag6k, 805-386-3734

520. Follow-up on CB-to-10M ssb conversion

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: gene@eagle.csl.uiuc.edu
Message-ID: <gene.853278994@eagle.csl.uiuc.edu>
Source record: 98573

About a year ago I posted some rather detailed instructions and concepts for modifying CB-SSB transceivers for use in the 28.300-28.500 MHz Novice band. (I still have the old files and could e-mail them to anyone interested).
I did not investigate, but one reply also suggested that LOU@CBCINTL.COM sells a book with conversion information.
I took the model I converted (Midland Model 79-892) camping last summer and managed a couple of QSO's on a mobile whip, although conditions were not great.
I had converted it so that the XMIT changed in 5 KHz steps (except a few places jumped 10 KHz due to the unique allotment in the original CB-channels).
BUT with such a weak signal, I found that being able to shift frequency either side of the 5 KHz steps was necessary, so as to get exactly on the frequency of the station being heard. I therefore further modified the trans-ceiver so that the so-called "clarifier" that several models use on "receive only" was connected so as to change BOTH Xmit & Rcv identically. This turned out to be quite simple, at least on my unit. Of course with a little more complication, one could add an additional pot and switch so as to zero a station, while Xmit & Rcv are identical, then throw a toggle-switch to provide RIT (Receive-Incremental-Tune) on receive-only but Iconsidered this over-kill for such a low-power transceiver unit.
I did this by cutting the control-voltage wire to the Xmit-diode/resistor (D-5, R-25 on my model). I transferred the control-voltage wire to the Rcv-diode/resistor (D-4, R-24) to a constant +9v (regulated). This was about 1 volt higher than the original control-voltage, and gave me a little more frequency-deviation, which is accomplished by "pulling" an Xtal-oscillator, (i.e. VXO) which of course has limits. The result, was a frequency shift of 3.5 KHz (+ or - 1.75 KHz). Of course it would have been nice to have a shift of + or - 2.5 KHz, which would fill in the gap completely between the basic 5 KHz steps (on most channels), but I considered it fortunate to get this much shift so simply, and with no complications with the Xtal oscillator.
The above-mentioned diodes (only a single diode D-4 after my modification) provide dc-bias to the varicap (D-3) whose capacitance is included in the Xtal-oscillator's circuit.
With the 10-meter band beginning its slow rise to improving conditions this year, perhaps 5 or 10 watts will enjoy success even without a linear amplifier.
With the FCC's new concern about radiation and power levels, there will certainly be no concern with this power-level!

I should point out that when the 5 KHz option (on the PLL-02A synthesizer) is chosen, you can't quite reach the top of the Novice-band....the highest on the Chan-40 position is 28.462 MHz with the variable pot at maximum.
Also, to remain safe you should use Chan-12 as the lower-limit (28,308.5 with the variable pot at min). Although it might be risky, on Chan-11 you can tune down thru 28,300, to 28,298.5 which of course is illegal.

--

Internet, BITNET: gene@csl.uiuc.edu

521. Re: power supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: Zack Clobes <zclobes@southwind.net>
Message-ID: <32DBFD0C.1986@southwind.net>
Source record: 98574

italy wrote:
>
> I have a 1.75A realistic regulated power supply that I would like to power
> my 2M
> HT with, when hooked up it works however I seem to get a bad hum on both
> voice and tone while transmitting, is there a simple fix for this? any help
> would
> be gratly appreciated, thanks in advance
>
> 73s KC7PWZ
This is caused from inadequate filtering from AC to DC. The more
current the radio draws, the worse the hum will be. This can usually be
quited down by placing a large electrolytic capacitor across the output
(make sure it doesn't pull too much current when the supply is first
turned on). Another idea that might work is the automotive power-line
filters that they sale at radio shack. One lead goes to ground, one
from the power supply, and one to the rig.

--
73s de Zack, W0ZC

zclobes@southwind.net
http://www2.southwind.net/~zclobes/zackc.html

522. Need FT290R front panel

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: Paulo Jose de Campos <pacampos@hipocrates.med.up.pt>
Message-ID: <32DC0554.F44@hipocrates.med.up.pt>
Source record: 98575

I have a Yaesu FT290R that needs a front panel.

Does anyone have one spare or a junker radio?

I have contacted Yaesu dealers that say they are out of production and stock.

Thanks and 73,

Paulo CT1EFS

email: pacampos@med.up.pt

523. Re: Icom IC-V68

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: "John B. Lawrence" <ke6tgn@lightspeed.net>
Message-ID: <32DBCDF6.7352@lightspeed.net>
Source record: 98576

I also have an IC-V68. You need a programming manual for it. Jun's (in LA; Email juns@dxnet.com) has them for about $10.00 plus shipping & tax. I haven't got mine yet, otherwise I'd clue you in.

John B. Lawrence KE6TGN

524. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: Joe Leikhim <Jleikhim@nettally.com>
Message-ID: <32DB1AF6.6A5A@nettally.com>
Source record: 98577

>
>]not disclosed wrote:
> >
> > does anyone have the plans to make a device in which I could drop next
> > to a offending 27mhz operator? I am looking for a device that will key
> > and buzz with stronger signals <say above 8 s units> so the person
> > will not be able to hear his local cohorts. <high school kids>
> > I appreciate any and all replies.
> > looking forward to hamming it up in the NEAR future....
> > countdown to test time!

Get an old style mechanical door buzzer, the kind with a coil and
mechanical clapper. Attach two 108" dipoles to it, one on each side of
the buzzer contact switch. string them out vertically or horizontally to
match the intended targets antenna polarity. Apply a large 6 volt
lantern battery. Bye Bye CB band. If that isn't high tech enuff let me
know.
--
Joe Leikhim
Jleikhim@nettally.com

"tv dinner by the pool,
i'm so glad i finished school" -F.Zappa 1967

"The Revolution will NOT be televised" -Gil Scott Heron

525. VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-14 00:00:00 UTC
From: Scott Coburn <scott@bnl.gov>
Message-ID: <32DBC9E0.63DECDAD@bnl.gov>
Source record: 98578
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I have built a WWVB (60kHz) VLF radio receiver. It is the receiver designed by Bob Roehrig and described in the article "Most Accurate Frequency Standard, Parts 1,2,3", 73, Jan/Feb/Mar 1994. It is a Tuned Radio Frequency (TRF) receiver with an active ferrite rod antenna.

I constructed the ferrite rod antenna/preamplifier as described in the article and the receiver powers up OK and gets through all of the alignment procedures outlined in the article. I have not yet gotten the WWVB signal, but I suspect that is more a misfortune of my location than a receiver problem.

Anyway, I have a few questions:

* I have wound my antenna on a length of 'generic' ferrite rod which is 3/8" in diameter and about 7" long. I put 700 turns of 34 AWG formvar coated wire on it. This covered about 5 of the 7 inches of the rod's length. The article says to use an 820pf fixed capacitor and a 10-180pf variable capacitor in parallel with the antenna, and to tune the variable capacitor to resonate the whole business at 60kHz. Ignoring stray capacitance and setting the variable to 100pf (about mid-range) the inductance of the antenna should be about 8 mH. I measured my antenna and found it to be about 26 mH. I connected it into the circuit and found that I could get it to resonate at 60kHz by using a 330pf fixed capacitor (rather than the 820pF called for). So, the question is: is there a 'prefered' range of values for the L/C values in a tuned circuit like this? Will the circuit get strange if the capacitance is too low (temperature
or stray variation effects?)? Should I un-wind some of my antenna and go to a larger capacitance? Is it 'better' to have more loops in the antenna at the expense of needing a smaller capacitor?

* I have placed the antenna into an 'electrostatic shield' as described in R W Burhans' article "Loop Antennas", Radio Electronics, June 1983.
I constructed the shield from a 10" length of 2" diameter heavy-wall aluminum tubing. I machined a slit through the wall the full length of the tubing. I positioned the antenna rod in the center of the tubing
using a couple pieces of plexi-glass type material. The tube is screwed
to the aluminum box which contains the preamplifier board and this is grounded through the BNC cable to the receiver. Does this sound like a 'good thing'? Should I have done it differently?

* My house is 'surrounded' on the west and south sides by very tall pine trees
(about twice the height of the house). I would like to be able to run the
antenna in the peak of my roof (in the attic) so that I don't have to worry
about weather-proofing it. Are these trees going to cause me problems?
Is my view of Boulder CO blocked by this 'ground plane' of trees? (Where's
my chain saw...) Should I put the antenna into a PVC tube and put it up in
one of these trees? Should I move to Boulder?

* How could I construct a small 'transmitting' antenna that I can connect
to my signal generator so that I can generate approximately what I
expect the WWVB signal level to be at my location? From WWVB signal
intensity profiles that I have seen it looks like the signal should be
somewhat less than 100uV/m. I don't have access to much in the way of
fancy equipment so it would be nice if I could 'calculate' a transmitter
antenna and input signal level to give me the right transmitted signal
level. Is this possible? I could wrap some wire around the aluminum
tube to generate a signal. Do I need some other load (ie a resistor
in series with the wire)? How many turns and what signal level should
I put into it?

I'm sure I'll think of some more questions after posting this. Any help
would be welcome.

Thanks,

Scott

--
scott coburn brookhaven national laboratory
mailto:scott@bnl.gov upton, ny, usa
http://gorzarg5.phy.bnl.gov/~scott (on long island)

526. Re: 117L7 tube data needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Jim Tury <tury@erols.com>
Message-ID: <32DCF1DE.4EF2@erols.com>
Source record: 98393

Cesare Lavazza wrote:
>
> Does anyone know the data of this tube?
> Which are the possible substitutes for the 117L7 tube?
> Thanks.
> Saluti.
>
> ---
> E-mail: Cesare.Lavazza@nemo.it
> WWW: http:\\radionostalgia.net\Users\Lavazza
> http:\\www.geocities.com\CapeCanaveral\4573

117L7GT/117M7GT are Rectifier-Beam Power Tubes

Half-Wave rectifier and usually Class A Amplifier

Pin Number Internal Connection

1 Cathode of Diode
2 Heater (117V @ .09A)
3 Plate of Beam Pentode
4 Grid 1
5 Grid 2
6 Plate of Diode
7 Heater
8 Cathode and Grid 3

I don't know of a direct substitution, but you could improvise from the above data. These tubes were used in cheap phonograph players in the '50s.

Jim

527. topconnector, how to make these ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <32ddffce.559685@news5.inter.NL.net>
Source record: 98394

I want to make an tube rx/tx with 807, but I do not have the top
connectors. I do not want to solder direct on the tube. Maybe there is
also somebody who can deliver them.
Costs will be payed of course.
73 de Bart PA3GGM.
In the beginning there was nothing, therefor I'm satisfied now

528. Re: Any tips on labelling cases?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19970115155701.KAA07630@ladder01.news.aol.com>
Source record: 98395

In article <32DA8BDA.D97@vogon.rain.com>, Philip Peake
<philip@vogon.rain.com> writes:

>If you have access to a laser or inkjet printer, consider making
>a transparent "cover" for the front pannel by printing on an
>overhead transparency, and putting this over your pannel.
>
>If you use a color printer, the effects could be really nice.
>
>

This is what I do with my Deskjet. BUt I reverse the print. That way you
can not
rub off the lettering for it is on the inside. A glue for the label is 3M
Artist's Spray

Carl

529. Re: Egg Beater Antenna (Help)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Mark McGregor <kb9khm@sprynet.com>
Message-ID: <32DD058A.2B6B@sprynet.com>
Source record: 98396

SWaldrup wrote:
>
> I am looking for plans on how to build the Egg Beater type Antennas for
> VHF and UHF. Any one played with these?

ME TOO!!!!!!

--
Mark <KB9KHM>

Home Page:
http://home.sprynet.com/sprynet/kb9khm

530. Re: How's it mixed? Two crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Monty Wilson <nospam@see.signature.part>
Message-ID: <E4234D.AKz@twisto.eng.hou.compaq.com>
Source record: 98397

mlc@izzy.net wrote:
>I've got an old G.E Porta Mobile I've been looking for info on for a
>long time, still don't have it all but:
>The TX uses a crystal multiplied 8 times, (5.590 Mhz = 44.720Mhz) the
>recieve uses 13.126666 Mhz mixed with 4.805 Mhz to come up with 44.720
>Mhz
>
>I know the rx is on 44.720 for sure.
>
>I have tried every combination I know of to figure out the mixing sheme
>but I can't.
>I have isolated the rx portion of the rig and there are only those two
>crystals on board. I want to put it on 6 FM but just can't figure out
>mixing scheme between these two rocks.

Tim if I remember right, the formula for the receiver is more
complicated than for the transmitter because you don't know the
frequency of the last IF. There won't necessarily be a crystal
in the rig to indicate such a frequency because the final
conversion stage uses tuned circuitry rather than a crystal to
convert the receive signal to audio.

The first crystal cries out to be multiplied by three. From this,
and playing with my calculator I would guess that both
crystals are tripled. The first conversion could beat the 39.38
against the incoming 44.72 yeilding a 5.34 MHz difference frequency
which would be injected with the 14.415 yielding a 9.075 MHz
difference which is detected. You may be able to listen for these
frequencies by removing the tube shields and wrapping a wire around
a tube, listen on a scanner or other wide-coverage receiver. Once
you think you've found the last IF, use a signal generator or other
transmitting equipment to put a signal on the air (use a dummy load
located nearby the rig so you don't bother anyone) to test your
theory.

I'm not sure my guess is correct as to the multiplication scheme, it
could be any of a number of different combinations but surely all
those sixes indicates a multiple of three for the multiplier on
that one, and I would bet against any sum or difference where two of
the numbers in the equation are close together, like
3 * 13.126666 = 39.38
44.72 - 39.38 = 5.34
2 * 4.805 = 9.61
9.61 - 5.34 = 4.27
just because it's so important in mixers to keep the original

components out of the output signal. It is much easier to prevent 5.34 and 14.415 components out of a mixer designed to output 9 MHz than it is to keep a 5.34 MHz component from appearing in a 4.27 MHz output.

Let us know what your further investigation turns up.

73
.....Monty N5NVM.

mwilson @ flex.net (with spaces deleted)

531. NF versus input impedance question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5bjas1$nt7@hpcvsnz.cv.hp.com>
Source record: 98398

There has been a bit of discussion about how an amplifier adjusted for minimum noise figure for a given source impedance does not, in general, offer a load impedance equal to the (complex conjugate of the) source impedance.

I have an application in which I'd like to have an optimized noise figure, but specifically would like a very high load impedance, and I'm wondering if anyone has suggestions about specific components or circuits to achieve this. This is for the 2 meter band, at the moment, but I'd like to be able to extend it well above that and somewhat below as well, if it works out for me.

The source impedance is approximately 50 ohms in this case, and if I could get to over 1000 ohms load impedance, it would be nice.

--
Cheers,
Tom
tomb@lsid.hp.com

532. Re: Egg Beater Antenna (Help)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <5biqi0$b35@freenet-news.carleton.ca>
Source record: 98399

SWaldrup (swaldrup@aol.com) writes:
> I am looking for plans on how to build the Egg Beater type Antennas for
> VHF and UHF. Any one played with these?

Yes, point your browser to: http://fly.hiwaay.net/~harperrc/antenna/ant.html

73 de va3rr/aa8lu

533. Re: Military Surplus WWW INFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Hal Rosser W4PMJ <hmrosser@csranet.com>
Message-ID: <32DCFD26.2FBA@csranet.com>
Source record: 98400
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> http://linux.cec.army.mil/hamradio/equipment/mi.htmlthe above address worked for me maybe you tried the site when it was down. Try it again.
--
73 de W4PMJ
HAL
hmrosser@csranet.com

534. WTB: transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5binm7$k4v@news1.mnsinc.com>
Source record: 98401
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

I would like to buy or tarde for some A.F.output transformers and modulation transformers.

Please advise what you have. See my trades list at the URL below.

73 - Bry

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

535. GIF of a 3-500Z.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Guido.BRessan@italtel.IT
Message-ID: <32DCE795.15FB7483@italtel.it>
Source record: 98402

I am searching for a GIF of a 3-500Z transmitting tube. Can anyone give me the URL of some suitable photographic archive or any other possible information for finding it?

Guido IW2CUH in JN45RQ

536. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970115191100.OAA14913@ladder01.news.aol.com>
Source record: 98403

>>Extracted from E-mail>>
The suppressor graphs (RL.GIF) seem to show two things:

1. The conventional (non-nichrome) suppressor gives a faster roll-off of Q with frequency than the nichrome suppressors.

2. There's very little difference between the two grades of nichrome.

You obviously don't want to get publicly embroiled in this controversy, and neither do I. However, it does seem that the distinguishing feature of the nichrome suppressors is their low HF Q. The VHF Qs are all pretty similar.

The VHF Q of the conventional suppressor could be made exactly the same as the nichrome ones by changing the value of either L or R, but the HF Q of the conventional suppressor would still be about a factor 2 higher.<<-<<

I don't blame anyone for avoiding Rich's wrath. But since I am already on his top ten list, I have nothing much to lose, hi. So I'll post this and accept the return attack it will almost certainly generate.

This conclusion above is the same conclusion I reached, nichrome suppressors offer lower HF Q, and nearly identical VHF performance. Just the slightest adjustment in resistance or inductance of the conventional copper wire suppressor would result in less VHF Q without greatly changing HF Q.

If the data is reviewed, the ratio of Q is almost unity at 200 MHz and over 2:1 at 10 MHz. Just the slightest adjustment of R or L will make the conventional suppressor equal the nichrome at VHF, while maintaining better Q at HF where we want losses to be reduced.

For example, the AL-80B oscillates at about 170-180 MHz when the suppressor is removed. At that frequency, Wes measured a Q of about one (same as I posted weeks ago). The Q of a duplicate nichrome suppressor is about .75. This very small Q change is diluted by circuit effects when the suppressor is installed in an actual PA. The actual operating Q change would be even less at VHF, and more at HF.

Rich's claim this small change in VHF Q is a great or worthwhile improvement that cures all woes is completely false. Anyone believing that would have to have a real problem understanding parallel and series L/R circuits. Add one turn to the conventional suppressor or adjust the resistor size, and you've gone even lower with Q than the nichrome.

Finally, I'd like to remind everyone how (over and over again) Measures squaked about how he could SEE the difference in his dip meter, describing all the sharp dips that went away when he made (what amounts to) a *very* small Q reduction at the frequency of interest. Rich would have use believe he measured a Q change of less than 0.5 with his GDO!

Remember and compare those claims of what he "saw first hand" to other claims of things he "knew for a fact":

1.) The Miklos employment tale. He claimed he "called Eimac" and they told him Buzz was never R+D manager. Yet Eimac even issued a letter (after getting Buzz's permission) explaining Buzz was indeed R+D manager. Not only that, VHF Handbooks list Buzz as Eimac's former R+D Manager. Even after the employment confirming letter was out, Rich sent Buzz Miklos a post card telling Buzz he was never R+D manager!

2.) The tale about Marvin Born. Rich said Marvin measured parasitics in an AL1500. Turns out it wasn't even an AL1500, it was a dual 8877 PA built on a old empty prototype chassis. When I talked to Marvin he said he was positive Rich knew he was talking about a west coast manufactured 3CX3000 PA, and not a AL-1500.

3.) Rich's tale about 500 watt 8877 grids. Eimacs own catalog disagrees and they even have an application note describing how improper tuning can destroy the grid.

4.) Rich's story about a photon hitting the cathode of a tube ON STANDBY and blowing up a PA. A physicist who works with that type of stuff every day said it was bunk.

5.) The story about the variac and filament meter markings **on every broadcast transmitter** and Rich's slam of every amateur manufacturer for doing something the commercial manufacturers apparently don't often do. Several people jumped in and proved he was telling another story.

6.) Measures' claim a certain TL-922 was damaged by a parasitic. The owner showed up and said "no, it was a lightning arrestor causing the arc, I removed it and the amp is fine".

7.) Measures' attempt to blame me for Wes' unintentional error. Rich was completely aware of how this happened BEFORE he posted his pathological accusation that I was trying to hide something, and that I misled Wes.

When all this is considered it becomes perfectly clear Measures presents untrue statements as fact, even when he should have known in advance what he says really isn't true.

We all make occasional mistakes, but this stuff goes far beyond once in a while. It appears to be chronic or habitual.

73 Tom

537. Re: BIG AMP FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970115191101.OAA14902@ladder01.news.aol.com>
Source record: 98404

In article <19970115061200.BAA25545@ladder01.news.aol.com>,
strestest@aol.com (STRES TEST) writes:

>
>I have a GLEN custom 1600 for sale. It uses 4--4CX250R ceramic tubes. It
>is
>in PERFECT shape in all meanings of the word! If you havent heard of this
>amp, I'll tell a little bit about it.

The band-width on this unit is 40-2
>meters.(about 7MHz through 145 MHz) It will take an input of about 4
>watts-100 watts,(adjustable on rear of unit).
> It has an input on back for
>direct key-up(re. footpedal). It runs on 120v ac. it has variable
output(
>kinda like the texas star 350 w/ variable). It has a built in watt meter,
>that reads RMS, and is very accurate. The output is 1700 watts rms, 2700
>watts peak, depending on how you drive it.

RMS power? You mean average power don't you?

>serious only. Not a scratch on it, no discolorings, no blemishes. very
>PERFECT condition. Comes with origional paper work, schematics, and
custom
>slip/dust cover. Weighs about 90 pounds. 1800.00 + shipping, please dont
>respond unless your serious,,, 73's, and happy modulating,, STRESS TEST.

The proper place for selling a CB amp is in rec.cb.bootleg

538. Re: Parasitic suppressor data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970115191100.OAA14906@ladder01.news.aol.com>
Source record: 98405

>>Extracted from E-mail>>
The suppressor graphs (RL.GIF) seem to show two things:

1. The conventional (non-nichrome) suppressor gives a faster roll-off of Q with frequency than the nichrome suppressors.

2. There's very little difference between the two grades of nichrome.

You obviously don't want to get publicly embroiled in this controversy, and neither do I. However, it does seem that the distinguishing feature of the nichrome suppressors is their low HF Q. The VHF Qs are all pretty similar.

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For example, the AL-80B oscillates at about 170-180 MHz when the suppressor is removed. At that frequency, Wes measured a Q of about one (same as I posted weeks ago). The Q of a duplicate nichrome suppressor is about .75. This very small Q change is diluted by circuit effects when the suppressor is installed in an actual PA. The actual operating Q change would be even less at VHF, and more at HF.

Rich's claim this small change in VHF Q is a great or worthwhile improvement that cures all woes is completely false. Anyone believing that would have to have a real problem understanding parallel and series L/R circuits. Add one turn to the conventional suppressor or adjust the resistor size, and you've gone even lower with Q than the nichrome.

Finally, I'd like to remind everyone how (over and over again) Measures squaked about how he could SEE the difference in his dip meter, describing all the sharp dips that went away when he made (what amounts to) a *very* small Q reduction at the frequency of interest. Rich would have use believe he measured a Q change of less than 0.5 with his GDO!

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4.) Rich's story about a photon hitting the cathode of a tube ON STANDBY and blowing up a PA. A physicist who works with that type of stuff every day said it was bunk.

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When all this is considered it becomes perfectly clear Measures presents untrue statements as fact, even when he should have known in advance what he says really isn't true.

We all make occasional mistakes, but this stuff goes far beyond once in a while. It appears to be chronic or habitual.

73 Tom

539. Re: MLA-2500 P/S caps?? 150 uF @ 450V??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1501971148330001@port17.vcnet.com>
Source record: 98406
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

In article <32d08c0e.162343140@news.pitnet.net>, garyk9gs@pitnet.net (Gary K9GS) wrote:

> A while back there was someone selling replacement caps for the
> MLA-2500 Power Supply. 100-150 uF @ 450 Volts.
>
> Does anyone remember who was selling them or know of a source? I do
> know that caps in this size/voltage are difficult to buy.
>

My mla2500 roadmap says these 5 caps have a rating of 500v. I don't know of any source of 500v electrolytics. From my own experience, 500v is really pushing the envelope for an aluminum electrolytic cap.---i.e., they don't seem to last as long as lower v rated electrolytics. I would be tempted to go to 7 400v units or to 6 450v units, using more C per unit. One source of Panasonic/Matsushita filter caps is DigiKey 1 800 344 4539. 150uF is not really enough C. I would use the largest amount of C that will fit comfortably. The Panasonic/Matsushita filter caps are of a new compact design that packs in more C per cubic inch, so you should be able to get more C and have room for the extra one or two capacitors. The new cap. arrangement can be mounted on a 1/8"-t acrylic sheet rectangle---covering the original cap. mtg. arrangement. Electrolytic caps can be easily mounted on the acrylic, sheet upside down with silicone rubber adhesive/sealant. Allow a mm or two between caps for air circulation. The equalizer resistors can go directly across the capacitor terminals. Since heat rises, that way the caps. don't get roasted by the equalizer resistors. Also, the carbon-comp. equalizer resistors Dentron (Dennis Haad) used are not stable. They should be replaced with Matsushita 100k ohm 3w mof resistors, which are also sold by DigiKey.

--
--Rich-- ag6k, 805-386-3734

540. Re: power supply problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Bill <billd@comic.net>
Message-ID: <32DD946C.F20@comic.net>
Source record: 98407

italy wrote:
>
> I have a 1.75A realistic regulated power supply that I would like to power
> my 2M
> HT with, when hooked up it works however I seem to get a bad hum on both
> voice and tone while transmitting, is there a simple fix for this? any help
> would
> be gratly appreciated, thanks in advance
>
> 73s KC7PWZ
You have not said what the current drain of your HT is. It sounds
like you are pulling more out of the supply than it is rated for. The
regulator(I assume it is regulated) goes into saturation and closely
couples the output to the input and its relatively high ripple content.
The regulator will attenuate the ripple as long it is in its linear
region. When saturated, it can not regulate out the ripple.
Bill, W0BVR

541. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: dick@merlin.libelle.com
Message-ID: <dick-ya023680001501971319210001@news.zippo.com>
Source record: 98408
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

In article <32DCE015.547@ldecs.ericsson.se>, Tommy Karlberg
<ecstka@ldecs.ericsson.se> wrote:

>Has anyone seen "teddy bears" callsign?

Perhaps that =is= his callsign.
--
Dick Flanagan W6OLD CFII Minden, Nevada
Visit http://wadg.greatbasin.net/siera/

542. Icom program in RAM ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: hduff@ica.net
Message-ID: <32dd5022.0@lightning.ica.net>
Source record: 98409

I just aquired an ICOM IC-271A 2 meter all-mode transceiver and
after a quick look at the schematic I noticed that they used their
nasty RAM board scheme to store program code.
Wondering if anyone has experimented with using an EPROM
to store the code ?
Someone told me that there is actually a board like this on the
market... Who ?...Where ?

I'd like to hear from anyone who has any relevant information.
Thanks de Hugh, VA3TO
hduff@ica.net

543. Re: Parasitic suppressor data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.247.0099BB7A@azstarnet.com>
Source record: 98410

In article <19970115191100.OAA14906@ladder01.news.aol.com> w8jitom@aol.com writes:
>From: w8jitom@aol.com
>Subject: Re: Parasitic suppressor data
>Date: 15 Jan 1997 19:14:01 GMT

>>>Extracted from E-mail>>
>The suppressor graphs (RL.GIF) seem to show two things:

The graphs referred to by Tom can now be found on my home page at:

www.azstarnet.com/~n7ws

Wes N7WS

544. Re: Electro Encephalo Graphy (EEG) info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Jerry Arch <jfarch@pop3.concentric.net>
Message-ID: <32DDBC78.3676@pop3.concentric.net>
Source record: 98411
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew,sci.engr.biomed

lbliao wrote:
>
> I am looking for any book or papers that talk about the electro enchphalo
> graphy. Specifically, I am looking for information of typical EEG, the
> voltage levels involved, the frequency range, and how to pick up the
> signal. If the signal can be displayed on an oscilloscope?
>
> Thanks a lot!
> lbliaoHi Ibliao,
Check out the Circuit Cellar Ink magazine. They have an EEG
Biofeedback Brainwave Analyzer Kit that uses your computer. It is called
the HAL-4. Phone is (860) 875-2751 FAX (860) 871-0411 or try
http://www.circellar.com/

Jerry

545. BA1404 chip in the U.K?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Steve Simpson <Steve@chubs.demon.co.uk>
Message-ID: <vmJQAVAZRD3yEwfg@chubs.demon.co.uk>
Source record: 98579

Can someone tell me where to get the BA1404 chip in the U.K. please?
I know they are only a couple of dollors in the U.S but I can't seem to
find anyone who does them.

Please reply by E-mail as my newsfeed is playing up on my ISP.

Thanks all.
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
Visit Radio World -
HTTP://www.chubs.demon.co.uk

546. silver mica 1000V 10pf Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: chenshaw@cris.com
Message-ID: <5bhi3l$ese@chronicle.concentric.net>
Source record: 98580

My father owns a FT101. He needs a
Silver Mica 1000V, 10pf Capacitor.
Does any one know where to get one?

My e-mail chenshaw@cris.com
chenshaw@nikon.com

His e-mail dhenshaw@juno.com

547. Egg Beater Antenna (Help)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: swaldrup@aol.com
Message-ID: <19970115040600.XAA21336@ladder01.news.aol.com>
Source record: 98581

I am looking for plans on how to build the Egg Beater type Antennas for
VHF and UHF. Any one played with these?
73
Stan N8PJP
swaldrup@aol.com

548. PAGING

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: pbpd520@aol.com
Message-ID: <19970115043501.XAA22319@ladder01.news.aol.com>
Source record: 98582

Hello Bret

You did not advise what type of radio you have or if it has a speaker jack.
There are several ways to do what you wish but the simplest way is to buy a 2 tone decoder from Communications Specialists and build a small circuit to listen for the tones sent out by the dispatch center and use them to turn on a speaker.
To use you would need to know the two tone frequencys sent out to alert the radio and obtain a decoder programed for them. Comm Spec can be reached at 1-800-854-0547. The have a programable unit they sell for about 60.00 the model number is SD-1000. The have circuit plans with every decoder.

I hope this helps and I understand what you do as I am a Police/Fire E991 Dispatcher.

Have fun
Phil McCleary
PBPD520@aol.com

549. BIG AMP FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: strestest@aol.com
Message-ID: <19970115061200.BAA25545@ladder01.news.aol.com>
Source record: 98583

I have a GLEN custom 1600 for sale. It uses 4--4CX250R ceramic tubes. It
is
in PERFECT shape in all meanings of the word! If you havent heard of this
amp, I'll tell a little bit about it. The band-width on this unit is 40-2
meters.(about 7MHz through 145 MHz) It will take an input of about 4
watts-100 watts,(adjustable on rear of unit). It has an input on back for
direct key-up(re. footpedal). It runs on 120v ac. it has variable output(
kinda like the texas star 350 w/ variable). It has a built in watt meter,
that reads RMS, and is very accurate. The output is 1700 watts rms, 2700
watts peak, depending on how you drive it. This amp is beeing offered to
the
serious only. Not a scratch on it, no discolorings, no blemishes. very
PERFECT condition. Comes with origional paper work, schematics, and custom
slip/dust cover. Weighs about 90 pounds. 1800.00 + shipping, please dont
respond unless your serious,,, 73's, and happy modulating,, STRESS TEST.

550. Re: silver mica 1000V 10pf Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <32DC9FBC.75B8@wenzel.com>
Source record: 98584

I have a zillion 10 pF, 1000V ceramic disk capacitors. Do you want a few?

551. A Special Offer!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: dozer@netwizards.net
Message-ID: <5bi37m$j6e@news1-alterdial.uu.net>
Source record: 98585

Are you interested in making Millions in your spare time?

Any housewife could do it and so can you!

Just email me at dozer@netwizards.net to receive your FREE information packet.

Thanks for your attention, and I'll be talking with you soon.

Bill
dozer@netwizards.net

552. Re: How's it mixed? Two crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970115093100.EAA00170@ladder01.news.aol.com>
Source record: 98586

You forgot the the crystal mixing will never equal the
receiver frequency. The LO injection will be at the
sum or difference of the IF frequency. You must know
the first IF frequency to figure out the relationship.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

553. Re: How's it mixed? Two crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <32dc9e0d.3352841@news.lin.foa.se>
Source record: 98587

Looking at the numbers I beleive that 13.12666 is multiplied 3 times!
Should give 39.38 MHz. Using this as first LO gives an IF of 5.34 MHz,
odd but not impossible! Second LO 4.805 gives second IF of 535 kHz,
sound almost likely. Check any markings of filters to find out the
centre- frequecy of any IF.

Good Luck
Lasse
mlc@izzy.net wrote:

>I've got an old G.E Porta Mobile I've been looking for info on for a
>long time, still don't have it all but:
>The TX uses a crystal multiplied 8 times, (5.590 Mhz = 44.720Mhz) the
>recieve uses 13.126666 Mhz mixed with 4.805 Mhz to come up with 44.720
>Mhz
>
>I know the rx is on 44.720 for sure.
>
>I have tried every combination I know of to figure out the mixing sheme
>but I can't.
>I have isolated the rx portion of the rig and there are only those two
>crystals on board. I want to put it on 6 FM but just can't figure out
>mixing scheme between these two rocks.
>
>Additionally anyone with a manual for the G.E Porta Mobile, I will pay
>for a copy.
>
>73, Tim, ka8ddz

554. Unknown Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: maroof@cybersys.net
Message-ID: <5bhkpc$r0n@post.servtech.com>
Source record: 98588
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Can anyone give me the specs of the folllowing power transistors please?
MJ11032
PMD12K40
PMD18K100
(DELCO) DTG2400
PMR27K100
PMR31K100
SJ6009
Trying to find a suitable transistor for RF power amp.

PLEASE EMAIL!
Thanks in advance.

Maroof
<maroof@cybersys.net)

555. Re: -FS- Heath Grid dip Meter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Ron Sibbitt <n8lmt@usa.net>
Message-ID: <01bc028f$9b38c8a0$546794ce@ron-s-computer>
Source record: 98589
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

The dip meter has been sold !!!!!!!!
tnx & 73,

--
Ron Sibbitt - N8LMT
5885 Galbraith Line Road
Croswell, MI 48422

556. 2 meter horizontal omni new designs wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: paulc@snet.net
Message-ID: <32dcf43b.3086455@news.snet.net>
Source record: 98590

Hello Folks

I am going mobile on 2 meters SSB. I have looked and modeled several horizontal omni antennas. The big wheel, turnstile, and bent dipole and the halo. I was wondering if there were any other design out there I might want to consider before I go ahead and build one or 2.

I can easily stack 2 on my car since I have a12 foot collapable pole mounted to a trailer on the back. I am looking for greater omni gain which means stacking. I want to start with the greatest gain before I stack to of the elements.

Thanks for any help
PaulC

KB1RP

557. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: Tommy Karlberg <ecstka@ldecs.ericsson.se>
Message-ID: <32DCE015.547@ldecs.ericsson.se>
Source record: 98591
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Hi!

Has anyone seen "teddy bears" callsign? I havn't!
He seems to think that yelling and screaming is ok, even
talking bad about some people he piont out. But he hasn't
got the guts to put his callsign in the mails.

Tommy / SM7PAF

558. Re: If I had no life at all.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-15 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5birc8$k08$1@news3.microserve.net>
Source record: 98592
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

>>If I had no life at all.
>>I'd report people for swearing on the internet.

559. Re: POP CORN NOISE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5bk3b0$74p$3@nadine.teleport.com>
Source record: 98412
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew

In article <5bhn4e$se6@gap.cco.caltech.edu>,
lbliao@alumnae.caltech.edu (lbliao) wrote:
>I am looking for any book that goes into the details of the popcorn noise
>that supposedly results from the existence of quasi-stable current levels.
>I am not familiar with details, however.

Hopefully someone will be able to direct you to a reference. If not, you might look into some books dealing with semiconductor processing. Apparently, popcorn noise is due to poor processing, so isn't covered in most of the conventional textbooks. I know I've found references to it in the past (having first been burned by this phenomenon over 20 years ago, which I still remember), but I can't find any references in the several texts I now have.

In my experience, popcorn noise is characterized by abrupt jumps to a second DC level and back a few times per second. With amplification, it sounds a lot like corn popping, hence the name.

Good luck!

Roy Lewallen, W7EL

560. &&& Need PJ068 Audio Jacks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19970116025700.VAA29673@ladder01.news.aol.com>
Source record: 98413

I need one or a few audio connectors (jacks) to go with the PJ068 phone plug. This is the smaller diameter phone plug (0.208" dia) used on Collins S-line equipment microphones, and in my case, an aircraft type boom headset. I have an immediate need for an inline (cable mounted) jack, and will probably need one or more chassis mount types in the near future. I have not been able to find them in any of the retail catalogs (Digi-Key, Mouser, etc.). Anyone know of any sources? Please reply here or to WB4LNM@aol.com. Thanks. John... WB4LNM

561. Antenna Parts Sources

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: ssouva@dreamscape.com
Message-ID: <32dd7dfe.2849892@news.dreamscape.com>
Source record: 98414

Winter is getting a bit long. To help make the time pass, I want to build a new beam for 10 meters. As a newbie to building yagis, I am going to need a good source for brackets, gamma matching tubes, and whatever else I need. Can someone please give me some good sources for antenna parts.

Many thanks for any help. 73s from the very cold Central NY!

Scott Souva
KG2GT

562. Re: Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Dietrich Morgenstern <76050.1341@CompuServe.com>
Message-ID: <32DDD23D.61E1@CompuServe.com>
Source record: 98415

Monty Wilson wrote:
>
> I'm interested in hearing from anyone who has built
> a screen grid modulated HF transmitter.
>
> --
> ....Monty N5NVM.
> mwilson @ flex.net (with spaces deleted)
Monty:
I built a screen grid modulated TX way back in 1951. (Actually these designs were very popular then for people who could not afford a big class B Audio amplifier for plate modulation).
The transmitter worked very well, I needed only very low audio power to modulate a 813 with approx. 100 watts RF power output. Obviously the disadvantage was that I could not get more RF out of the PA.
Apart from that audio quality was quite good.

73 Dietrich DJ1VA.

563. Re: POP CORN NOISE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: rbmccammon@mmm.com
Message-ID: <32DE317D.6F97@mmm.com>
Source record: 98416
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew

Roy Lewallen wrote:
>
> In article <5bhn4e$se6@gap.cco.caltech.edu>,
> lbliao@alumnae.caltech.edu (lbliao) wrote:
> >I am looking for any book that goes into the details of the popcorn noise
> >that supposedly results from the existence of quasi-stable current levels.
> >I am not familiar with details, however.
>
> Hopefully someone will be able to direct you to a reference. If not, you
> might look into some books dealing with semiconductor processing.
> Apparently, popcorn noise is due to poor processing, so isn't covered in
> most of the conventional textbooks. I know I've found references to it in
> the past (having first been burned by this phenomenon over 20 years ago,
> which I still remember), but I can't find any references in the several
> texts I now have.
>
> In my experience, popcorn noise is characterized by abrupt jumps to a
> second DC level and back a few times per second. With amplification, it
> sounds a lot like corn popping, hence the name.

The explanation that I remember is that poor processing left
ionic contamination on the surface of the semiconductor and that
these ions broke loose due to temperature, vibration, and votage stress,
thereby delivering a charge pulse that was amplified and eventually
disapated.

--
My real e-mail address is rbmccammon@mmm.com

564. WTB: TEN-TEC 500hz cw filter for Corsair.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: kovar@zeus.ia.net
Message-ID: <5bjs5s$b0r@hera.ia.net>
Source record: 98417

I would like to find a CW filter for my TEN-TEC Corsair.

First choice of 500hz filter then the 250hz in a pinch.

Thanks,

Jack kovar

K0VAR

565. Re: Military Surplus WWW INFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Reed Park <reedpark@nbnet.nb.ca>
Message-ID: <01bc0391$ff717c60$31c7a4c6@uymfdlwk>
Source record: 98418
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I just had the pleasure of checking this out also. Yes, it does still
work, and works great. Fantastic amount of info on the old gear.

P.S.
I remember when the OLD gear was considered NEW gear.

My compliments to the person responcible for the web site.

Regards
Reed

Robert R. Koblish <n3hat@erols.com> wrote in article
<32DBBAEB.134D@erols.com>...
> Brian Carling wrote:
> >
> > There used to be a GREAT listing and description of MANY models of
> > military surplus equipment available on the web at:
> >
> > http://linux.cec.army.mil/hamradio/equipment/mi.html
> >
> > It no longer works! Does anyone have any idea where it has been moved
> > to or has it just disappeared?
> >
> > ANY help would be appreciated!
> >
> > Thanks! Bry, AF4K
>
>
> I clicked the URL in your post and it worked. Rumors of its demise
> appear to be exaggerated. Seems slow, though.
>
> -rrk
>
>
>

566. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: saw@camalott.com
Message-ID: <32dde1d8.272258750@qwknews.com>
Source record: 98419

n7ws@azstarnet.com (Wes Stewart) wrote:

>In article <5b4umk$nd9$1@nadine.teleport.com> w7el@teleport.com (Roy Lewallen) writes:
>>From: w7el@teleport.com (Roy Lewallen)
>>Subject: Re: Silver salts & urban legends
>>Date: Fri, 10 Jan 97 08:27:54 GMT
>
>>In article <32d58ecf.829916@netnews.worldnet.att.net>,
>> jfriley@worldnet.att.net (J. Fred Riley) wrote:
>>>On Thu, 09 Jan 97 20:51:22 GMT, w7el@teleport.com (Roy Lewallen)
>>>wrote:
>
>>>>I consider the "fact" that silver sulfide, oxide or other salts are good
>>>>conductors to be an urban legend. All attempts I've made to find the
>>source
>>>>have resulted in "I heard it from. . ." but never a pointer to an
>>>>authoritative source.
>>>We were, for many years, the only broadcast manufacturer to employ a
>>>staff chemist. This exact question came up during his tenure. The
>>>search for an "authorative source" was also fruitless at that time.
>>>There were, however, measurements made here to confirm the legend.
>>>The results were never published but they amounted to two
>>>generalizations:
>>>a) silver oxide is at least as good a conductor as silver, and
>>>b) other contaminants could impair this conductivity.
>
>[snip]
>
>>Fred,
>
>>You're the first person I've heard from with direct experience in measuring
>>silver oxide. It's interesting that its conductivity is as good as silver,
>>which I had thought to be the best conductor known (at room temperature).
>>Did you also measure silver sulfide, perchance, since as Rich points out
>>it's much more common as a contaminant.
>
>
>>I personally do see a reason to research the point further, and so far I
>>have yet to see any foundation at all for claims about silver sulfide
>>(although I now have your experience as testimony that silver oxide is at
>>least as conductive as silver). The possibility that one can oxidize silver
>>to further increase its conductivity should excite some interest.
>>Even if it's only as good as silver, this information may be
>>important. Silver has some real problems as a conductor material on

>>substrates due to metal migration. If silver oxide doesn't, and is at least
>>as good a conductor, it may have some real advantages for this use. It's a
>>shame the results of your experiments weren't published.
>
>
>
>>Roy Lewallen, W7EL
>
>
>
>
>I asked one of my metallugical engineer friends about this. He *thought* (no
>experimental evidence) that silver oxide would be a semi-conductor.
>
just out of curiosity, would that be a semi-conductor be like doped
silicon is a "semi-conductor" or like carbon is a "semi"-conductor?

>Now if somebody wants to donate some precision air-line coax with silver
>center conductors that I can oxidize, I will gladly make before and after
>measurements on an HP8510C network analyzer and we can put this to bed.
>
>Any takers? I didn't think so. <g>
>
>N7WS
>

e-mail: saw@camalott.com
voice: +915.672.2881
fax: +915.692.8355

567. Re: topconnector, how to make these ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Jim <jstrohm@texas.net>
Message-ID: <5blmi4$8l6@newsgate.sps.mot.com>
Source record: 98420

Wrap a strip of brass or copper (1 cm wide is good) around a
drill bit that is smaller than the 807 top terminal, and
clamp in a vise. Drill a hole in the tabs and put in a small bolt.
This will clamp on the top terminal properly.

If you have an old fuse holder that takes a fuse the same diameter
as the top terminal, you can remove the fuse holding clip and use
this.

A small stainless steel automotive hose clamp will also work.

N6OTQ

568. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan16.162849.9356@ke4zv.atl.ga.us>
Source record: 98421

In article <9700138531.AA853185279@mail.creo.com> lhalliday@creo.COM writes:
>Joe Subich wrote:
>
>> (snip snip snip)
>> Another option to consider...since QST is typeset with a PostScript
>> process, if you DON'T use HTML, save the PostScript source and
>> convert everything to PDF files...
>> (snip)
>
>This might be a nice option for future releases. PDF is (in theory,
>anyway... :-) platform independent, and readers are available for all
>major systems. If you need one that doesn't exist, you can get the
>specs from Adobe and write your own.
>
>> ...I believe that Adobe also include functions for generating
>> indexes and tables of content.
>
>They do. And it all works very nicely. No, I don't work for Adobe. But
>I *do* work professionally with digital prepress.
>
>BTW: can we slow down a bit on the ARRL bashing, please? At least they
>did *something*, rather than sitting around on their backsides and
>whining. The fact that their first attempt was imperfect means exactly
>that. With some constructive criticism, future CDs will be better.

The real issue here is that the old QSTs in the compilation weren't in computer readable form, and had to be scanned as page images. OCR is imperfect, and the amount of copy editing required to convert those images into a common text format was too much to make the product economically viable.

Page images are Ok as long as the image format is standard and platform independent. We can still display the images on various flavors of machinery and OS, but the tools we need to do it are different for each platform. If someone wants to do something useful, they'll gather the required tools for each platform and make them available on the ARRL Website.

Of course we can't do exhaustive searches of page images the way we can with a standard machine readable text format. So if someone really wants to be useful, they'll take the compilation disks and convert them, via OCR and copy editing, to a standard text format. This will have to be a labor of love because there's no way the market would support the cost of doing this commercially.

For *future* QST CDROM volumes, compilied from current year magazines, the ARRL should use a standard platform independent text and image format. That's viable because the originals will already be in computer readable form, because that's the way they are produced now, and translating them to any other standard form is a simple machine process. That wasn't the case with old QSTs in the archive release.

PDF is Ok, but I really like HTML because it is a natural for *any* browser on *any* platform. And it would allow embedding links from the contents page to the articles, and to later bugfix notices about the article. Everyone feels at home with a browser, so this makes the system very user friendly. We can still do exhaustive searches of HTML text with common tools such as grep, though it looks nasty unless we can couple the hits back into the browser gracefully.

OTOH, PDF preserves the *look* of the original magazines. There may be an esthetic reason to preserve this, though I'd personally prefer to be able to customize displayed fonts, line lengths, etc, to something I can easily read on whatever screen I happen to have. That's a drawback with PDF. And I don't really need to see old advertising intruding on article text. (The advertising should be kept, however, for historical reference, but I'd be happy to see that retained as image files of each bit of ad copy.)

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

569. Re: &&& Need PJ068 Audio Jacks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan16.162933.9432@ke4zv.atl.ga.us>
Source record: 98422

In article <19970116025700.VAA29673@ladder01.news.aol.com> wb4lnm@aol.com (WB4LNM) writes:
>I need one or a few audio connectors (jacks) to go with the PJ068 phone
>plug. This is the smaller diameter phone plug (0.208" dia) used on
>Collins S-line equipment microphones, and in my case, an aircraft type
>boom headset. I have an immediate need for an inline (cable mounted)
>jack, and will probably need one or more chassis mount types in the near
>future. I have not been able to find them in any of the retail catalogs
>(Digi-Key, Mouser, etc.). Anyone know of any sources? Please reply here
>or to WB4LNM@aol.com. Thanks. John... WB4LNM

Try Newark.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

570. Re: Request help on 2.4GHz antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Cliff Soderback <Cliff-s@worldnt.att.net>
Message-ID: <01bc03e2$ecbe06a0$cd7993cf@cliffs>
Source record: 98423

Jim Lee <jlee@proaxis.com> wrote in article
<5bkjri$iik@news.proaxis.com>...
> Hi all,
>
> I have two 2.4GHz frequency-hopping spread spectrum tranceivers (100
> mW each). I would like to construct two directional antenna systems
> (parabolic dish? yagi? helical?) that would give me a range of 20
> miles or so. The two sites where the radios will be located are
> pretty much line of sight (except for maybe some trees and other
> variable terrain). Any suggestions? Any ideas where I might find
> related info on the net? Thanks in advance....
>
> jlee@proaxis.com
>
>
>
Jim:
Check out the local swap meets and Hamfests for some old
MDS receiver dishes. These were used quite widely a few years
back and are cut quite closely to 2.4g. The feed horns and the antennas
will work, but just throw the rest away.

Cliff, W7VVA

571. Re: POP CORN NOISE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: San Rotter <rotter@postoffice.worldnet.att.net>
Message-ID: <5bm3bc$t7@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 98424
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew

lbliao@alumnae.caltech.edu (lbliao) wrote:
>I am looking for any book that goes into the details of the popcorn noise
>that supposedly results from the existence of quasi-stable current levels.
>I am not familiar with details, however.
>
>
>Thanks a lot!
>lbliao
>
>

lbliao -

You may contact:

Richard A. Stanbury
Marketing Manager
Quan-Tech
P.O. Box 28
Route 206
Flanders, NJ 07836
Telephone 201-927-1766
FAX 201-927-8242

Quan-Tech manufactures noise analyzers that measure
popcorn noise. I have no history of the Qaun-Tech
company.

Otherwise a HP or Teckronix low frequency spectrum analyzer
should work as a Popcorn Noise detector.

San

572. Re: ? Oszi and Spectrum Analyzer using Sound

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: "Charles R. Patton (714) 932-7476" <patton@a1.wdc.com>
Message-ID: <32DE8F90.1723@a1.wdc.com>
Source record: 98425

Look at CoolEdit at:
ftp://ftp.syntrillium.com/pub/cool_edit/cool95z.exe
for the demo Win95 version. Syntrillium also has Win3.1 versions.

573. Re: NF versus input impedance question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5bm28q$da9@hpscit.sc.hp.com>
Source record: 98426

In article <5bjas1$nt7@hpcvsnz.cv.hp.com>, Tom Bruhns <tomb@lsid.hp.com> wrote:

>I have an application in which I'd like to have an
>optimized noise figure, but specifically would like a
>very high load impedance, and I'm wondering if anyone has
>suggestions about specific components or circuits to
>achieve this. This is for the 2 meter band, at the
>moment, but I'd like to be able to extend it well above
>that and somewhat below as well, if it works out for me.
>
>The source impedance is approximately 50 ohms in this case,
>and if I could get to over 1000 ohms load impedance, it would
>be nice.
>Cheers,
>Tom
>tomb@lsid.hp.com

First of all, you can derive from the equations in Motchenbacher and Fichen the fact that a grounded emitter transistor optimized for best NF at 50 ohms source impedance results in the input impedance being 50*sqrt(beta). But you'd have to have a beta of 400 to get to 1000 ohms. So you end up with a few hundred ohms input impedance.

Go ahead and optimize your amplifier for best NF, then measure its input impedance. Now feedback a portion of the output to the emitter in the right phase to raise the input impedance of the amplifier to 1000 ohms. You can adjust the feedback to get exactly 1000 ohms, or try for more than 1000 ohms (it is not clear if more is better in your application). As long as the feedback is lossless (i.e. transformer coupled, or done with a direction coupler, etc.) you should not significantly degrade the NF of the amplifier by adding the feedback.

An article describing this technique appeared in the last year or two, but I can't remember where I saw it. In the article, the author used feedback to lower the input impedance to 50 ohms, but I don't see why it wouldn't work the other way too.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

574. Re: How's it mixed? Two crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Jim Devenport <jdevenport@lanl.gov>
Message-ID: <32DE5D21.4065@lanl.gov>
Source record: 98427

The easiest way to accomplish this is to forget the calculations and let
the crystal supplier do it for you. All major xtal suppliers have the
formulas for the most popular commercial and most amateur gear and all
you have to do is tell them YOUR desired tx and rx frequency as well as
the model number of the radio you want it for.
You didn't specify (maybe you don't know) the IF frequency, but a
perhaps mixing formula could be:
13.12666 xtal freq. multiplied to 39.37998
(round it off to 39.38
Mixed with 4.805 LO gives 44.185
Producing a possible IF of .535 MHZ
Which adds up to 44.720 MHZ

Or, if hi-side injection is used: 44.720 Desired Freq
Plus LO 4.805
Equals 49.525
Minus Xtal tripled freq. 39.38
Equals Possible IF of 10.145
Motorola is more famous than GE for using weird IF freqs to thwart
possible use of "common" crystals in their equipment but most anything
is possible. Like I say, I's sure the xtal supplier will have all this
stuff already so you just have to give them the info and send the
money..
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |
|My views rarely (if ever) reflect those of my employers|
http://nis-www.lanl.gov/~jdport/

mlc@izzy.net wrote:
> I've got an old G.E Porta Mobile I've been looking for info on for a
> long time, still don't have it all but:
> The TX uses a crystal multiplied 8 times, (5.590 Mhz = 44.720Mhz) the
> recieve uses 13.126666 Mhz mixed with 4.805 Mhz to come up with 44.720
> Mhz
>
> I know the rx is on 44.720 for sure.
>
> I have tried every combination I know of to figure out the mixing sheme
> but I can't.
> I have isolated the rx portion of the rig and there are only those two
> crystals on board. I want to put it on 6 FM but just can't figure out
> mixing scheme between these two rocks.

>
> Additionally anyone with a manual for the G.E Porta Mobile, I will pay
> for a copy.
>
> 73, Tim, ka8ddz

--

575. Public Service Message

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: jrlawson@sprynet.com
Message-ID: <5bm69g$en1@juliana.sprynet.com>
Source record: 98428

This is a public service posting. It may or may not be relevant to the subject of your news group but it may be of significant interest to
the readers of your newsgroup.

Flash!

The Department of Justice under the direction of US Attorney General Janet Reno and the Office of the Attorney General for the
State of California under the direction of Daniel Lungren are investigating the following credit card companies for falsifying billing
statements: If you ever made a partial payment on your credit card and had them charge a late payment fee you may want to contact
these offices about participation in the conviction of these companies for racketeering by furnishing information about false billing
practices.

First USA Bank
PO Box 740085
Atlanta, GA 30374-0085

First USA Bank
PO Box 8650
Wilmington, DE 19899-8650

AARP Bank One Columbus, NA
PO Box 182153
Columbus, OH 43218-2153

AT&T Universal Card
PO Box 9999
Columbus, GA 31977-0001

Capital One
PO Box 85617
Richmond, VA 23276-0001

Choice Visa
Box 6248
Sioux Falls, SD 5117

Discover Card Services
PO Box 29212
Phoenix, AZ 85038-9312

The GM Card
PO Box 88000
Baltimore, MD 21288-3000

Household Credit Services
PO Box 7002
Anaheim, CA 92850-0002

MBNA America
PO Box 15019
Wilmington, DE 19850-5019

MBNA America
PO Box 15137
Wilmington, DE 19850-5137

Wachovia Bank Card Services
P. O. Box 4635
Atlanta, GA 30302

Wachovia Bank Card Services
P. O. Box 15515
Wilmington, DE 19886-5515

Check your billing statements closely. If you have been charged a late fee even though your payment was mailed prior to the due
date you should report it to your state attorney general. If your finance charges are being listed as purchases you should contact your
state attorney general. If your credit card company is unable to funish a copy of a signed billing receipt you should notify your state
attorney general.

All the events described above could make you a party to a class action suit against your credit card company where you could
collect up to ten times the amounts you were falsely charged.

For more information contact your state attorney generals office.

576. Re: POP CORN NOISE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: szekeres+@pitt.edu
Message-ID: <5blo30$alq@usenet.srv.cis.pitt.edu>
Source record: 98429
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew

In article <32DE317D.6F97@mmm.com>, Roy McCammon <rbmccammon@mmm.com> wrote:
>Roy Lewallen wrote:
>>
>> In article <5bhn4e$se6@gap.cco.caltech.edu>,
>> lbliao@alumnae.caltech.edu (lbliao) wrote:
>> >I am looking for any book that goes into the details of the popcorn
noise
>> >that supposedly results from the existence of quasi-stable current
levels.
>> >I am not familiar with details, however.
>>
>> Hopefully someone will be able to direct you to a reference. If not,
you
>> might look into some books dealing with semiconductor processing.
>> Apparently, popcorn noise is due to poor processing, so isn't covered
in
>> most of the conventional textbooks. I know I've found references to it
in
>> the past (having first been burned by this phenomenon over 20 years
ago,
>> which I still remember), but I can't find any references in the
several
>> texts I now have.
>>
>> In my experience, popcorn noise is characterized by abrupt jumps to a
>> second DC level and back a few times per second. With amplification,
it
>> sounds a lot like corn popping, hence the name.
>
>The explanation that I remember is that poor processing left
>ionic contamination on the surface of the semiconductor and that
>these ions broke loose due to temperature, vibration, and votage stress,
>thereby delivering a charge pulse that was amplified and eventually
>disapated.

Having been "brought up" with warnings of popcorn noise,
I actually ran into it in an audio mixer device not too
long ago. I shall refrain from mentioning the manufacturer.
At least I instantly knew what it was, and it did sound like popcorn.

greg

577. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <32DEA462.6A97@arrl.org>
Source record: 98430

Gary Coffman wrote:
> PDF is Ok, but I really like HTML because it is a natural for *any*
> browser on *any* platform. And it would allow embedding links from
> the contents page to the articles, and to later bugfix notices about
> the article. Everyone feels at home with a browser, so this makes

Actually, you can do links in PDF.

> the system very user friendly. We can still do exhaustive searches
> of HTML text with common tools such as grep, though it looks nasty
> unless we can couple the hits back into the browser gracefully.

I don't think grep searches are going to go over too well. "Coupling back into the browser" is one objection to using HTML and standard browsers. Another is that HTML doesn't give you a lot of page-layout control. It leaves a lot up to the browser, and not all browsers work quite the same. By the way, "everyone" doesn't feel comfortable with a browser. Believe it or not, there are still quite a few people who are equipped with a computer but don't browse the Web!

> OTOH, PDF preserves the *look* of the original magazines. There may
> be an esthetic reason to preserve this, though I'd personally prefer
> to be able to customize displayed fonts, line lengths, etc, to something
> I can easily read on whatever screen I happen to have. That's a drawback
> with PDF. And I don't really need to see old advertising intruding on
> article text. (The advertising should be kept, however, for historical
> reference, but I'd be happy to see that retained as image files of
> each bit of ad copy.)

I'm not sure the look is that important. All else being equal, it would be nice to retain the look. But all else isn't equal. In Acrobat, for example, try selecting text from a multiple-column page and copying it to the clipboard. (Hint: It won't restrict the selection to a single column, resulting in an unusable mess on the clipboard.) Another drawback to PDF is that it's slow. That's less of a problem as time goes on and computers get faster, but it's still a concern for now. PDF has some strong features, and we may make use of it in the future. But it's not a perfect solution by a long shot. HTML is even less so.

Which brings up the question: How much compromise in functionality should we allow in order to achieve multi-platform operation? When one platform is by far the dominant one in use, it's not unreasonable to answer that question: "Not much compromise." Of course, if you're not using the dominant platform, that's not a satisfying answer. Believe me, I understand that. We'll keep evaluating the possible solutions to multi-platform support that emerge.

Jon
--
Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

578. Re: Need high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5bmbom$atf@lace.colorado.edu>
Source record: 98431

You don't mention the exact voltage or current required. I recently liberated a perfectly functional transformer with a ~1900 V secondary from an abandoned (by the side of the road) microwave oven. I knocked out the magnetic shunts, and it works fine. However, one end of the secondary is connected to the core. (Even if this connection is broken, there will be little insulation between the core and the first layer of the high voltage winding.) I haven't loaded it heavily to see its full-power output, but one might imagine it will be in the high hundreds of watts, that is, a few tens of mA for ~2kV output. Coming across unwanted or garage- or moving-sale microwave ovens is probably not difficult.

My transformer also has a 3.3 V secondary for the filament, and a 115 V one-phase primary as you indicated you wanted.

Some people on this group indicated the regulation, even with the shunts knocked out, will be poor compared to "real" HV transformers, but it might be just fine for you, and you won't beat the price! Peter Dahl, for example, makes high-performance transformers of this type, but his products are full price. There are also the HV manufacturers, like Universal Voltronics, Del High Voltage, etc. They make HV power supplies and systems, as well as HV components such as transformers. (They also go up to ~100 kV, should you need to power an accelerator or X-ray tube.)

Bruce
N6URH

579. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-1601970917370001@port17.vcnet.com>
Source record: 98432

In article <19970115191100.OAA14913@ladder01.news.aol.com>,
w8jitom@aol.com wrote:

snip...
> The VHF Q of the conventional suppressor could be made exactly the same
> as the nichrome ones by changing the value of either L or R, but the HF
> Q of the conventional suppressor would still be about a factor 2
> higher.<<-<<

I know who Mr. Rauch is quoting above, but readers, other than Wes, N7WS, probably do not know. So far, the person who made this statement has not come up with a conventional suppressor that will reduce the VHF voltage gain of an amplifier by the same amount as a nichrome suppressor. Sure, I can come up with a suppressor design using a high-Q silver-strap Ls (with a different amount of inductance) and a different amount of resistance for Rs, which yields a much lower VHF Q than any of the suppressors Wes measured for us. However, such a suppressor creates a 'gotcha'/land mine that the naysayers don't seem to be aware of yet. ....Stay tuned for the next exciting episode. (Note: this gotcha is discussed in an article about VHF suppressors that appeared in the March, 1989 issue of QST magazine.)

...snip...

> This conclusion above is the same conclusion I reached, ... snip

What are the values of Rs and Ls that will produce exactly the same VHF Q, Mr. Rauch?

...snip...
> If the data is reviewed, the ratio of Q is almost unity at 200 MHz and
> over 2:1 at 10 MHz. Just the slightest adjustment of R or L will make the
> conventional suppressor equal the nichrome at VHF, while maintaining
> better Q at HF where we want losses to be reduced.

Is a 1% (0.087db) loss at 29MHz going to make a difference at the receiving end? Is a 0.25% (0.022db) loss at 14MHz going to make a difference? Every benefit has a trade-off. Is a 1% power increase at 29MHz worth a 2/3, or more, increase in VHF voltage gain?

> For example, the AL-80B oscillates at about 170-180 MHz when the
> suppressor is removed.

However, AL-80s seem to occasionally oscillate at roughly 160MHz with the factory suppressor installed. Here's a clip from an e-mail I recently received from an AL-80 owner who reportedly had two bandswitches fail.
"Hi Rich: Sorry for the delay but we were out of town. I am sending

you 2 sets of toasted AL-80A bandswitches. The first time it arc'ed over
, I
had no idea what the problem was. Since I only used it on 75 meters, I
thought it had wimpy bandswitch wafers in it and that was the problem. I
then soldered the bandswitch in the 75 meter position and of course then
when it arc'ed it mad more of a mess than the first time. I had a
chance to put your suppression kit in and what a difference. You of
course knew this would be the result, but I am most pleasantly surprised.
The amp tunes up nice and smooth now with no crackling and popping
sounds emanating from inside......."
When Rick's 'toasted' AL-80 bandswitches arrive, I will post photographs
of them on the Web for all to see. ....Once again, Mr. Rauch has
been proved to be correct---i.e., the tune capacitor in the AL-80 has no
resonances around 160MHz that could cause it to arc over from a VHF
parasitic oscillation. Congrats, Tom.

> At that frequency, Wes measured a Q of about one
> (same as I posted weeks ago). The Q of a duplicate nichrome suppressor is
> about .75. This very small Q change is diluted by circuit effects when the
> suppressor is installed in an actual PA. The actual operating Q change
> would be even less at VHF, and more at HF.

Now that we have Wes' measurements, we know that a fairly typical low Q
suppressor has an ESR of 4.32 ohms at 30MHz and an ESR of 0.88 ohms at
10MHz. Perhaps Mr. Rauch, or another 'recognized amplifier expert' can
show us how to calculate the effect this would have on the Q of the tank
circuit in an AL-80B at 10MHz, and at 30MHz? These calculations are beyond
my capabilities.
>
> Rich's claim this small change in VHF Q is a great or worthwhile
> improvement that cures all woes is completely false.

Granted, the claims about mirculously curing gout have not been verified
by a double-blind scientific study, but preliminary evidence suggests that
verification is absolutely, positively, 100% certain.

...snip...
> 1.) The Miklos employment tale. He claimed he "called Eimac" and they told
> him Buzz was never R+D manager. Yet Eimac even issued a letter (after
> getting Buzz's permission) explaining Buzz was indeed R+D manager. Not
> only that, VHF Handbooks list Buzz as Eimac's former R+D Manager. Even
> after the employment confirming letter was out, Rich sent Buzz Miklos a
> post card telling Buzz he was never R+D manager!

Curiously, Mr. Rauch does not quote what I wrote. In the postcard, I
told Mr. Miklos that someone on this newsgroup was providing information
about his prior employment at Varian-Eimac that, according to the
Varian-Eimac's personnel department, did not match his personnel records.

> 2.) The tale about Marvin Born. Rich said Marvin measured parasitics in an
> AL1500. Turns out it wasn't even an AL1500, it was a dual 8877 PA built on
> a old empty prototype chassis. When I talked to Marvin he said he was

> positive Rich knew he was talking about a west coast manufactured 3CX3000
> PA, and not a AL-1500.

True, it was retrofitted with a second 8877. As I recall, tank
modifications were made to the AL-1500's tank to double the power handling
ability and halve the input Z in order to match two tubes instead of one.
However, Mr. Rauch's statements are somewhat puzzling. First Mr. Rauch
tells us it was a 'dual 8877 PA', but then he tells us it was a Create
Electronics Co. 3CX3000A7 amplifier.
If Mr. Rauch is correct, Marvin Born ordered the WRONG suppressor
retrofit-kit. To explain: According to my records, Marvin ordered kit
s/n 4548, which was for an AL-1500 with an extra resistor set for a second
8877. As I recall, Marvin told me that the AL-1500 had no VHF parasitic
suppressors and that he could see intermittent VHF parasitic oscillations
at 87MHz on a Tektronix 454 oscilloscope as well as on a spectrum
analyzer. According to my records, Marvin Born sent a cheque to pay for
suppressor retrofit kit s/n 4548. However, a suppressor for an AL-1500
would prompty incinerate in a 3CX3000A7 amplifier. I just telephoned
Marvin to see if a mistake was made. Unfortunately, no one was home.
I'll try again later.
>
...snip...

> 7.) Measures' attempt to blame me for Wes' unintentional error. Rich was
> completely aware of how this happened BEFORE he posted his pathological
> accusation that I was trying to hide something, and that I misled Wes.

'Unintentional error'? To the best of my knowledge, Wes did not error
anywhere.
RE: hiding something: Mr. Rauch cancelled his post of 28 November,
sans-explanation. I believe the reason why Mr. Rauch cancelled this post
has something to do with the belated realization that a small change in
VHF Q affects a large change in VHF Rp.

> When all this is considered it becomes perfectly clear Measures presents
> untrue statements as fact, even when he should have known in advance what
> he says really isn't true.

Mr. Rauch names no such statements. However,, in his next reply, perhaps
he will take me to to task on the gout issue. .

> We all make occasional mistakes, but this stuff goes far beyond once in a
> while. It appears to be chronic or habitual.
>
Amen to that, Mr. Rauch.

A question: An Rs of 100 ohms is connected in parallel with an Ls of
85nH. Assuming that the intrinsic L in Rs is zero, and the intrinsic R in
Ls is zero, please calculate the currents in Ls and Rs if 1V at 160MHz
when applied. In your expert opinion, Mr. Rauch, is the resultant current
in Ls insignificant compared to the current in Rs?

POSTSCRIPT
Did anyone notice that Mr. Rauch avoided the subject of Rp? When evaluating suppressor performance, Rp is is an important consideration because Rp and tube mu determine VHF voltage gain. Since we can't change the mu of the tube, Rp is the only game in town for VHF voltage-gain reduction.
---
e-mail copy to Mr. Rauch

--
--Rich-- ag6k, 805-386-3734

580. Re: Need high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Stan Aughenbaugh <Stan.Aughenbaugh@MCI.COM>
Message-ID: <32DEC295.7C25@MCI.COM>
Source record: 98433

Winston Chan wrote:
>
> I am repairing a high voltage power supply and need a transformer with
> about 1500 V secondaries for line voltage (115 V) input. I have checked
> the major transformer manufacturers and they all seem to have stopped
> making transformers with secondaries of more than a couple of hundred
> volts. Does anyone know of a source for high voltage transformers?
>
> --
> Winston Chan | phone: (319) 353-2398
> Dept. of Electrical Engineering | fax: (319) 353-1115
> University of Iowa | email: wkchan@icaen.uiowa.edu
> Iowa City, IA 52242

Try Peter Dahl Corp.
www.pwdahl.com I believe.
73,
--
Stan Aughenbaugh II
Stan.Aughenbaugh@MCI.com
Amateur Radio KF0NC
"90% of all statistics are made up"

581. Re: QST on CD BEWARE!!!!OS Whining

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Frank Brand <frank001@postoffice.worldnet.att.net>
Message-ID: <32DEC55C.508C@postoffice.worldnet.att.net>
Source record: 98434

Mark Bryant wrote:
>
> The folks with the minority operating systems need to accept that your
> performance OS is just that and you should not expect every vendor or store
> (ARRL) to spend resources to accommodate your OS choice any more than I can
> expect stores to maintain stock for my Corvette. Should I also demand that
> Wendy's redesign their drive through window so I can get food without my
> coke being spilled all over my lap? Maybe I should complain to banks for
> having the ATM machines designed for average car window height.
>
> Maybe I can just whine at my OS or car decisions and hope that the world
> will drop everything and accommodate my special desires and needs. By the
> way I also used OS/2 until market conditions required me to switch to
> Windows for practical reasons. Should I whine about that also? Maybe I
> should just be adult enough to accept the results of my decisions.
>
> MarkThese were my thoughts from the begining. Those that complain because
they choose an operating system that is becomming increaseing non-main
stream shouldn't expect everyone else to accommodate them. Maybe ARRL
should also provide the QST back issues for the TRS-80 and the Amiga?

582. Re: VHF/UHF NF optimization

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: "Dale R. Parfitt" <par@magg.net>
Message-ID: <32DECBA8.5D92@magg.net>
Source record: 98435

Michael C. McHugh (TA2ZG/W2AV) wrote:
>
> N7WS wrote:
>
> >Subject: Good source for amplifier tips
> >
> >In article <1997Jan12.163113.18881@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
> >>From: gary@ke4zv.atl.ga.us (Gary Coffman)
> >>Subject: Re: Good source for amplifier tips
> >>Date: Sun, 12 Jan 1997 16:31:13 GMT
> >>
> >>[snip]
> >>
> >> As I noted above, at VHF+, internal noise determines the floor of
> >>the receiver, so as much signal power as possible must be coupled to
> >>the first amp to overcome that.
> >>
> >>No, there is an optimum source impedance which the active device wants to see
> >>to deliver the lowest noise figure. More often than not, the input match is
> >>very poor. I have seen VSWRs of >6:1 on some LNAs. This is a terrible match,
> >>but delivers the best noise figure.
> >>
> >>This property also gives rise to considerable uncertainty in the measurement
> >>of noise figure; a property often overlooked by those who quote NFs to 0.01 dB
> >>accuracies. But all of this is the subject for another thread, isn't it.
> >^^
>
> By all means. Please.
>
> >
> >[snip]
> >
> >>Gary
> >>
> >>N7WS
>
> In the days when I was on 2m EME and constantly building/testing/using
> low-noise preamplifiers, I had access to a good lab and could do those
> "0.01 dB" noise figure measurements. For whatever they were worth.
>
> It used to bother me that the real system was probably never anything
> like the source impedance presented by the NF measurement setup, and I
> always wondered whether optimizing the NF on a lab setup was really the

> way to go.
>
> I had thought about bringing a SINAD meter home sometime, setting up a
> distant weak-signal source that would give me 6 or 8 dB SINAD at the
> receiver audio output (SSB, tuned for 1 kHz tone or so to find the notch
> in the SINAD meter) and then going to work adjusting the LNA and maybe
> transverter front end for the best SINAD. It seemed to me that this
> technique would always ensure the best possible noise figure for the
> system, regardless of whether I knew an exact value for it.
>
> Alas, I never got a "round tuit" and now it seems that I never will.
>
> Has anyone else thought of or tried this technique? I never saw it
> written up anywhere...
>
> It always seemed to me that this would be the way to ensure that the
> system was adjusted for the best possible NF, regardless of whatever
> the LNA measured at the latest NF party. Bring it to the party, test
> it, adjust it, laugh or cry over the results - but then, bring it home
> and use a SINAD meter to retune it in the actual system to its best
> performance.
>
> Comments?
>
> 73 -
>
> de Mike (TA2ZG/W2AV) Remote Sysop TA2EM BBS - first PRBBS in Turkiye
> Amateur Packet Radio: TA2ZG@TA2EM.#IST.TUR.EU
> Internet (email only): Michael C. McHugh <MichaelM@doruk.com.tr>

Hi Mike,

I am currently becoming active on 23 cM EME and of course NF is a big subject. I had my LNA built by KB2AH and NF optimized. The equipment ensures that the LNA is looking into 50 Ohms.
When I built my dual circular feed in addition to looking at circularity, isolation etc. I used my HP network analyzer to adjust the feed for a return loss in excess of 25 dB. Therefore it seems to me that the LNA should play the same on my feed as it did on the NF equipment as they are both 50 Ohms.
You are certainly correct that the input Z of the LNA is most assuredly something other than 50 Ohms if it has been noise optimized. The old gain/NF tradeoff.

Dale W4OP

583. 20 or 40 meter radio for NE602a

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Dennis Chamblee <dchamblee@intelectinc.com>
Message-ID: <5bkpld$guj@news-t.computek.net>
Source record: 98436

I would like a schematic for any type 20 or 40 meter radio using the NE602a. Any receiver and or transmitter. thanks

584. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: jrc@skypoint.com
Message-ID: <5bmjtm$93m@mirage.skypoint.com>
Source record: 98437
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

In article <Pine.BSF.3.91.970109230343.20816F-100000@prog1.caprica.com>,
Teddy Bear <teddyb@prog1.caprica.com> wrote:
>
>I THOUGHT that these were newsgroups for radio science discussions, based
>upon factual information. But mostly all I see here are people's
>unsolicited opinions based upon conjecture.

Welcome to Usenet !!!!!!!

>That's what happens when code skills are emphasized, hailed and
>rewarded instead of engineering skills. That's also why hams of today would
>rather buy equipment from a store than built it.
>
>Once upon a time iw was WE who invented everything elecronic! Now most of
>us have been reduced to clueless consumers, lead by the nose like dumb
>sheep... a sad legacy indeed to leave to future hams.

I think that things are harder now. It was easy to glue together
vacuum tubes in the days you speak of. Solid state is harder, at
least harder to do right. My opinion.

>
>When someone asks for calculations, instead they get speculation. But I
>must warn that if you were to try to build things out of speculation,
>you'll soon have a pile of failed projects stacked taller than you are.
>
>Amateur radio is a SCIENCE, not a realm of personal opinions! We are
>SUPPOSED TO BE following in the footsteps of SCIENTISTS, using FACTS!

I thought amateur radio was a hobby. You are supposed to have fun
doing something that you like. For some it is talking, for some like
you it is doing stuff like measuring the energey of the quantum band
gaps of hot carrier diodes over temperature :-)

>I shouldn't even HAVE to tell you this! Half the hams I hear these days
>barely know how to even solder! WHAT the heck is happening to us? Who
>lowered the technical knowledge standards? Who said that they could? When
>did it become no longer required to demonstrate the ability to build and
>troubleshoot radio equipment? It's truely an embarrassment to amateur
>radio that this has happened! I honestly know of novices who understand
>electronics better than extras and extras who act like CB'ers!

That is kind of hard to believe. The extra written exam is a cake walk,
but the advanced class is about the same as a commercial radiotelephone.
Those extras must have been one of those people that memorized every

question in the pool.

--
Jeffrey Comstock

DISCLAMIER: If my employer does not agree with this message, then they
are wrong.

585. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <32DE9B6F.4C8F@arrl.org>
Source record: 98438

R. L. Measures wrote:
>
> In article <5ba1sc$1n9k$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe
> Subich) wrote:
>
> > In message <32D52BF1.694B@arrl.org> - Jon Bloom <jbloom@arrl.org>Thu, 09
> > Jan 1997 12:33:37 -0500 writes:
> > :>
> > :>The fact is, if we had decided to do this product only if we could make
> > :>it multi-platform, the product wouldn't exist at all. The only way we
> > :>were able to do this economically was by means of a good deal with a
> > :>third-party shop that does the scanning and the software; "normal"
> > :>commercial providers of these kinds of services are vastly more
> > :>expensive. The people we are working with supply only Windows software,
> > :>so that's what's available.
> >
> > The people you worked with used the wrong tools. The text should have
> > been scanned using OCR and converted to text rather than to graphics
> > files. The pictures, schematics and charts could have been scanned
> > individually as JPEG files and stored linked to the text.
> >
> snip.....
>
> A thorough explanation, Joe. It's like the lights are on a 225 Main St.,
> but no one is home.
>

I already sent this to Joe by email, but I guess I should post it here,
too.

From our own experience and from talking to commercial service bureaus,
OCR is just out of the question. The technology isn't yet up to
producing error-free text from scanned pages. And we're talking about 80
years of QST, after all! It would be a massive job to OCR, then fix and
mark up (if you want links), 80 years of QST text. Plus scanning and
separating all of the graphics. We'd have to charge many times what we
charge for the QST View product--no one would buy it.

> The text would have needed only minor editing for format ... editing
> that could probably have been automated by using any of a number of word
> proccssing or DTP programs now available with HTML output filters.
>
> :>The basic problem, which recurs for just about any software product we
> :>produce, is that the number of Mac users who might buy an ARRL product
> :>is miniscule. That's not an assumption; we know it from market research.

>
> It's not just Mac users, but OS/2 users, *.nix users, people with older
> DOS systems that can't run Windows ... all of them are excluded by a
> Windows only product.

True, but all of them put together consist of a miniscule part of the
potential market for ARRL products. Nobody (outside of Redmond) likes
that fact, but it's true.

> :>Of course, if we could find low-cost, off-the-shelf multi-platform
> :>products that would provide the capabilities we need, we'd use them.
> :>We've not found any such as yet. (We're always interested in hearing
> :>about any you know of.)
>
> Netscape Navigator, Microsoft Internet Explorer, the various flavors of
> Mosiac, are about as inexpensive, off-the-shelf, and multi-platform as
> one can get.
>
> :>Ummm... how does one implement a searchable database in HTML? You need
> :>an HTTP server with CGI and a database application. And of course, that
> :>software would have to be multi-platform.
>
> Every browser I've looked at (Netscape Navigator, Internet Explorer,
> IBM's Web Explorer for OS/2) all support searching a document. With
> that support in the reader, one need only provide a properly (HTML)
> coded index much like the annual index already included with QST.

The index for a 5-year set (85-89), stored in ASCII form on the CD-ROM,
is well over a megabyte. While that represents one of the larger 5-year
indices, the total index for 80 years of QST will clearly be many
megabytes. No browser I know of will handle a search of a document that
large well, if at all.

> A significantly expanded index is almost trivial using the indexing
> functions of modern word processors (all of which will create an index
> over multiple documents or chapters).

If you can OCR the text, which, as I've explained, isn't feasible.

> :>The image files on the QST View CD-ROMs are standard TIFF files (using
> :>CCITT Group 3 compression). And the database for each set is contained
> :>in a comma-delimited ASCII file on the first disk of the set. (The file
> :>contains a few SQL engine commands you can ignore.) If some enterprising
> :>Mac (or OS/2, or *nix, or...) software type wants to write an
> :>application for his/her favorite platform that will search and display
> :>the files, I'd be delighted. Heck, I'll gladly make it available from
> :>ARRL's Web site. We just can't afford to *pay* anyone to do it.
>
> Your requirements sound rather easy to accomplish, at least for OS/2,
> using V-REXX and the graphics display capability (MMOS/2) built into the
> operating system. I'm sure nobody even bothered to check it out before
> pressing the CD.

You're right about that. We spent no time looking at platform-specific solutions for platforms for which we can't sell significant volume. We looked at cross-platform solutions, without success, and Windows solutions. (One minor correction to what I said in the posting--it's Group 4 compression, not Group 3.)

> It's a shame I don't have the V-REXX developer package and a little free
> time.
>
> Another option to consider ... since QST is typeset with a Psotscript
> process, if you DON'T use HTML, save the postscript source and convert
> everything to PDF files. The CD can be published using ADOBE'S ACRROBAT.
> Acrobat readers are free or low cost, are available for a large number
> of platforms, and are rapidly becomimg a portable standard. I believe
> that Adobe also include functions for generating indexes and tables of
> content.

We're planning to look closely at PDF for future products. PDF and PDF tools have come a long way recently. But they aren't a viable solution for "legacy" documents--such as older QST issues--that aren't in Postscript form.

Jon
--
Jon Bloom, KE3Z
Electronic Publications Manager
jbloom@arrl.org

586. SSTV with a sound card

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Harv Nelson <hnelson@facstaff.wisc.edu>
Message-ID: <32DF06A6.2D5D@facstaff.wisc.edu>
Source record: 98439

Hi All,

Can anyone out there suggest a good Shareware/Freeware program for SSTV
that uses the sound card on my computer. Need FTP/URL info too.

tnx a bunch
73
Harv/KG9GA

587. Unbuilt Kits??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <32DEDAD6.25F7@primenet.com>
Source record: 98440

Have run out of kits to build. Will buy unbuilt kits.
Just about any type, just let me know what you have/price.
Other project ideas?

73, Brian ke7gh@primenet.com

588. Re: QST on CD BEWARE!!!!OS Whining

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Mark Bryant <bryant@sohobusiness.com>
Message-ID: <01bc03e6$a0cecc80$a3d879a8@soho>
Source record: 98441

The folks with the minority operating systems need to accept that your performance OS is just that and you should not expect every vendor or store (ARRL) to spend resources to accommodate your OS choice any more than I can expect stores to maintain stock for my Corvette. Should I also demand that Wendy's redesign their drive through window so I can get food without my coke being spilled all over my lap? Maybe I should complain to banks for having the ATM machines designed for average car window height.

Maybe I can just whine at my OS or car decisions and hope that the world will drop everything and accommodate my special desires and needs. By the way I also used OS/2 until market conditions required me to switch to Windows for practical reasons. Should I whine about that also? Maybe I should just be adult enough to accept the results of my decisions.

Mark

589. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: RickH <Nexus15@flash.net>
Message-ID: <32DEF43C.54F@flash.net>
Source record: 98442
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

Teddy Bear wrote:
>
> On Fri, 10 Jan 1997, tyler wrote:
>
> > Teddybear:
> > I sure hope you don't expect any more help on your helical antenna after you
> > pulled this asshole stunt.
> >
> > Beggars can't be choosy.
>
> WHAT makes me a damn begger? I have info to give on other topics pal!
> Fair exchange is not robbery as the old saying goes. So get off your high
> horse because you do not have a corner on knowledge and even though I dont
> know it all, I certainly am not knowledgabley bankrupt!
>
> And AGAIN if I ask for a screwdriver and you give me a hammer then your
> idea of "help" is not help at all!
>
> What is so hard to understand about that? IT HAPPENS TO BE TRUE!

Teddy

But what if what you really need is a hammer?

Rick

590. Re: silver mica 1000V 10pf Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: hugo@infobahnos.com
Message-ID: <32defa3b.0@news.total.net>
Source record: 98443

chenshaw@cris.com (Calvin Henshaw) wrote:

>My father owns a FT101. He needs a
>Silver Mica 1000V, 10pf Capacitor.
>Does any one know where to get one?

>My e-mail chenshaw@cris.com
> chenshaw@nikon.com

>His e-mail dhenshaw@juno.com

Calvin, if this may be of any help, Mouser has an whole page of dipped mica capacitors at 500WDCV. In the range you're looking for they have 1,5,10,12,15,18,22 pf at different lead spacing. Maybe 2 x 5pf in // could suit you.

Contact me if you want more specifics

H.C.

591. Need high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Winston Chan <wkchan@icaen.uiowa.edu>
Message-ID: <32DE4F09.27EB@icaen.uiowa.edu>
Source record: 98444

I am repairing a high voltage power supply and need a transformer with about 1500 V secondaries for line voltage (115 V) input. I have checked the major transformer manufacturers and they all seem to have stopped making transformers with secondaries of more than a couple of hundred volts. Does anyone know of a source for high voltage transformers?

--
Winston Chan | phone: (319) 353-2398
Dept. of Electrical Engineering | fax: (319) 353-1115
University of Iowa | email: wkchan@icaen.uiowa.edu
Iowa City, IA 52242

592. 2 M CW QRP Xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Steve Allen <sallen@madriver.com>
Message-ID: <32DF0433.4D5@madriver.com>
Source record: 98445

Looking for schematic and/or info regarding HB 2 meter CW qrp transceiver.

Please e-mail to sallen@madriver.com

73s Steve, KD1UP NEQRP 102

593. Request help on 2.4GHz antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: jlee@proaxis.com
Message-ID: <5bkjri$iik@news.proaxis.com>
Source record: 98446

Hi all,

I have two 2.4GHz frequency-hopping spread spectrum tranceivers (100 mW each). I would like to construct two directional antenna systems (parabolic dish? yagi? helical?) that would give me a range of 20 miles or so. The two sites where the radios will be located are pretty much line of sight (except for maybe some trees and other variable terrain). Any suggestions? Any ideas where I might find related info on the net? Thanks in advance....

jlee@proaxis.com

594. Power Transistor Help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: md13042@dredd.swipnet.SE
Message-ID: <199701171136.MAA23738@dredd.swip.net>
Source record: 98447

Can anyone give me the specs of the following power transistors please?
TRW's PT8750
It's in a power amp

73 de SM5NPV/Tobbe

595. Re: 20 or 40 meter radio for NE602a

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32DF1179.3234@idecc.com>
Source record: 98448

Dennis Chamblee wrote:
>
> I would like a schematic for any type 20 or 40 meter radio using the NE602a. Any receiver and or transmitter. thanks

Try the NorCal webpage, lots of goodies there.
http://www.fix.net/~jparker/norcal.html

596. HF and VHF kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: Will White <will.white@asu.edu>
Message-ID: <32DF1686.6ECA@asu.edu>
Source record: 98449

Where are some good sources of HF and VHF solid state kits? I am in the PHX, AZ area. Thanks.

--Will

597. Closed Caption Data Format ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: k1el@aol.com
Message-ID: <19970116133501.IAA19440@ladder01.news.aol.com>
Source record: 98450

Does anyone know where I can obtain information about the format of
the closed caption (line 21) data used in US television transmissions ?

Thanks Steve K1EL

598. Re: &&& Need PJ068 Audio Jacks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-16 00:00:00 UTC
From: "R.E. Dodson" <rdodson@worldnet.att.net>
Message-ID: <32DE5969.1B1B@worldnet.att.net>
Source record: 98451

NOS original PJ-068 microphone plugs manufactured by Kings electronics.
-- They are the REAL THING as supplied to
the US military and Collins Radio -- Will also fit other equipment
(Drake, etc) that require a .206" 3-conductor phone-type
plug. -- These retail for approx $14 plus shipping (if you can find
them!) -- MY PRICE: $7.50 (I ship) -- Bill, AA4FM/0,
Eudora, Kansas, USA -- debral@falcon.cc.ukans.edu

Found this. Is this what you are looking for.
WB5APD
Bob

599. 3-500z help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: w8pu@aol.com
Message-ID: <19970117005901.TAA16538@ladder01.news.aol.com>
Source record: 98452

I have a first generation Prime Industries AL80 amplifier and I would like to know just what is the max current that should be applied to the single 3-500z grid. Also what is the max key down plate current. The manual suggests no more than 100 watts input but this amp will put out 700 watts with as little as 60 watts and 150 mils on the plate. This is approx a KW input if the amp's meter is accurrate. This amp will do almost 900 watts if pushed to the 100 watt max input suggested but the grid current is closer to 200 mils or more. I use this amp for SSB mostly and I am more interested in the tube's life than an extra 100 watts or so as it realistically is not going to make my signal any better.

Thanks de Gary W8PU

600. Re: help with MC1350

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <32DF4FA4.23A6@mwt.net>
Source record: 98453

Zack Clobes wrote:
>
> I'm working on a 20M SSB receiver and I'm working on the IF amplifier.
> I chose to use the mc1350 because of it's simplicity. I built a circuit
> that used a capacitor coupling on the input and the output came out on
> pin 1, through a xformer, and to the +vcc. I was unable to get the
> amplifier to amplify ... CUT HERE SO MY NNTP SERVER WII ACCEPT THE REPLY!!
>
> --
> 73's de Zack, W0ZC
>
> zclobes@southwind.net
> http://www2.southwind.net/~zclobes/zackc.html

I haven't played with the 1350 for quite a while, but concerning the 1K resistor going from the output pin to Vcc...it looks like that, but thinking in terms of AC, the "top" end of the 1K will actually be at ground potential due to the large filter capacitors in the power supply. Remember, a capacitor looks like a "short" to AC, hence, electrically the Vcc end of the 1k IS grounded, so my next question is: Do you have a electrolytic capacitor from Vcc to ground (even if you are running this from a battery!) ???

If I can be of further help...let me know.
73, Scott, N0EDV

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

601. PicCon Hidden Transmitter Hunt Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: byon@netcom.com
Message-ID: <32e0df9f.10329212@news.hlc.net>
Source record: 98454

Greetings to fellow T-hunters and T-hiders,

I have recently created a new microcontroller-based hidden transmitter controller called PicCon. It connects to a radio transceiver and produces tone sequences and Morse code messages at user-programmed times. It is completely field programmable via DTMF tones, remembers all options even when power is removed, runs off a 9-volt battery (or any 7-35VDC source), and is quite compact (1.9" x 1.7" PCB.) PicCon also supports synchronized multi-transmitter hunts, and can operate under IARU T-hunting standards. Look for it in the March 1997 issue of 73 magazine in Joe Moell's Homing In column.

Kits are available, which include a manual, and all parts necessary to build the printed circuit board, excluding a chassis. A power/radio interface cable is also included, but must be wired for your specific radio. Kits are $49 plus $2 S/H and can be built in about 30 minutes.

Further details can be found at the PicCon Web page where I have on-line copies of the User's Manual in PDF, HTML, RTF and TEXT formats. If you do not have web access, I would be glad to eMail a version to you. The web page URL is:
http://www.kvoa.com/byon/piccon/
Additional questions can be directed to me via eMail.

Thanks, 73, and good hunting (and hiding.)

Byon

Byon Garrabrant N6BG byon@netcom.com http://www.kvoa.com/byon/

602. soldering iron tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: sw1gak@polaris.mindport.NET
Message-ID: <Pine.SUN.3.94.970116213846.1847A-100000@polaris>
Source record: 98455

I have a pace solder station that needs new tips for the soldering iron. Ordered some from Jensen tools and got the wrong ones. Returned them with no hassle.
Needing a new tip in a hurry I made 2. One from .125 stainless welding rod and one from .125 brass brazing rod. The stainless tip does't transfer heat very well. The brass tip works very well.

Does anybody know of any problems I may have using the brass tip in place of the iron clad copper tip?

I tinned both tips using duzall flux and used anti-seize compound.

603. FS: Toobes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: "John F. Haase" <TheHossMan@worldnet.att.net>
Message-ID: <5bmqs7$qb9@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 98456
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have a large quantity of tubes for sale. Please e-mail to TheHossMan@worldnet.att.net or write to 336F Versailles Dr., Melbourne Beach, FL 32951. WA9ENO

Qty N.I.B. Qty N.I.B. Qty Min. Qty 8-Pin, etc.
1 1G3/1B3 4 6SJ7 2 6AH6 5 1G3GT/1B3GT
1 1N1238 1 6SK7 2 6AL5 1 1K3
1 2AS2 1 6SN7 2 6AQ5 1 5V4G
2 3A3/3B2 1 6V6GTA 1 6AS5 2 5Y3
2 5Y3 1 6W4 1 6AW8 2 6AS7G
1 6AG5 1 7F8 1 6BA6 1 6BK4
1 6AH6 1 8EM5 1 6BG7 1 6BQ6GTB/6CU6
1 6AK5 1 12AL5 2 6BH6 3 6D6
1 6AK6 1 12BH7 1 6BQ7 1 6J5 (Metal)
2 6AN5 1 12DT5 1 6BZ6 2 6V6
2 6AU4 1 35L6 1 6CG7 1 6Y6G
1 6AU6 1 OA2 1 6CG8 1 6Z10
1 6AX8 2 OB2 1 6CL8 1 12AY3
1 6AY3 1 OC2 2 6CQ8 1 12D4
2 6BA6 1 OG3 1 6CZ5 1 12DQ6B
1 6BC5 1 5651 1 6DE6 1 12SN7GT
2 6BF5 1 5749 1 6EA5 1 12SQ7
2 *6BH6 2 5763 2 6EB8 1 12V6GT
2 6BK7 2 5963 1 6EK5 1 17BE3
1 6BN6 1 6112 1 6GH8 1 17BF11
1 6BQ7 1 6977 1 6GM6 2 17JZ8
1 6CB6 1 6HB7 1 21JZ6
3 6CB6 Metal 1 6J6 1 25L6GT
4 6CL6 1 6AC7 2 6KE8 1 38HE7
2 6CL8 6 6AG7 1 6T8 2 50L6
3 6CW4 1 6C5 2 6X4 1 OD3
1 6CZ5 4 6L6 2 8FQ7 1 5452
1 6D4 1 6L7 1 8FQ7 1 6528
1 6D6 1 8JV8 1 75
2 6EA5 Qty Min 1 10LZ8 2 829B
8 6EB8 1 2D21 1 12AD6
1 6EH7 1 3HQ5 1 12FX5
1 6FQ7 1 4DT6 1 OA5
1 6FV8 1 4HM6 1 OB2
1 6GH8 2 4JC6 2 5654
1 6GM6 1 4JD6 1 5696
3 6J4 1 4KT6 2 5749
1 6J6 2 5AQ5 1 5750

```
2 6JE6 1 6136 1 5751
1 6JF7 1 6201 3 5814
1 6K7 1 6AF4 1 6197
1 6KD6 2 6AG5
1 6KE8
1 6L8
```

604. -FS- Dow-Key Relays/ D-K Switch/more...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: Ron Sibbitt <n8lmt@usa.net>
Message-ID: <01bc0432$cdd9a500$616794ce@ron-s-computer>
Source record: 98457
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

```
for sale---
two DOW-KEY model DK-77-BNC Coax Relays...
they have 12vdc coils...and of course BNC
female connectors. The DK-77 series is a
compact 5/8 x 5/8 x 2" (body), but other-
wise similar to popular DK-60 types.
rated 250w, DC to 1000Mhz. used but
excellent condition.
$15. each....or both for $25.

Tektronix model 011-031 10db attenuator for
signal generators etc...50 ohms/ 1.5 watts
3/4" x 3/4" x 2" with pl-259 male connector
on one end, female on other...looks like new..
$12.00

DowKey model DK78-T manual transfer switch
new-in-box, real quality! rated 1KW to 500Mhz,
.............$35.00

need an extra $2 to mail any of the above....

73,
Ron Sibbitt - N8LMT
5885 Galbraith Line Road
Croswell, MI 48422
Email n8lmt@greatlakes.net
```

605. Help, Acme electric transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: nbrown@whispa.co.nz
Message-ID: <nbrown-1701971956030001@wh18-4.wave.co.nz>
Source record: 98458

I have one huge transformer from Acme electric

Markings on it are

T-T-65619
EIA-4 13-7246
5170869
E.C. 715513

If you know what this is and what primaries and secondaries are please E-mail me. I was told it is a high current low voltage tranformer but that is only a few of the windings, and this thing has some twenty or so terminals on it!

regards
Neil

606. Re: Request help on 2.4GHz antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: k6oy@aol.com
Message-ID: <19970117071501.CAA01472@ladder01.news.aol.com>
Source record: 98459

No problem. Call Tecom Industries in Chatsworth, Ca @ 818-341-4010. Ask for Tami on x256. They have a meter parabolic dish with about 24 dB gain circular polarization.

607. <<Wind Generation>>

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: dgraham@iccu6.ipswich.gil.com.au
Message-ID: <5bng66$418@gilnt2.ipswich.gil.com.au>
Source record: 98460

Hi all

Would anyone have info or a site I can view on how to build a small
wind generator for a low key radio system operating on a 12 volt battery
system

Darryl
Ipswich Central Repeater Service
Australia

608. Re: help with MC1350

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <32DF4FBF.20B1@mwt.net>
Source record: 98461

Zack Clobes wrote:
>
> I'm working on a 20M SSB receiver and I'm working on the IF amplifier.
> I chose to use the mc1350 because of it's simplicity. I built a circuit
> that used a capacitor coupling on the input and the output came out on
> pin 1, through a xformer, and to the +vcc. I was unable to get the
> amplifier to amplify ... CUT HERE SO MY NNTP SERVER WILL ACCEPT THE REPLY!!
>
> --
> 73's de Zack, W0ZC
>
> zclobes@southwind.net
> http://www2.southwind.net/~zclobes/zackc.html

I haven't played with the 1350 for quite a while, but concerning the 1K
resistor going from the output pin to Vcc...it looks like that, but
thinking in terms of AC, the "top" end of the 1K will actually be at
ground potential due to the large filter capacitors in the power supply.
Remember, a capacitor looks like a "short" to AC, hence, electrically
the Vcc end of the 1k IS grounded, so my next question is: Do you have a
electrolytic capacitor from Vcc to ground (even if you are running this
from a battery!) ???

If I can be of further help...let me know.
73, Scott, N0EDV

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

609. Re: soldering iron tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970117032801.WAA22611@ladder01.news.aol.com>
Source record: 98462

In article <Pine.SUN.3.94.970116213846.1847A-100000@polaris>,
sw1gak@polaris.mindport.NET (Spencer Trombly) writes:

>Does anybody know of any problems I may have using the brass tip in place
>of the iron clad copper tip?
>
>

I suspect the flux will quickly errode away the brass. Other than
that you should be all set.

Pete

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

610. How to couple rx & tx to antenna ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: esies@mxsb30.ms.philips.nl
Message-ID: <5bnn7f$icj@news.best.ms.philips.com>
Source record: 98463

Hello,
For a so called 'multiple choice system' I have to make wireless (433.9MHz rf) data links. I plan to use those commercially available short range modules.

The system is based on a single master (a PC) and multiple slaves (the response button boxes). Each unit has a half duplex rf link, consisting of a small (ca. 0.1 mW) transmitter and a receiver (either a superreg, or a single conversion superhet in case of AM transmission, for FM the receiver is a double conversion superhet).

The integrated FM transceivers incorporate a kind of rx/tx switch, the individual transmitter and receiver modules don't. What are the possibilities of some passive splitter, anyone wants to share experience ?

Best regards, Erik Sies
esies@best.ms.philips.com

611. TX ATU for 10/11m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: Bowes@CEU
Message-ID: <Bowes.33.000EFEE9@CEU>
Source record: 98464

Dear all,

I'm wondering if anyone can help me attempt to build a 10/11m TX ATU. Has anyone done this with any level of success ??? I have ideas about how to go about doing it but small details are missing like what variable capacitor arrangement should be used and to what capacitance levels, MUST wide spaced capacitors be used for TX etc etc etc. Any hints, tips or advice would brilliant help.

Thanks alot for your time !

Jonathan
****
Jonathan Bowes Czech Ecological Institute
Environmental Scientist & GIS specialist Kaplanova 1931 / 1
E-mail: Bowes@ceu.cz Prague - 4 Chodov
Institute web page: www.ceu.cz 143 00
Ministry of Environment: www.env.cz Czech Republic
Tel: (00 42 2) 67910786
****

612. Ten-Tec Omni-A Series B Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: drallen@prairienet.org
Message-ID: <5bo8qa$o7r@vixen.cso.uiuc.edu>
Source record: 98465

The Omni Series B had a receive only 10MHz position as well as a AUX position in the original design. In previous years, Ten-Tec would convert the two bands for transmit capability on 10MHz and set up the AUX position for receive/transmit on 18MHz. Because of the age of the rig, they no longer offer this service.

Does anyone have info on homebrewing/winding the necessary toroids in the BPF and LPF sections of the Omni and the changes required to the Osc-Mixer board for the above bands. Obviously, correct xtals and some wiring jumpers have to be installed on the osc-mixer board, but any info on this would be helpful.

Tnx,

Don Allen W9CW (Ex-N9ALK)

--

613. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan17.160506.13906@ke4zv.atl.ga.us>
Source record: 98466

In article <32DEA462.6A97@arrl.org> Jon Bloom <jbloom@arrl.org> writes:
[snip]
>browsers. Another is that HTML doesn't give you a lot of page-layout
>control. It leaves a lot up to the browser, and not all browsers work
>quite the same. By the way, "everyone" doesn't feel comfortable with a
>browser. Believe it or not, there are still quite a few people who are
>equipped with a computer but don't browse the Web!

Well, I'm one who would prefer to modify page layout, fonts, and
colors to fit my display, so HTML is a plus for me. I want to be able
to comfortably view the text whether I'm using my PDA, my laptop, or
my 17 inch SVGA display, or a subwindow on any of them, but I addressed
that in the previous message. As for people who aren't familiar with the
browser metaphor, if they follow the Microsoft path in OSs, they'll have
to learn. The next versions of Microsoft OSs are going to use the browser
metaphor *as the desktop*, according to a Microsoft press release.

>Which brings up the question: How much compromise in functionality
>should we allow in order to achieve multi-platform operation? When one
>platform is by far the dominant one in use, it's not unreasonable to
>answer that question: "Not much compromise." Of course, if you're not
>using the dominant platform, that's not a satisfying answer. Believe me,
>I understand that. We'll keep evaluating the possible solutions to
>multi-platform support that emerge.

If things develop as expected, in a short time HTML will be the default
browseable text format on all platforms, and the Java VM will be the default
platform regardless of what underlying hardware or program loader the user
may be running. Sun is pushing this, Microsoft has signed on board (with their
usual non-standard modifications), Apple has agreed, and the other players,
notably the major application software vendors, are lining up to follow the
crowd.

With the advent of JIT compilation, there isn't even a significant
performance penalty to running on a virtual machine. And this scheme
will be transparently network aware, regardless of the mix of platforms
on the network. It won't matter if the client is on your machine or
elsewhere on the network, access to your screen through your server
will be the same in every case. X Windows brought that partially to
unix some years ago, the browser metaphor and the Java VM will bring
it to every platform and OS over every sort of network, and on your
local disk.

But even if that vision doesn't materialize, it is becoming increasingly
important to have data in a platform and OS independent format. Even if
the tools you include to manipulate the data are platform or OS specific,

the *data* should not be. So perhaps you'd only include a Windows *viewer* on your CDROM, but the data should be accessable to tools available on other platforms and OSs. PDF shares this independence with HTML, but not *transparently* over networks. That's why I think HTML will win out over things like PDF.

What the Fortune 500 is percieved to want is what drives application developers (and the OS vendors who support them). And what the Fortune 500 says it wants is scalability and transparency over the network. They want all software to be defacto capable of being groupware. They want any application to be able to share and use any other application's data. And the vendors are finally taking these demands seriously.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

614. Re: Help, Acme electric transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: Jim <jstrohm@texas.net>
Message-ID: <5bo7n9$cq0@newsgate.sps.mot.com>
Source record: 98467

With an ohmmeter, figure out how the windings are hooked up.

Then with a 6V transformer, excite the lowest resistance
winding and measure the voltage on the other windings.
Use a voltmeter that's safe to at least 1 KV, and if you've
got one, use an isolation transformer with the 6V transformer.

N6OTQ

615. Re: If I had no life at all.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: "Michael E. Cobb" <cobbco@terranet.net>
Message-ID: <32DFA791.14E1@terranet.net>
Source record: 98468
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

```
Burt Fisher wrote:
>
> If I had no life at all.
> I would debate the merits of code.
>
> #================#=======================================================#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#=======================================================#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #=====================================================================#

Nothing to debate on the code issue. No Coders are "Hamlets", and
recipients of code deferrals are "Squealers".
The End.
```

616. Re: 20 or 40 meter radio for NE602a

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: dwebster@netcom.com
Message-ID: <32df3840.4315665@10.0.2.1>
Source record: 98469

On 16 Jan 1997 08:42:21 GMT, Dennis Chamblee
<dchamblee@intelectinc.com> wrote:

>I would like a schematic for any type 20 or 40 meter radio using the NE602a. Any receiver and or transmitter. thanks

Look at the NORCAL QRP Club homepage:
http://www.fix.net/~jparker/norcal.html

Under projects, they have the 49er which is a very simple 40 meter
transceiver.

617. GE "MLS" Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: Michael Wick <shelby13@mail.bright.net>
Message-ID: <01bc044a$ecf98dc0$1194d4cd@default>
Source record: 98470

Recently inherited a GE "MLS" Series radio. Looks like the year was 1988. It's a two channel business radio set for 151.805.

Anybody aware of mods available to convert this into a 2-meter packet station?

Please post mods here or to: shelby13@bright.net

Thanks for any information.

618. Re: Help, Acme electric transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: gsparks@ix.netcom.com
Message-ID: <5bojg8$6f3@dfw-ixnews7.ix.netcom.com>
Source record: 98471

I'm not familiar with this transformer, but I have figured out the ratings of many using the following method.

take an ohm meter and find all the taps with continuity, and write down their resistance. Find the pair with the highest ohms, and connect it to preferably a variac, but if not plug it in with a fused line.

Measure the voltage on the taps you found continuity, and then determine the ratios of the taps to each other. What you probably have is a power transformer with taps for 125v, 120v, 115v, 110v 105v, and then a couple of centertapped secondaries.

The reason I always power the highest resistance is if it is a HV transformer you don't have 1000volts or so floating around. I also have seen people connect the 115v on the 125 to 120 volt tap of the primary, quite spetacular results.

Good Luck

Glenn Sparks KI5GY

In <nbrown-1701971956030001@wh18-4.wave.co.nz> nbrown@whispa.co.nz (Neil brown) writes:
>
>I have one huge transformer from Acme electric
>
>Markings on it are
>
>T-T-65619
>EIA-4 13-7246
>5170869
>E.C. 715513
>
>If you know what this is and what primaries and secondaries are please
>E-mail me. I was told it is a high current low voltage tranformer but
that
>is only a few of the windings, and this thing has some twenty or so
>terminals on it!
>
>regards
>Neil

619. Re: 2 M CW QRP Xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970117184201.NAA21799@ladder01.news.aol.com>
Source record: 98472

Hi --

Me too. Would also be interested in finding someone interested in
authoring a construction article for a similar 2-M project for CW or SSB.

Rick K1BQT

620. FS: HP141T Spectrum Analyzer & Tek Oscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: ylshih@alumnae.caltech.edu
Message-ID: <5bomcg$ksq@gap.cco.caltech.edu>
Source record: 98473

Trying to upgrade my home test bench. I have the following test
equipment for sale:

VHF/UHF band spectrum analyzer - $1700

HP141T Spectrum Analyzer System (Brand new storage tube - perfect)
HP 8552B - IF section plug-in
HP 8555A - 10 MHz to 18GHz plug-in (40 GHz w/ external mixers)
HP 8445B - 10 MHz to 18GHz Tracking Preselector
includes all manuals and calibration in past year

Audio band plug-in - $300

8556A - 20 Hz to 300 KHz plug-in
(w/ built-in tracking generator)

HF Band plug-in/tracking generator - $500

HP 8553B - 1 KHz to 110 MHz RF plug-in for HP141T
HP 8443A - 1 KHz to 110 MHz Tracking Generator/Counter for 8553B
includes manual for 8553B and calibration in past year

All fully functional - in fact most the above is also recently
calibrated as well as the new storage tube. I will make a package
deal of the whole system, which will cover spectrum analysis from
20 Hz to 40 GHz for a total price of $2250, an additional 10%. I
would prefer to sell the whole package, so offers for pieces will
be held temporarily.

Tektronix 2246A 100 MHz Oscilloscope - $1100

Recent Tek model 4 channel scope with on-screen cursors,
digital voltmeter, auto-calibration, setup memory, 2 probes,
almost perfect condition.

Yin Shih, (818)351-5493
ylshih@alumni.caltech.edu

621. Re: What are tiny tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: Roger Basford <Basford@g3vkm.demon.co.uk>
Message-ID: <JP5LBAA7W83yEwIi@g3vkm.demon.co.uk>
Source record: 98474
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <n7ws.232.0015B770@azstarnet.com>, Wes Stewart
<n7ws@azstarnet.com> writes
>
>>Steve McAllister wrote:
>>>
>>> I'm fairly new to working with vacuum tube radios. Recently, I bought
>>> box of tubes to use and there were about 60-70 tiny little tubes --
>>> about 5/16 - 3/8" in diameter and about 1 - 1 1/4" long. Some had
>>> regular pins coming off of the bottom, but most have insulated wire,
>>> about an inclh long. Some of the numbers are: JG-6021, JG-6111,
>>> AF-5840, JG-5896, 5641, JHS-5977, AF-5636, ...
>>>
>>> Are these "pencil tubes"? What were these little guys used for?
>>> Portable electronics? Do they have any practical use now?
>>>
>>> Thanks and happy new year!
>>> Steve
>
>The first air-to-air missile, the Falcon, was full of them. They were held
>onto circuit boards with springy metal clips (similar to large fuse clips) and
>hard-wired in.
>
Over here in the UK they were used in hearing aids, military radios and
also in the HIFIX navigation system which operated on 160 metres.

Cheers,

G3VKM

////////////////////////////////////
* e-mail: Basford@g3vkm.demon.co.uk *
////////////////////////////////////

622. Re: 3-500z help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1701971153030001@news.vcnet.com>
Source record: 98475

In article <19970117005901.TAA16538@ladder01.news.aol.com>, w8pu@aol.com (W8PU) wrote:

> I have a first generation Prime Industries AL80 amplifier and I would like
> to know just what is the max current that should be applied to the single
> 3-500z grid. Also what is the max key down plate current. The manual
> suggests no more than 100 watts input but this amp will put out 700 watts
> with as little as 60 watts and 150 mils on the plate. This is approx a KW
> input if the amp's meter is accurrate. This amp will do almost 900 watts
> if pushed to the 100 watt max input suggested but the grid current is
> closer to 200 mils or more. I use this amp for SSB mostly and I am more
> interested in the tube's life than an extra 100 watts or so as it
> realistically is not going to make my signal any better.
>

The max. anode/plate I rating is 400mA according to Eimac. No maximum grid current is specified. The typical drive power varies with anode supply V. More V means less drive power to obtain 400mA of anode current. At 3kV, somewhere around 65w will produce 400mA of anode current. If a healthy 3-500Z is driven to more than about 420mA, distortion increases rapidly. Some, IMO unethical, manufacturers of single 3-500Z amplifiers claim that it's okay to drive a 3-500Z to more than 500mA. With 100w of drive power, such currents are possible, but the signal will be severely distorted, and splatter on adjacent frequencies will result. By placing approximately 20 ohms in series with the cathode DC blocking capacitor, to provide RF negative feedback, a 3-500Z is harder to overdrive with the typical exciter.

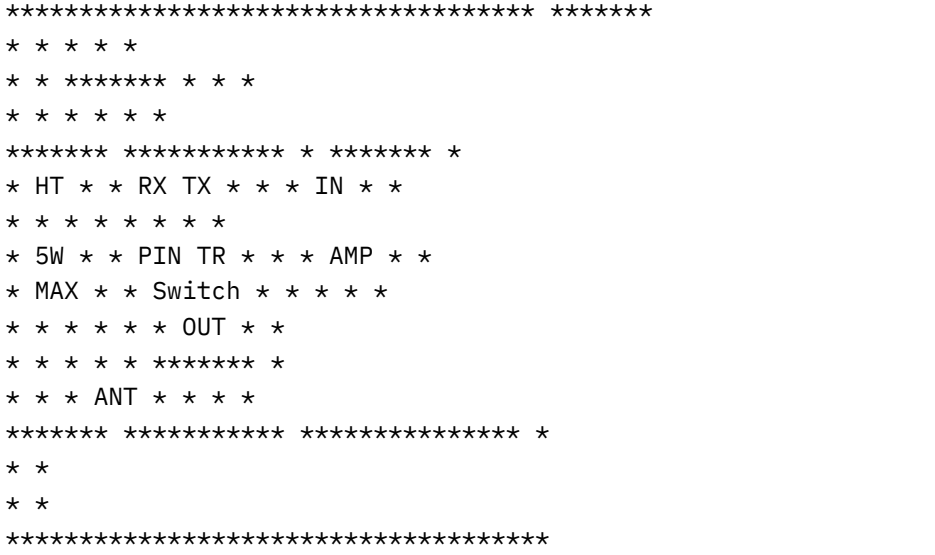
What does the AL-80 owner's manual say about 'plate' current, Gary?

--
--Rich-- ag6k, 805-386-3734

623. Can I do this? (TR hookup)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: JOHNWHITE@gnn.com
Message-ID: <5bnv5c$l48@news-e2b.gnn.com>
Source record: 98476

I am constructing a 2M amp (less than 50 Watts out) and want to know if I can connect my PIN diode TR switch this way:



This setup uses only one PIN diode TR switch. Points of concern are:

1) Received RF is present at amp input during receive. Shouldn't be enough to turn on amp though. If it will turn the amp on; I can slightly attenuate the RF going to the amp input since I don't need all 5 Watts to drive the amp, thus reducing RX RF at the amp input to a low enough level.

2) 5 Watts max output from HT is present at RX connection of PIN diode TR switch during transmit. Assuming that it can handle 5 Watts RF there, that shouldn't be a problem.

3) Am I out of my mind?!

624. Re: HF and VHF kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: kc5ng@dlep1.itg.ti.com
Message-ID: <5bot0n$3jh@sf18.dseg.ti.com>
Source record: 98477

In article <32DF1686.6ECA@asu.edu>, will.white@asu.edu says...
>
>Where are some good sources of HF and VHF solid state kits? I am in
>the PHX, AZ area. Thanks.
>
>--Will

Ten-Tec has some -- http://www.tentec.com

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

625. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1701971615270001@news.vcnet.com>
Source record: 98478

In article <measures-1601970917370001@port17.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) wrote:

...snip...

> Here's a clip from an e-mail I recently
> received from an AL-80 owner who reportedly had two bandswitches fail.

> "Hi Rich: Sorry for the delay but we were out of town. I am sending
> you 2 sets of toasted AL-80A bandswitches. The first time it arc'ed over,
> I had no idea what the problem was. Since I only used it on 75 meters, I
> thought it had wimpy bandswitch wafers in it and that was the problem. I
> then soldered the bandswitch in the 75 meter position and of course then
> when it arc'ed it mad more of a mess than the first time. I had a
> chance to put your suppression kit in and what a difference. You of
> course knew this would be the result, but I am most pleasantly surprised.
> The amp tunes up nice and smooth now with no crackling and popping
> sounds emanating from inside......."

> When Rick's 'toasted' AL-80 bandswitches arrive, I will post photographs
> of them on the Web for all to see. ....Once again, Mr. Rauch has
> been proved to be correct---i.e., the tune capacitor in the AL-80 has no
> resonances around 160MHz that could cause it to arc over from a VHF
> parasitic oscillation. Congrats, Tom.
>
Rick's toasted AL-80 bandswitches arrived today. I photographed them,
saved the images as JPEG files, and made them available on my Web site at

http://www.vcnet.com/measures/

The images are available at Figures 15a and 15b.

BTW, replacement AL-80 bandswitches cost $58.22 (inv #02745).

--
--Rich-- ag6k, 805-386-3734

626. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1701971803350001@news.vcnet.com>
Source record: 98479

In article <19970115191100.OAA14913@ladder01.news.aol.com>, w8jitom@aol.com wrote:
...snip...
> 2.) The tale about Marvin Born. Rich said Marvin measured parasitics in an
> AL1500. Turns out it wasn't even an AL1500, it was a dual 8877 PA built on
> a old empty prototype chassis. When I talked to Marvin he said he was
> positive Rich knew he was talking about a west coast manufactured 3CX3000
> PA, and not a AL-1500.
>
I just had a conversation with Marvin Born. He said the amplifier in question was built on an AL1200 chassis, had two 8877s, now has one 8877, and uses a low VHF Q parasitic suppressor intended for an AL-1500.

Mr. Rauch is correct in stating that Marvin's spectum analyzer detected a parasitic-oscillation (at 78MHz) in a Create 3CX3000A7 g-g amplifier that had vapourized various bandswith contacts and destroyed its VHF parasitic suppressor. Marvin said he replaced the bandswitch, and replaced the factory-stock parasitic suppressor with an all-nichrome, resistorless, low VHF Q parasitic suppressor. No further arcing problems have been reported.

Congrats, Tom

--
--Rich-- ag6k, 805-386-3734

627. Steve Fossett's balloon trip?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <5bp29s$c1p$1@excalibur.flash.net>
Source record: 98480

Does anybody here know if Steve Fossett (the guy from St. Lousi) has
hf in his balloon? If so, what freq is he on? I remember listening
to Dick Rutan and Jeanna Yeager on their trip around the world, maybe
we can do the same with the balloon.
73,
Kerry
kmiller@flash.net

628. Re: Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: WA8GHZ /5 Jack Dougherty <jdougher@wt.net>
Message-ID: <32E07DD8.11D7@wt.net>
Source record: 98481

My first rig in '66 was a used Heath DX-35 that had a grid-modulated 6146 final setup (essentially a DX-20 with grid modulation added for AM). It worked, and was cheap, but the modulation was never equal to a plate modulated setup - my audio was always weak, but the rig was $20. used and was all I could afford. Still, it was a compromise sollution at the time to save transformer cost, etc.

--
WA8GHZ /5 / === === o === o === o o === === o
Jack /Houston / "I know the guy who built my radio."

629. Dipswitch ERS2240 settsatelite

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: scaruso@freenet.columbus.oh.us
Message-ID: <5bpatt$jnu@login.freenet.columbus.oh.us>
Source record: 98482

```
[ Article crossposted from rec.radio.amateur.space ]
[ Author was Stephen Caruso ]
[ Posted on 11 Jan 1997 22:03:12 -0500 ]

looking for dipswitch settings for satelite reveiver ers2240 made by DRAKE.
--
In Italy, a caruso is a little boy that works in the sulphur mine.
VVVVVVVVVVVVVVVVVVV
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

--
In Italy, a caruso is a little boy that works in the sulphur mine.
VVVVVVVVVVVVVVVVVVV
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

630. Any info on Homebrew repeater controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: dyee944658@aol.com
Message-ID: <19970117201201.PAA25829@ladder01.news.aol.com>
Source record: 98483

Anyone have any info on homebrewing a repeater controller?
Only need basic features: CW ID, time out timer, courtesy tone and
squelch tail.

Please contact me if you can share some info.

Thanks

631. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-17 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1701971340060001@news.vcnet.com>
Source record: 98484

In article <32dde1d8.272258750@qwknews.com>, saw@camalott.com (Alan) wrote:

> n7ws@azstarnet.com (Wes Stewart) wrote:
>
> >In article <5b4umk$nd9$1@nadine.teleport.com> w7el@teleport.com (Roy Lewallen) writes:
> >>From: w7el@teleport.com (Roy Lewallen)
> >>Subject: Re: Silver salts & urban legends
> >>Date: Fri, 10 Jan 97 08:27:54 GMT
> >>
I found a General Electric 25uH roller-L in my toolshed, in which i store ammonium sulphate fertilizer among other things. This roller-L was made during WWII, when there was a shortage of copper. The coil wire material is silver instead of silver plated copper. A layer of black silver sulphide had formed on the wire during the past 12 years. I did not clean the wire.
I evaluated the roller to coil contact resistance with a current of 2A. The source impedance was 4 ohms. I measured the voltage-drop between the coil and the roller with sharp tipped probes so that I would penetrate to bare metal. This voltage averaged about 80mV after several roller passes. At numerous points on the coil, some kind of breakdown effect appeared to be taking place--i.e., no current initially flowed, but current began flowing almost immediately. After several roller passes, the coil to roller voltage-drop remained fairly constant.

--
--Rich-- ag6k, 805-386-3734

632. Re: MLA-2500 P/S caps?? 150 uF @ 450V??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5bpb26$2dbi$1@news-s01.ny.us.ibm.net>
Source record: 98485
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

In message <measures-1501971148330001@port17.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures)Wed, 15 Jan 1997 11:48:33 -0800
writes:
:>
:>My mla2500 roadmap says these 5 caps have a rating of 500v. I don't know
:>of any source of 500v electrolytics.

The MLA-2500 has had several values of filter capacitors over time.

My original schematic shows the six (6) power supply filter capacitors
as
150 uF at 450 Volts. At some time there was a note in the parts list
changing the capacitor values to 100 uF at 500 volts. My spare parts
stock contains a couple of Mallory FP-155, 125 uF at 450 volt
capacitors,
that were left over from a "minimum quantity" purchase when I had to
replace the caps several years ago.

In any case, since the MLA-2500 uses a voltage doubler power supply, any
redesigned filter band will require an EVEN number of capacitors ... six
or eight, not five or seven.

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==

633. Re: QST on CD BEWARE!!!!OS Whining

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5bpb2s$2dbi$2@news-s01.ny.us.ibm.net>
Source record: 98486

In message <01bc03e6$a0cecc80$a3d879a8@soho> - "Mark Bryant"
<bryant@sohobusiness.com> writes:
:>
:>Maybe I can just whine at my OS or car decisions and hope that the world
:>will drop everything and accommodate my special desires and needs. By the
:>way I also used OS/2 until market conditions required me to switch to
:>Windows for practical reasons. Should I whine about that also? Maybe I
:>should just be adult enough to accept the results of my decisions.

And, just perhaps, the general population should require government to stop spending tax money on programs and regulations that benefit a very few. We should pass laws banning closed captioning and/or signed TV programs. There should be laws against special/preferential parking for the handicapped. Wheelchair ramps, wide doors, and other "special" facilities should similarly be banned because they increase the cost of product to the rest of "normal" society.

To use your automobile analogy ... highways costs are greatly inflated by the cost of roadbeds designed to support the weight of heavy trucks and overpasses high enough to permit tall vehicles to pass under them. You and I pay those increased costs every time we fill our gas tanks.

QST is available on audio tape and by braile for the blind ... I would not doubt that some of the cost (even if it is only the cost of shipping copy) comes from the League's general fund budget. Perhaps people with minority sensory abilities should not expect the general membership to spend funds to support them either.

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==

634. Re: soldering iron tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan18.021219.16082@ke4zv.atl.ga.us>
Source record: 98487

In article <Pine.SUN.3.94.970116213846.1847A-100000@polaris> sw1gak@polaris.mindport.NET (Spencer Trombly) writes:
>I have a pace solder station that needs new tips for the soldering
>iron. Ordered some from Jensen tools and got the wrong ones. Returned them
>with no hassle.
>Needing a new tip in a hurry I made 2. One from .125 stainless welding rod
>and one from .125 brass brazing rod. The stainless tip does't transfer
>heat very well. The brass tip works very well.
>
>Does anybody know of any problems I may have using the brass tip in place
>of the iron clad copper tip?
>
>I tinned both tips using duzall flux and used anti-seize compound.

The brass tip will need more frequent tinning, and its life will be
shorter than iron plated copper, but otherwise it should be fine.

Gary

--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

635. $$$ CASH WITH YOUR PC - YOU MUST READ THIS $$$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: <>
Message-ID: <joernall-1701972145580001@smithers-37.netshop.net>
Source record: 98488
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

$$$$ This is what many people call A $$ scam but, IT WORKS you can't lose!!!!!!$$$$

Take five minutes to read this and it WILL change your life.

The Internet has grown tremendously. It doubles in size every 4 months. think about it. You see those 'Make.Money.Fast' posts more and more. That's ... because it WORKS ! So I thought, all those new users might make it work. And I decided to try it out, a few months ago. Besides, whats $5.00!
So I sent in my money and posted.Everyone was calling it a scam, but there are SO many new users!

Well, two weeks later, I began recieving bucks in the mail! I couldn't believe it! Not just a little, I mean big bucks! At first only a few hundred dollars, then a week later, a couple of thousand, the By the end of the fourth week, I had recieved nearly $47,000.00. It came from all over the world. And every bit of it perfectly legal and on the up and up. I've been able to pay off all my bills and still had enough left over for a nice vacation for me and my family.

Not only does it work for me, it works for other folks as well. Markus Valppu says he made $57,883 in four weeks. Dave Manning claims he made $53,664 in the same amount of time. Dan Shepstone says it was only $17,000 for him. Do I know these folks? No, but when I read how they say they did it, it made sense to me. Enough sense that I'm taking this serious.

STEP 1.

Invest your $5 by writing your name and address on five seperate pieces of paper along with the words: "PLEASE ADD ME TO YOUR MAILING LIST." (In this way, you're not just sending a dollar to someone; you're paying for a legitimate service.) Fold a $1 bill inside each paper, and mail them to the folowing adresses:

1-M Palmer Gilfach Goch,Blaenpenal,Aberystwyth
SY23 4TN ,United Kingdom

2-T.Toole box1138,Valemount B.C
Canada VOE-2ZO

3-Vitor Schlrder de Borba
Av Lucas de olivieira 2280 ap 404
90460-000 Porto Alegre/RS Brasil

4-Evert jan Benz
nijensteinheerd 58
9736 TD Groningen
Netherlands

5-J.J. Alles
RR 2 Site 81 Comp 6
Smithers, B.C.
V0J 2N0
Canada

STEP 2.

Now remove the top name from the list, and move the
other names up.This way, #5 becomes #4 and so on.
Put your name in as the fifth one on the list.

STEP 3.

Post the article to at least 250 newsgroups. There are at
least 19000 newsgroups at any given moment in time.
Try posting to as many newsgroups as you can. Remember
the more groups you post to, the more people will see your
article and send you cash!

STEP 4.

You are now in business for yourself, and should start seeing
returns within 7 to 14 days! Remember, the Internet is new
and huge. There is no way you can lose.

Now here is how and why this system works:

Out of every block of 250 posts I made, I got back 5 responses.
Yes, thats right,only 5. You make $5.00 in cash, not checks or
money orders, but real cash with your name at #5.

Each additional person who sent you $1.00 now also makes 250
additional postings with your name at #4, 1000 postings. On
average then, 50 people will send you $1.00 with your name at
#4,....$50.00 in your pocket!

Now these 50 new people will make 250 postings each with your
name at #3 or 10,000 postings. Average return, 500 people= $500.
They make 250 postings each with your name at #2= 100,000
postings=5000 returns at $1.00 each=$5,000.00 in cash!

Finally, 5,000 people make 250 postings each with your name at
#1 and you get a return of $60,000 before your name drops off
the list.And that's only if everyone down the line makes only 250
postings each! Your total income for this one cycle is $55,000.

From time to time when you see your name is no longer on the list,
you take the latest posting you can find and start all over again.

The end result depends on you. You must follow through
and repost this article everywhere you can think of.
The more postings you make, the more cash ends up in
your mailbox. It's too easy and too cheap to pass up!!!

So thats it. Pretty simple sounding stuff, huh? But believe me, it
works. There are millions of people surfing the net every day, all
day, all over the world. And 100,000 new people get on the net
every day. You know that, you've seen the stories in the paper.
So, my friend, read and follow the simple instructions and play
fair. Thats the key, and thats all there is to it. Print this out
right now so you can refer back to this article easily. Try to keep
an eye on all the postings you made to make sure everyone is
playing fairly. You know where your name should be.

If you're really not sure or still think this can't be
for real, then don't do it. But please print this article and pass
it along to someone you know who really needs the bucks, and see
what happens.
I've been perusing usenet for a few months now and I've seen these ads
appear very often. Like you, I thought that these postings were a
complete annoyance and a waste of time. But after reading dozens of them, I
decide 'For the sake of only 5 dollars I'll give it a try'. But the
reality is that it DOES work and you are guaranteed to receive large
sums of money, legally.
Make sure that you put your correct mailing address,
especially if you're from another country as some people have never sent
mail out of the country and might not know how. You may alter this
article
if necessary, editing what you need to edit.

REMEMBER....HONESTY IS THE BEST POLICY.YOU DON'T
NEED TO CHEAT THE BASIC IDEA TO MAKE THE BUCKS!
GOOD LUCK TO ALL, AND PLEASE PLAY FAIR AND YOU WILL
WIN AND MAKE SOME REAL INSTANT FREE CASH!

*** By the way, if you try to deceive people by posting the messages
with your name in the list and not sending the bucks to the people
already included, you will not get much. I know someone who did this
and only got about $150 (and that's after two months). Then he sent
the 5 bills, people added him to their lists, and in 4-5 weeks he had
over $10,000!

TRY IT AND YOU'LL BE HAPPY!!! :o) !!!!!!!!!!

INSTRUCTIONS ON HOW TO POST USING NETSCAPE 3.0

1. Click on any newsgroup like you usually would, then click on
"TO:NEWS" in upper right hand corner. This will bring up a message box
to type this article in.

2. Leave the message box like it is, don't maximize it. In Subject
box type something flashy like "$$$CASH READ HERE$$$".

3. Tab once and you are ready to type in the body of the box. Retype this article but with your name inserted in slot #5 and the others moved up as I directed. Remember the #1 in this article will be removed in yours.

S. Pypke tells people to retype the article. This may not be necessary. Try this: highlight the article with a mouse (or click edit and click select all). Then, click edit, click copy. Then, go to notepad, or Word, or WordPad, or Wordperfect. Click paste. Save it from there. To post, highlight from notepad. Click copy. Go to the mail section to post, click paste. Go on from there. This will make it easier.

4. When you are done retyping this whole article with the proper changes, click on FILE in this message box (it is right above SEND). Click on SAVE AS under FILE (make sure your in the newsgroup message window, not where it says Netscape News) Save your file as a text file to your C: or A: drive. DO NOT SEND OR POST YOUR ARTICLE UNTIL YOU DO THIS!!! Once saved move to next step.

5. To post to at least 200 newsgroups do the following. You can post to more which will bring you more money but 200 is the bare minimum. Go to a newsgroup you want to post in. Click on "TO NEWS". Write your subject just like you did when you retypd this article. Hit tab once. Now click ATTACHMENT.
Another box comes up. Find your file where you saved it. Highlight the file and click "OPEN". Now click OK. If you did this right you should see the file name in the Attachments box in shaded letters.

6. NOW JUST CLICK SEND. Do this to at least 200 newsgroups (there are over 18,000) Each time it takes no more than 30 seconds so once you have retyped the article its easy.

INSRTRUCTIONS FOR EXPLORER

1. Holding down the left mouse button, highlight this article. Then press "CRTL" key and "C" at same time to copy this article.

2. Print this article for reference.

3. Go to Newsgroups and press "POST AN ARTICLE", a window will open. Type your headline in the subject area and click in the large window below.

4. Press "CRTL" and "V" and the article will be placed in the window. If you want to edit the article, do so and then highlight and copy it again. Now every time you want to post the article in a new newsgroup just do the "CRTL" and "V" command and press Post"

636. Re: Electro Encephalo Graphy (EEG) info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: tmahanna@ziplink.net
Message-ID: <5bpq91$730@zip1.ziplink.net>
Source record: 98489
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew,sci.engr.biomed

```
: lbliao wrote:
: > I am looking for any book or papers that talk about the electro enchphalo
: > graphy. Specifically, I am looking for information of typical EEG, the
: > voltage levels involved, the frequency range, and how to pick up the
: > signal. If the signal can be displayed on an oscilloscope?

Sure! Just boost it with a high gain amp. A differential amp with a gain
of 100,000 or so and a frequency response of DC-150 Hz (a couple of
op-amps will do it). Keep the input leads short to avoid picking up 60Hz.

Specs on waves 10-50uV 1-150 Hz. Go to the library. There is lots of
stuff there.

-Tom
```

637. Re: ATU ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: Don Wittlich <dwittlic@apci.net>
Message-ID: <32E0974E.47E0@apci.net>
Source record: 98490

w8jitom@aol.com wrote:

{some text deleted}
> Roller inductors "stink" in applications wher high Q is required, but
> people still love them. Plus the thing to remember is it isn't the self Q
> of the inductor that is important in most tuners, it is the lack of enough
> capacitance range to keep the loaded Q low and efficiency high.
>
{some more text deleted}

> > Small-inductance coils should have
> >fat tubing or wide strap for the conductors, whch you don't get with
> >a roller inductor.
>
> Certainly not flat conductors! Flat wide conductors force current out to
> the edges, the center area of the strip carries almost no current. Not
> only that, the useless surface area adds needless undesired capacitance.

Tom: given that fact about flat conductors, may I ask your opinion of
the ribbon style variable inductor used in old military auto tuners, the
style where the ribbon unwinds off of a brass drum onto a ceramic
form? At least there is no roller with a point contact against a wire.
(although the end shaft contacts are fairly small).

I would also like to ask you about the common practice of connecting a
roller inductor so that as it varies, a varying number of the turns
become a sort of shorted secondary winding in an autotransformer.
Doesn't this destroy the Q of the system too? I heard that the reason
for this configuration of connection is to avoid a high voltage
situation. Is that true, or is it to make tuning adjustment less
critical?

--Don Wittlich WN9V

638. Re: PC lpt1 interface info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: david@comms.ee.man.ac.uk
Message-ID: <5bq4q4$mgk@yama.mcc.ac.uk>
Source record: 98491

hamster (hamster@loose.org) wrote:
: I would like to interface a DTMF decoder chip, M8870, to my LPT1. Has
: anyone done this and have info or ideas?

Yes: http://home.aol.com/pdrunen

David G0JVY

639. CD-Recordable Media at Low Prices !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: TCCS
Message-ID: <5bq6o2$6mh@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 98492

We have the following CD-R media for sale.

Brand: Pioneer
Type: Printable Media (Surface is blank for printing or labels)
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.99
Minimum Order: 10

Brand: Pioneer
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Maxell
Type: Gold on Gold
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: TDK
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Hewlett Packard
Type Gold on Gold
Size: 74 min (650 mb)
Price: 7.15
Minimum Order: 10
Lifetime Warranty

The Copy Cat Shop has all your CD duplication, replication, recorders,
software, and media needs.

If you have any questions or comments feel free to call.

Cordially,

The Copy Cat Shop
213-650-1680
213-650-9110 Fax

640. 144MHZ MGF1302 preamp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: Stephen Henry <sthenry@infogo.com>
Message-ID: <32E0A085.72BA@infogo.com>
Source record: 98493

Does ne1 have a schematic of an MGF1302 144mhz preamp that uses a negative bias supply. The data sheet of the device shows that the lowest NF is obtained at Igs=10ma. All of the preamps I have seen that use the MGF1302 has 0 bias voltage.

641. Re: Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: arm@intr.net
Message-ID: <5bphjh$6sd@news.intr.net>
Source record: 98494

Monty Wilson (nospam@see.signature.part) wrote:
: I'm interested in hearing from anyone who has built
: a screen grid modulated HF transmitter.

: --
: ....Monty N5NVM.
: mwilson @ flex.net (with spaces deleted)

My Knight Kit T-50 transmitter had an optional screen-grid
modulator. Maybe you can find a schemac for that.

--
Andy Mitz (WA3LTJ)
arm@helix.nih.gov

642. Help With VHF Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: rrives <rrives@mail.netdoor.com>
Message-ID: <5bqm43$lei@axe.netdoor.com>
Source record: 98495

We are tring to set up a set of old duplexer(we have no paper work on them). It is a six cavitity set, three band pass and three band reject. the cable harnness was not attached to the cavities when we got them. We hook the three reject cavities on the reciever and tuned them to reject the transmitt freq(146.97).we hook the threee band pass on the transmitter and tuned them to pass the transmitt freq.(146.97) We are get about 9 to 12 db of lose on the recieve freq(146.37) thur the band reject filters . What did we do wrong ???????

643. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970118154700.KAA06703@ladder01.news.aol.com>
Source record: 98496

In article <measures-ya02408000R1701971803350001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>> 2.) The tale about Marvin Born. Rich said Marvin measured parasitics in
an
>> AL1500. Turns out it wasn't even an AL1500, it was a dual 8877 PA built
on
>> a old empty prototype chassis. When I talked to Marvin he said he was
>> positive Rich knew he was talking about a west coast manufactured
3CX3000
>> PA, and not a AL-1500.
>>
>I just had a conversation with Marvin Born. He said the amplifier in
>question was built on an AL1200 chassis, had two 8877s, now has one 8877,
>and uses a low VHF Q parasitic suppressor intended for an AL-1500.
>Congrats, Tom

It's not just this time Rich, it's nearly all the time. When your stories
are looked at, they almost always wind up being little tiny threads of
fact woven into big fabrications. It's just an attempt to support your
view of how the world works.

When any person repeatedly posts or distributes factoids that are almost
entirely figments of imagination, he looses all credibility. You've done
that over and over again.
Even when you admit being wrong, you still can't control yourself and
"slip in" another false claim!

Look at a small part of your history on this thread:

If Dave had not corrected you in public about the real cause of his
TL-922's arcing (a bad lightning arrestor), you likely would have posted a
picture of the capacitor on your web page and slammed Kenwood even more
than you have for parasitics. You declared the 922 cap damaged from
parasitics, sent Dave a kit, and almost got away with "another one"
except, before installing the kit, Dave found the problem. (By the way,
that was a problem you said could NEVER occur. You plainly said HF signals
or improper loading or antenna termination could NOT cause a PA to arc.)

Just hours after that, WB8BFS came on the thread and said his 922 arced
from a bad relay.

More recently you declared all amateur PA's poorly designed because they
had no rheostats like commercial transmitters, and declared no proper
engineer would purchase a transmitter without one. Several people rebuked
you for saying that, one of whom is a top notch engineer for a large

commercial BC transmitter manufacturer.

Now you've moved on to the AL-80 or something with more Richard L.
Measures picture "evidence". Once in a while you'll find a sucker who buys into your fantasy, but your days of misleading large numbers of people are over.

73 Tom

644. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970118154700.KAA06708@ladder01.news.aol.com>
Source record: 98497

In article <measures-ya02408000R1701971340060001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

> I evaluated the roller to coil contact resistance with a current of 2A.
>The source impedance was 4 ohms. I measured the voltage-drop between
the
>coil and the roller with sharp tipped probes so that I would penetrate to
>bare metal. This voltage averaged about 80mV after several roller
passes.
>At numerous points on the coil, some kind of breakdown effect appeared to
>be taking place--i.e., no current initially flowed, but current began
>flowing almost immediately. After several roller passes, the coil to
>roller voltage-drop remained fairly constant.

Eight volts at two amperes could easily destroy any resistive layer.

When silver plated relay contacs fail to connect, all that is required is
application of a few volts at a few mA and the contact is "healed". That's
why relay contacts have a minimum current design rating, as well as a
maximum.

If you would have measured the contact resistance with a very low current
very low voltage meter, it would have shown something. You ruined an
excellent opportunity to prove something.

73 Tom

645. Gap, do they still exist ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <32e5f620.3605002@news5.inter.NL.net>
Source record: 98498

I bought a Titan DX II from Gap. In the middle of september 1996 I
erected this antenna but had some problems with the swr on some bands.
I wrote a letter to Gap, after six weeks I got an answer and an other
Cap for the 80 meter band. They gave instructions, but I have still
problems. So they promised to sent an other Cap again, wich was 7 weeks
ago. Until now I received nothing and a letter and several e-mails were
not answered. The PACC contest is coming, then my antenna must be good.
Who has a better address than gap@digital.net, or who can help me in an
other way ?
73 de Bart PA3GGM
In the beginning there was nothing, therefor I'm satisfied now

646. Receiver schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: Andy <muldowne@wilde.oit.umass.edu>
Message-ID: <01bc055c$1e650bc0$51b37780@oit.umass.edu.umass.edu>
Source record: 98499

Hello, I'm looking for a SIMPLE receiver schematic which has a freuqency
set by a crystal in the 40M band. Thanks, KB0MMU

647. Re: ATU ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970118154700.KAA06715@ladder01.news.aol.com>
Source record: 98500

Hi Don,
In article <32E0974E.47E0@apci.net>, Don Wittlich <dwittlic@apci.net>
writes:
>
>Tom: given that fact about flat conductors, may I ask your opinion of
>the ribbon style variable inductor used in old military auto tuners, the
>style where the ribbon unwinds off of a brass drum onto a ceramic
>form? At least there is no roller with a point contact against a wire.
>(although the end shaft contacts are fairly small).

I've never seen one, or measured one, so I can offer no real opinion other
than my earlier general statements about flat conductors.

>I would also like to ask you about the common practice of connecting a
>roller inductor so that as it varies, a varying number of the turns
>become a sort of shorted secondary winding in an autotransformer.
>Doesn't this destroy the Q of the system too? I heard that the reason
>for this configuration of connection is to avoid a high voltage
>situation. Is that true, or is it to make tuning adjustment less
>critical?

Q reduction is often very slight in an air core space wound coil mounted
near a chassis when turns are shorted. If turns are shorted in an optimum
Q coil mounted in an optimum location, Q reduction can be large.

I never short turns in a mobile loading coil, because the ratio of loading
to unloaded Q can sometimes approach unity, I also keep my loading coils
far away from other metallic objects and poor dielectrics.

By the time you get an inductor mounted in place, any Q change caused by
shorting turns is swamped out (or diluted) by the sheet metal and
dielectrics around the inductor. Look at all the stuff around a roller:
The cabinet and chassis, end plates, roller shaft, contact wheel or
slider support rail, rolling or sliding contacts, shaft end contacts,
thick dielectric support bars, etc.

When shorted turns are added to the hodge-podge, little changes.

On the other hand if unused turns are not shorted, series resonances can
absolutely ruin performance.

73 Tom

648. F.S. - Lots of radio tubes...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970118165200.LAA09499@ladder01.news.aol.com>
Source record: 98501

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #110-T.

649. How do i connect my HamCom to my handheld Icom H16T?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: bergum@sn.no
Message-ID: <5br6bf$2a2@frysja.sn.no>
Source record: 98502

How do i connect my HamCom to my handheld Icom H16T?
Do anybody have a shematic? (rx&tx)

650. R.F chokes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: Arthur Moe <kb7ww@transport.com>
Message-ID: <01bc0582$79f02580$6a23a3ce@kb7ww>
Source record: 98503

Can anyone out there help with a source(s) for PI wound chokes
like National R-100, Millen , National R50 , R100, etc

tks
art
KB7WW

651. Ultra mini VHF tx and rx modules web page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: Walter Dunckel <wdunckel@ix.netcom.com>
Message-ID: <32E10559.3D77@ix.netcom.com>
Source record: 98504

Radio Tech manufactures many different kinds of transmitters and receivers.The smallest transmitter measures 30mm x 10mm x4mm(small). Pictures of the devices and more info can be found through a link at:

http://www.netcom.com/~wdunckel/small.html

The 433.92 Mhz "high" power transmitter transmits at 10mW output power and costs about $26.00 . The Receiver module is a little larger and costs about $37 to $42.00 depending on options. The more expensive receiver has a received signal strength indicator.

Walt
KD6VYV

652. CD-R Media for Sale at Good Prices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: "Copy Shop"
Message-ID: <5brj01$f9k@mtinsc01-mgt.ops.worldnet.att.net>
Source record: 98505

We have the following CD-R media for sale.

Brand: Pioneer
Type: Printable Media (Surface is blank for printing or labels)
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.99
Minimum Order: 10

Brand: Pioneer
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Maxell
Type: Gold on Gold
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: TDK
Type: Gold on Green
Size: 74 min (650 mb)
Price: 6.55
Minimum Order: 10

Brand: Hewlett Packard
Type Gold on Gold
Size: 74 min (650 mb)
Price: 7.15
Minimum Order: 10
Lifetime Warranty

The Copy Cat Shop has all your CD duplication, replication, recorders,
software, and media needs.

If you have any questions or comments feel free to call.

Cordially,

The Copy Cat Shop
213-650-1680
213-650-9110 Fax

653. Control via PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: Todd Peterson <elab@netins.net>
Message-ID: <32E14CB2.498C@netins.net>
Source record: 98506

We are pleased to announce that our new application note,
'Device Control via the PC' is finally available.

This application note covers such topics as PC control of lamps and motors
using solid state and mechanical relays, device control using both
BJT and power MOSFET transistors, stepper motor control using a transistor
array IC, as well as PWM motor control using the L293 H-Bridge. Connection
to the PC is made via our inexpensive EDE300 PC Interface IC. Code examples
are also provided.

Feel free to download a copy today; it is available at
http://www.netins.net/showcase/elab in the 'Integrated Circuits' section
under 'EDE300'.

Todd Peterson
E-Lab Digital Engineering, Inc.

P.S. - While you're there, visit our Electronics Resource Directory,
a freely useable directory containing over 500 categorized hot-links of
value to the electronics community.

654. Re: Help With VHF Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: "Christopher (Chris) W. Boone" <cboone@earthlink.net>
Message-ID: <32E19CBA.23FF@earthlink.net>
Source record: 98507

rrives wrote:
>
> We are tring to set up a set of old duplexer(we have no paper work on
> them). It is a six cavitity set, three band pass and three band reject.
> the cable harnness was not attached to the cavities when we got them. We
> hook the three reject cavities on the reciever and tuned them to reject
> the transmitt freq(146.97).we hook the threee band pass on the
> transmitter and tuned them to pass the transmitt freq.(146.97) We are get
> about 9 to 12 db of lose on the recieve freq(146.37) thur the band reject
> filters . What did we do wrong ???????

Are you sure they are band reject and are they set to reject high or low?
Get them hooked to a spectrum analyzer WITH tracking generator and look
at the curve of them in wide more (say +/- 5-10 Mhz from center) it may
tell you something....if the pass looks better on one side than the
other, they may have been built for high pass low reject operation...

Also 3 BP only on the TX side likely will NOT be enough for a 600Khz
split....BP caivites are inherently wide spaced...so use on a narrow
spacing like 600Khz will usually not work....3Mhz or more is best for
BP....You probably need to make two of the TX side BR (notch) and try to
get better rejection there...the TX carrier AND noise should be notched
as much as possible on the rx freq...

73
Chris
WB5ITT

655. Re: POP CORN NOISE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: W Letendre <wjl@ziplink.net>
Message-ID: <32E067D5.4FC0@ziplink.net>
Source record: 98508
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew

lbliao wrote:
>
> I am looking for any book that goes into the details of the popcorn noise
> that supposedly results from the existence of quasi-stable current levels.
> I am not familiar with details, however.
>
> Thanks a lot!
> lbliao

Haven't seen any good references on subject. Have noticed one thing though; just about every kind of electronic amplifier exhibits popcorn noise at low frequency. Tubes do it, FET's, BJT's. Mechanism is different in each case, in each case related to manufacturing defects. Only common feature is sound, and spectrum, which tends to go as 1/f in power.
Was reading IEEE journal a few years back, and saw a paper on chaotic processes. Turns out systems with chaotic dynamics have power spectra that go as... 1/f. Hmmmm.

W Letendre

656. KW 621/721 remote ctrl protocol?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: "Robert R. Koblish" <n3hat@erols.com>
Message-ID: <32E1A937.735C@erols.com>
Source record: 98509
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi,

Can anyone supply the protocol for remotely controlling the Kenwood TM621 / 721 transceivers? Kenwood sold the RC10 remote control, which connects to the 8-pin mic plug and (I assume) controls the radio via serial data on one or more of the mic plug pins. I'd like to build my own remote control.

Any help would be appreciated.

Thanks,
Bob N3HAT
Baltimore

657. electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970118213251.3897A-100000@oso.slonet.org>
Source record: 98510

I have been told to be sure and use electronic grade RTV for long term use in outside antennas in which the exposed ends of coax must be sealed for extended periods. What is this material and where can it be purchased? As a first guess I would think that it is RTV in which a non acedic base is use. If this is true, can any clear RTV be used that does NOT smell like acidic acid (vinegar) when opened? Cliff Buttschardt K7RR

658. Re: Any info on Homebrew repeater controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: Belasius <Belasius@enetis.net>
Message-ID: <32E1A874.144@enetis.net>
Source record: 98511

DYee944658 wrote:
>
> Anyone have any info on homebrewing a repeater controller?
> Only need basic features: CW ID, time out timer, courtesy tone and
> squelch tail.
<snip>

The february '97 issue of QST has an article starting on page 37 that describes such a project. The only [small :)] downside I see is that you either have to buy or program your own microcontroller for the project. I wish I'd seen this article before I bought Spectrum Electronic's "HRC-10 Handheld repeater controller" - although the HRC is a lot easier to program!

73 de Greg, KC7KUP

659. WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-18 00:00:00 UTC
From: "Brian E. Cauchi" <gcauchi@keyworld.net>
Message-ID: <01bc0566$8ad8d340$0100a8c0@mstcp.keyworld.net>
Source record: 98512
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.digital,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radi

Hello...

If you have a RADIO and a SOUND BLASTER (or compatible card) you already have all the hardware necessary to receive WEFAX, FAX, SSTV and RTTY.

You can also transmit monochrome FAX and SSTV, with the current version.

*** Put the power of your 80386, 80486 or Pentium processor to real use ***

The external "decoder" units that are used by conventional users are modelled inside the software. This makes it easy to get started, inexpensive and rids you of the inevitable tangle of wires and boxes of decoders.

Absolutely no external hardware, other than a simple audio lead, is required by FTV. The current version decodes:

WEFAX (from weather satellites, e.g. 137-138 MHz)
HF-FAX (from terrestrial stations)
SSTV (from radio amateurs, e.g. 14.230 MHz)
Baudot (press, naval, weather etc)

Here is a run down of the more interesting features:

(1) It keeps the demodulated signal in memory, so that the signal can be analysed again at a different keying rate or polarity! Garbage can be resampled on the fly, which means that minutes of received signals decoded at the wrong baud rate or keying polarity are recovered, on the fly, while still receiving.

(2) The incoming signal is analysed automatically - standard modes, line rates, baud rates and keying polarity are automatically determined following analysis.

(3) Tuning oscilloscope available at all times, without loss of copy.

(4) Program works in real time.

*** What are you waiting for? Try it now! ***

Take a look at my web site for futher details, from where you can download an evaluation copy, at: http://www.geocities.com/SiliconValley/2504

Be fore warned! A registered copy costs US$ 25, but after all, registered promotes the further development of this and other software while giving you the right to acquire all future versions paying only for delivery

expenses, if any.

Fianlly, just in case some of you have trouble accessing my web site, here is my postal address (if you want a reply, send a self-addressed label and IRC's to cover expenses):
Brian E. Cauchi,
Gawhra, Domenico Cachia Street, Birkirkara BKR06, MALTA.

What can I say? Try it, and may you have as much fun as I am having...
73's from Brian.

660. Re: Need high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: "Keith E. Spainhour" <KSpainhour@wilkes.net>
Message-ID: <01bc0641$ffa251c0$37b174cc@ks>
Source record: 98343

I have in the past used these for low voltage transformers
as well, just saw off the hv side and re-wind with
aprrox. 1 turn per volt, give or take a few. When I
worked in consumer electronics, we had these things
running out our ears. Just go by a local shop and
ask.
--
73 de KT4XW
Keith Spainhour
KSpainhour@wilkes.net

Murray Kelly <mkelly@faraday.dialix.com.au> wrote in article
<32E15BFD.4F1E@faraday.dialix.com.au>...
> TIEMANN BRUCE wrote:
> > I knocked out the magnetic shunts, and it works fine.
> > Bruce
> > N6URH
>
> Bruce,
> I have just such a transformer from a 550W microwave with 1500V on the
> secondary and everything is as you describe it. But - what are the
> 'shunts' you speak of. If you describe them I can look see and learn.
>
> Thanks.
> --
> **
> * Murray Kelly vk4aok mkelly@faraday.dialix.com.au *
> * 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
> * ph/fax Intl+ 61 7 3379 3307 mobile 018 071 355 *
> **
>

661. Re: 6m duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com.DELETE-FOR-EMAIL>
Message-ID: <32E2DAA7.CD6FAD8@primenet.com.DELETE-FOR-EMAIL>
Source record: 98344

tim_hynde wrote:
>
> I finally have enough 6m FM "stuff" to put a machine on the air. Can
> anyone advise my options on duplexers. I could go remote site for the TX
> but prefer to keep it all at one location.
>
> I've priced new ones, I could take a second mortgage on my home but I
> thought perhaps building some would be more economical.
>
> Can I use less (as far as the duplexer is concerned) if I go with a 1Mhz
> split as apposed to .500 Mhz.
>
> 73, Tim

I saw this url posted the other week. Check out:

http://www.dallas.net/~jvpoll/dup6m/dup6m.html

This guy has some great ideas. Don't give up on building your
own duplexor.

Bob
WA3TGF

662. check this out!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Rich <kf4bia@mail.dbeach.com>
Message-ID: <32e1ab70.0@204.71.8.22>
Source record: 98345

look at this ham site:

http://www.dbeach.com/~kf4bia/index.htm

663. Re: QST on CD BEWARE!!!!OS Whining

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: nobody@REPLAY.COM
Message-ID: <5brlb8$2er@basement.replay.com>
Source record: 98513

The same can be said for CW. Why use valuable FCC and ARRL resources to support an outdated mode that few use any more.

(snicker, snicker)

664. Re: Need high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Murray Kelly <mkelly@faraday.dialix.com.au>
Message-ID: <32E169DB.283@faraday.dialix.com.au>
Source record: 98514

Murray Kelly wrote:
>
> TIEMANN BRUCE wrote:
> > I knocked out the magnetic shunts, and it works fine.
> > Bruce
> > N6URH
>
> Bruce,
> I have just such a transformer from a 550W microwave with 1500V on the
> secondary and everything is as you describe it. But - what are the
> 'shunts' you speak of.

Bruce, 'sOK. I had another GOOD look and see the laminated bars
'twixt the two bobbin wound windings. Thanks for the comment and
getting me on the right track.

Cheers.
> --
> **********
> * Murray Kelly vk4aok mkelly@faraday.dialix.com.au *
> * 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
> * ph/fax Intl+ 61 7 3379 3307 mobile 018 071 355 *
> **********

--
****
* Murray Kelly vk4aok mkelly@faraday.dialix.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 mobile 018 071 355 *
****

665. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5brrbe$1tq6$1@news-s01.ny.us.ibm.net>
Source record: 98515

In message <measures-ya02408000R1701971615270001@news.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures)Fri, 17 Jan 1997 16:15:27 -0800
writes:
:>
:>
:>Rick's toasted AL-80 bandswitches arrived today. I photographed them,
:>saved the images as JPEG files, and made them available on my Web site
:>at
:>
:>http://www.vcnet.com/measures/
:>
:>The images are available at Figures 15a and 15b.
:>

The pictures are interesting and prove nothing.

The arcing visible in the pictures could just as easily been caused
by a mistuned amplifier running into a high VSWR. I'm sure someone
will correct me if I get it backward but in and underloaded amplifier
driving a high impedence load the voltage across the bandswitch (and
tuning capacitor) will soar nearly out of control. Underloading and
high feedline impedences are particularly common on 80 and 160 meters
as many amplifiers lack sufficient range in their output capacitors to
achieve proper loading ... particularly if the load impedence is very
capacitive.

Rule #1 ... if one hears hoofbeats don't expect zebras.

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==

666. Re: Need high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Murray Kelly <mkelly@faraday.dialix.com.au>
Message-ID: <32E15BFD.4F1E@faraday.dialix.com.au>
Source record: 98516

TIEMANN BRUCE wrote:
> I knocked out the magnetic shunts, and it works fine.
> Bruce
> N6URH

Bruce,
I have just such a transformer from a 550W microwave with 1500V on the secondary and everything is as you describe it. But - what are the 'shunts' you speak of. If you describe them I can look see and learn.

Thanks.
--
****
* Murray Kelly vk4aok mkelly@faraday.dialix.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 mobile 018 071 355 *
****

667. Re: Gap, do they still exist ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: cwop@aol.com
Message-ID: <19970119054901.AAA12123@ladder01.news.aol.com>
Source record: 98517

<Who has a better address than gap@digital.net,

From Gap ad in Feb 97 QST magazine:

Gap Antenna Products Inc.
6010 N. Old Dixie Hwy.
Vero Beach, FL 32967
Phone: 561-778-3728
Web: http://www.gapantenna.com

73 CW OP

668. Re: BRAIN WAVES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: gad4034@InfoNET.st-johns.nf.ca
Message-ID: <5bsihe$u1m@coranto.ucs.mun.ca>
Source record: 98518
Cross-posted to: sci.electronics.design,sci.electronics.misc,rec.radio.swap,rec.radio.amateur.homebrew,sci.engr.biomed

Peter Kesselman (pkay@smartlink.net) wrote:
: In article <5b90l6$d8v@gap.cco.caltech.edu>, lbliao@alumnae.caltech.edu
: (lbliao) wrote:

: > I am looking for any book or papers that talk about the electro enchphalo
: > graphy. Specifically, I am looking for information of typical EEG, the
: > voltage levels involved, the frequency range, and how to pick up the
: > signal. If the signal can be displayed on an oscilloscope?
: >
: > Thanks a lot!
: > lbliao
: You need a high-gain differential amplifier and a tunable low-frequency
: bandpass filter. Without the filter you will pick up alot of noise. I built
: a biofeedback monitor in about 1974 from a Popular Electronics project that
: was essentially this. I was able to view alpha waves with it. Can't help
: you on the actual levels but they are probably in the microvolt level.
: Maybe someone out there has a Popular Electronics collection with that
: article.

: --
: Peter Kesselman

669. Re: Good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Jan Axing <janax@algonet.se>
Message-ID: <32E1D7A5.24FF@algonet.se>
Source record: 98519

w8jitom@aol.com wrote:

> Cs does NOTHING good at the leading edge of the waveform. It would take a
> series inductor to do that! It does limit the steady state or low
> frequency response, but to say it allows the gas tube time to ionize
> BEFORE coupling energy to the receiver is a complete mis-statement.

[lurk mode off]
Hmm... It depends. If the series capacitor is fully discharged when the leading edge of a pulse arrives, voltage at the input side will be higher than
at the output for a short time. However, the rise time must be shorter than
the time constant formed by the capacitor, the source and the load impedances.
The gas tube will not fire before coupling energy to the receiver, true enough
but the energy will only be a fraction of the original.
0.1 uF seems to be a very well choosen value.

SM5GNN, Jan

670. Re: Need high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <2oGQzIALVh4yEwE1@ifwtech.demon.co.uk>
Source record: 98520

TIEMANN BRUCE wrote:
>You don't mention the exact voltage or current required. I recently
>liberated a perfectly functional transformer with a ~1900 V secondary from
>an abandoned (by the side of the road) microwave oven. I knocked out the
>magnetic shunts, and it works fine. However, one end of the secondary is
>connected to the core. (Even if this connection is broken, there will be
>little insulation between the core and the first layer of the high voltage
>winding.) I haven't loaded it heavily to see its full-power output, but
>one might imagine it will be in the high hundreds of watts, that is, a few
>tens of mA for ~2kV output. Coming across unwanted or garage- or
>moving-sale microwave ovens is probably not difficult.

One solution to the problem of the grounded secondary would be to obtain
two identical transformers and operate them in the 2000-0-2000V
configuration. That will also double the available current, or halve
your problems with transformer voltage drop.

(So now you have 137 dead microwave ovens, and only two of them have
identical transformers? Is that a problem?)

In practice you would still need to un-ground the low voltage end of
each secondary in order to insert current metering resistors. The
voltage at the center-tap will always be very close to ground and there
will be no problems about insulation. These resistors should be shunted
by a high-current diode (anode to ground) for protection against
flashovers.

BTW, the Peter W Dahl Company is at http://www.pwdahl.com
Their amateur catalog is one huge downloadable page which seems to
contain every power transformer they ever made.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

671. How to extend TX on IC-T42A ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Daniel Trillaud <daniel@netscape.COM>
Message-ID: <32E22BC6.783C@netscape.COM>
Source record: 98521
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Dear Hams,

I own a UHF Hand Held ICOM IC-T42A which covers 440 to 450MHz.
Being in Europe I would like to extend the TX coverage to
430-450Mhz and enable the 1750Hz tone burst.

Who has mods for this radio ?

Thank you so much in advance.

73, Daniel.
F1TDI / N2FNB
--
----
* Daniel TRILLAUD - Netscape Communications Tel : (331) 41 97 55 55 *
* Pre-sale Manager, European Channels Fax : (331) 41 97 55 81 *
* CNIT Paris la Defense Email : daniel@netscape.COM *
* France mailto:daniel@netscape.COM *

Talk to me on 431.725MHz - Daniel is F1TDI / N2FNB

672. FS Keypad and case

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <32E22FA8.5B19296C@acsu.buffalo.edu>
Source record: 98522

I have some new unused grayhill 16 button keypads. they are mounted in
Pac tec boxes. They include circuit board with Ti TCM5087N
dtmf decoder and 3.579545 crystal and related circuitry.
These are new / unused. $10 each . 3 for $25.

Jim N2GO

673. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970119144800.JAA27008@ladder01.news.aol.com>
Source record: 98523

In article <5brrbe$1tq6$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) writes:

>The arcing visible in the pictures could just as easily been caused
>by a mistuned amplifier running into a high VSWR. I'm sure someone
>will correct me if I get it backward but in and underloaded amplifier
>driving a high impedence load the voltage across the bandswitch (and
>tuning capacitor) will soar nearly out of control. Underloading and
>high feedline impedences are particularly common on 80 and 160 meters
>as many amplifiers lack sufficient range in their output capacitors to
>achieve proper loading ... particularly if the load impedence is very
>capacitive.

Hi Joe,

That's basically the idea.

Anything that underloads the PA for the amount of drive power applied allows voltage to build up in the tank. The most common components ruined are either the bandswitch or the tuning cap.

Dave had that happen with his 922 Kenwood, when his defective lightning suppressors fired. Of course, Rich blamed it on a para$itic...and sold him a kit.

I wonder why ?

73 Tom

674. Re: Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <32e24907.579019@news.airmail.net>
Source record: 98524

On Tue, 14 Jan 1997 22:48:56 GMT, you wrote:
>I'm interested in hearing from anyone who has built
>a screen grid modulated HF transmitter.
You may not find many folks who've done so within the past thirty years. Now it's almost as efficient to use a linear amplifier as a screen-grid modulated amplifier. Screen grid modulation is, by its nature, efficiency modulation. If you have the amplifier set for, say, 75% efficiency at full output (four times carrier), your efficiency drops to 37.5% at carrier level. On the other hand, if you have a modern Class AB2 amplifier your efficiency at full output will be about 65%. The efficiency at carrier would only be 32%. In exchange for the 5.5% loss in efficiency at carrier level you get reduced complexity in the screen bypass area. The screen bypass not only bypasses RF; it also bypasses part of your audio signal feeding the screen grid. So the value you choose is fairly dicey. You don't want the audio driver's response rolling off too quickly.

It should be pointed out that good, linear screen modulation also requires either audio pre-distortion or audio feedback derived from the RF output signal. The screen voltage vs plate current curve is non linear so substantial second harmonic distortion must be introduced to stretch the negative peak and squash the positive peak of the modulating waveform to get a low-distortion signal.

Hope this helps.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

675. Re: Help With VHF Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: pauls1234@aol.com
Message-ID: <19970119171801.MAA03255@ladder01.news.aol.com>
Source record: 98525

I understand that you don't have any paperwork on this unit, but do you know who the manufacturer is? If it is a Sinclair duplexer, it may be of the hybrid ring type which requires tuning several stubs in addition to the cavities. You will find these stubs in the cable harness. If it is a Sinclair, you can contact them direct or E-Mail me at pauls1234@aol.com and I should be able to get you a copy of the procedure.

Regards,

Paul Sexauer - W9JTO

676. HAM Tool-Kit CD ROM, Stun guns, GSM Mobiles, Satellite Tv

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: murphy@sphynx.com
Message-ID: <32f55a4b.9649887@news.indigo.ie>
Source record: 98526

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What is a Stun Gun?

A Stun Gun is an electrical self-defense device that puts out a high voltage and low amperage shock. By merely touching a person with the stun gun, he is immobilized for several minutes with no permanent harm. Stun Guns are considered reasonable force to resist attack. They can be used many times to ward off attackers before the batteries need replacing.

Our Current Best Seller is the "Talon 250"ï¿½."The Finest Stun Gun in the World!"

Features:

Curved Head.
Strength: 250,000 Volts.
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Complete with hand-strap and belt clip.

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The Talon 250 Stun Gun does not merely rely on pain for results. The stun gun works on the muscular and neural system. A short blast of ï¿½ second duration will startle an attacker, cause minor muscle contractions and have a repelling effect. A sustained blast of 1 to 4 seconds can cause an attacker to fall to the ground and result in some mental confusion. It may make an assailant unwilling to continue an attack. A sustained blast of 5 seconds can overwhelm and control the attackers neuromuscular system IM-mobilizing him, causing disorientation and loss of balance. He will probably fall to the ground, feeling weak and dazed for some minutes afterward. Full recovery in this instance takes about 10-15 minutes. The "Talon 250" is effective through 1/2inch of clothing.

TALON 250 STUN GUN: ï¿½95 (Batteries included)

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677. Re: Help With VHF Duplexer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan19.191234.25433@ke4zv.atl.ga.us>
Source record: 98527

In article <5bqm43$lei@axe.netdoor.com> rrives <rrives@mail.netdoor.com> writes:
>
>We are tring to set up a set of old duplexer(we have no paper work on
>them). It is a six cavitity set, three band pass and three band reject.
>the cable harnness was not attached to the cavities when we got them. We
>hook the three reject cavities on the reciever and tuned them to reject
>the transmitt freq(146.97).we hook the threee band pass on the
>transmitter and tuned them to pass the transmitt freq.(146.97) We are get
>about 9 to 12 db of lose on the recieve freq(146.37) thur the band reject
>filters . What did we do wrong ???????

Well, the harness lengths are an integral part of the networks.

The bandpass cavities will look like 50 ohms in and out when
adjusted properly, and will maintain a flat line SWR on their
side of the network if the string is terminated in the characteristic
impedance of the line at the transmitter and at the antenna Tee.
So cable lengths aren't critical on the pass side, *except for one*
(see below), and you just need to peak the series pass cavities for
best passthru of your transmitted signal.

A reject notch cavity will look like a virtual short at some
frequency, *at its connector*. This is in shunt with the transmission
line. At some cable length from that connector, it can look like an
open or some intermediate impedance due to the standing wave it generates
on the line. This causes the cavity tuning to interact between the cans,
and can cause problems at the combiner Tee if the cable lengths aren't
arranged properly. Thus cable lengths are an integral part of the network
response.

Now a convienent way, not necessrily the only way, to deal with
this is to separate each receiver notch cavity from the adjacent
cavity by an electrical halfwave of cable, at the *transmit* frequency.
Since impedance repeats at halfwave multiples, this overlays the
notches of all the cavities at the first cavity connector when the
string is tuned to that electrical halfwave frequency. And the cable
from the first notch cavity to the combiner Tee should be an electrical
quarterwave at the transmit frequency. That'll make the line to the
receiver look like an open circuit to transmit frequency energy at the
Tee because a quarterwave inverts impedances, turning a virtual short
into a virtual open. The transmit energy then only sees the antenna
impedance as a load. That's exactly what you want it to see.

When receiving a signal, the notch cavities will look like high
shunt impedances on the line, and hopefully won't contribute
any significant loss to the received signal (if they do, you

have a cavity with degraded Q which you need to repair). But the received signal will divide at the Tee, some going toward the receiver, and some going toward the transmitter. That's a loss of signal to the receiver.

Now the transmit pass cavities are in series with the transmit line, and should, if their Q is good, look like a high impedance to the received signal, reflecting it back toward the Tee. It must arrive back there in phase so that it can add constructively rather than destructively, so the cable length from the Tee to the first pass cavity should be an electrical halfwave at the *receiving* frequency. The received signal going down and back will arrive back at the Tee in phase and will sum with the received signal.

Now you can use other combinations of cable lengths and compensate by tuning the cavities differently, but it will be the duplexer from hell to get aligned properly for lowest loss. When tuning the duplexer, all ports have to be terminated in the correct impedance. I generally peak the transmit pass filters first, with the antenna and receiver ports terminated with 50 ohm loads. I'm looking for maximum output at the antenna termination. Then I tune the receive notch filters, looking for minimum power at the receiver load (as tuning becomes closer, a thru pad and a receiver with an S meter can be used as an indicator). This will rough tune the duplexer.

Final tuning of the duplexer is best done with a network analyzer or a spectrum analyzer with a tracking generator (I prefer the latter since it lets you *see* the duplexer response). All of the adjustments will interact to a degree thanks to imperfections in phasing, so you just go back and forth tweaking here and there until you've got it tuned as best you can. You should have no more than 0.5 db of insertion loss on the receive side with a high Q notch string and a high Q pass string. You may have a couple of dbs of loss on the transmit side through the pass cavities. That's no big whoop, just turn up the transmitter PA to compensate.

Now when you install the duplexer, you'll find that performance is degraded from what you had while bench tuning it. That's because the transmitter doesn't look like a perfect 50 ohm termination, the antenna doesn't look like a perfect 50 ohm termination, and the receiver doesn't look like a perfect 50 ohm termination. With all three ports mismatched, it is anybody's guess what the response of the duplexer will be. The only thing we can be sure of is that it won't be *better* than what we saw on the bench.

What to do? There are two schools of thought on this. One approach is the absorb the mismatches into the duplexer network by retweaking the cavity nearest the mismatch. The purist school of thought says to correct the mismatches with external networks. In either case, you need a weak signal source and a SINAD meter on the repeater receiver. The goal is to reduce the desense on the weak signal

as much as possible by adjustments to either the duplexer, or
the external networks if you are a purist. The goal is to reduce
desense to zero, IE there is no difference in the SINAD meter
reading between repeater transmitter on or off, while at the same
time achieving best receiver sensitivity.

As an example of when an external network is warranted, I helped
a fellow who had horribly poor sensitivity and lots of desense
in his repeater. The duplexer had been bench tuned perfectly,
but in the system it worked horribly. Upon inspection, I discovered
he was feeding the antenna with 75 ohm CATV hardline. That mismatch
was screwing up the duplexer tuning. Adding a 75 ohm to 50 ohm
matching network cleared things up immediately. OTOH, a mismatch
at the transmit or receive port is usually best just absorbed into
the tuning of the nearest cavity if it can't be easily corrected
by tweaking the transmitter or receiver networks.

You can easily get hopelessly lost in the tuning process if you
don't *write things down*. Record every adjustment and every reading
as you do them. That way you have a chance of getting back where
you were if things start going awry. Tuning up a duplexer requires
patience and freedom from distractions.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

678. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970119175001.MAA04932@ladder01.news.aol.com>
Source record: 98528

In article <19970119144800.JAA27008@ladder01.news.aol.com>,
w8jitom@aol.com writes:

>>The arcing visible in the pictures could just as easily been caused
>>by a mistuned amplifier running into a high VSWR.

I have to disagree. Tom, I have a SX-42 receiver here with damaged
RF stage components -- arced bandswitches, burnt resistors, and
defective 6AG5 pentode tubes.

A few years back I was monitoring WWV during an intense solar
storm. Imagine my horror when a bandswitch section began arcing
over, carbonizing the wafer! IMHO this was caused by photon
bombardment. I will sell you a picture of the bandswitch damage
for your webpage, if you are interested.

Later that year, I had a long wire connected during an electrical storm.
Again, the wafer switches began arcing over. IMHO this was caused
by parasitic oscillations in the 6AG5 pentodes induced by the high
voltage transients present at the antenna terminals.

Hallicrafters used resistive loaded rf chokes in the screen supplies,
and 15 ohm resistors in the grid and plate leads. I suspect had they
used nichrome wire, these problems would have been avoided. The
last straw was when the parasitics took out a mica plate bypass
capacitor -- destroying the 1.2k plate resistor.

Tom, what is the saturated cathode current of a 6AG5? Folks, why
won't Tom answer this question?

One of the RF stages had damaged screen resistors as well and a
destroyed 6AG5. I will smash open the tube and sell you pictures
if you are interested.

Imagine my horror when I discovered sharp dips across the entire
spectrum with my Millen griddipper (The receiver covers 540-kHz to
108-MHz) while probing the RF compartments!!

I have one final question.... How does Rich measure the LOADED
Q of a PA tank circuit using a grid dipper? I see many comments
regarding the use of his nichrome parasitic suppressors. The most
common comment is "the vernier tuning effect" after the suppressors
are installed. This would seem to indicate the loaded Q of the HF
tank circuit is being compromised by the addition of the suppressors.
Isn't the loaded Q value an important parameter in designing a
tank circuit for optimum impedance transformation?

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

679. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan19.202615.25848@ke4zv.atl.ga.us>
Source record: 98529

In article <19970119175001.MAA04932@ladder01.news.aol.com> commquart@aol.com writes:
>In article <19970119144800.JAA27008@ladder01.news.aol.com>,
>w8jitom@aol.com writes:
>
>>>The arcing visible in the pictures could just as easily been caused
>>>by a mistuned amplifier running into a high VSWR.
>
>I have to disagree. Tom, I have a SX-42 receiver here with damaged
>RF stage components -- arced bandswitches, burnt resistors, and
>defective 6AG5 pentode tubes.
>
>A few years back I was monitoring WWV during an intense solar
>storm. Imagine my horror when a bandswitch section began arcing
>over, carbonizing the wafer! IMHO this was caused by photon
>bombardment. I will sell you a picture of the bandswitch damage
>for your webpage, if you are interested.
>
>Later that year, I had a long wire connected during an electrical storm.
>Again, the wafer switches began arcing over. IMHO this was caused
>by parasitic oscillations in the 6AG5 pentodes induced by the high
>voltage transients present at the antenna terminals.

I'd suggest *that* was the result of photon bombardment. Probably
about 2 MHz photons. :-)

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

680. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan19.195346.25680@ke4zv.atl.ga.us>
Source record: 98530

In article <32DE9B6F.4C8F@arrl.org> Jon Bloom <jbloom@arrl.org> writes:
>> It's not just Mac users, but OS/2 users, *.nix users, people with older
>> DOS systems that can't run Windows ... all of them are excluded by a
>> Windows only product.
>
>True, but all of them put together consist of a miniscule part of the
>potential market for ARRL products. Nobody (outside of Redmond) likes
>that fact, but it's true.

At the risk of repeating myself, let me say that there appears to be some confusion (on both sides) as to what is the product here. The product is the information in 80 years of QST. It is not a Windows browser that happens to be included on the disk to display it. There should be nothing about the data which is platform specific. If there is, then that is a seriously flawed decision.

Windows has only been around a short time, and may be gone (as we know it) in a further short time (see my note about the Java VM and Microsoft's announced plans for their next generation GUI). The data in those 80 years of QST remains valuable. It should remain accessable regardless of the underlying operating system used, *if* it contains no Windows dependencies. That would fatally flaw the product.

There is an ISO standard for cross platform structuring of data on CDROMs. There are several image formats which are quasi-standard across platforms. And comma delimited form is the most basic way of formatting cross platform data for databases. As long as these are followed, the data remains accessable.

It would be better, of course, if a higher level standard of data commonality were chosen, such as the forementioned HTML, so that browsing could be transparent across platforms (and networks). And I could certainly recomend an image format better than TIFF, but those are minor issues. As long as we can read and display the data with any CDROM equipped platform using available native tools, it is still usable.

Gary
--
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Lawrenceville, GA 30244 | |

681. 6m duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32E2A954.2203@idecc.com>
Source record: 98531

I finally have enough 6m FM "stuff" to put a machine on the air. Can anyone advise my options on duplexers. I could go remote site for the TX but prefer to keep it all at one location.

I've priced new ones, I could take a second mortgage on my home but I thought perhaps building some would be more economical.

Can I use less (as far as the duplexer is concerned) if I go with a 1Mhz split as apposed to .500 Mhz.

73, Tim

682. 455Khz Resonator - What is it

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32E2AAE0.5575@idecc.com>
Source record: 98532

In the Epiphite 2 (80m SSB tranciever) I am building there is a call for a 455Khz Resonator. I understand 455Khz as an I.F and for the most part how that works but:

The P.C board spacing appears larger than a standard 455Khz filter. Would someone please explain the difference between the resonator and the filter, if there is one?

Thanks, Tim, ka8ddz

683. Harris 450 information???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Earl <railnut@juno.com>
Message-ID: <32E2AD5B.5CF9@juno.com>
Source record: 98533

Hello all,

First of all, thank you for reading my message.

I have aquired a Harris series 450 car telephone order number ct 450. It has most of the crystals in it for the 450 mobile phone band. It is missing the duplexer.

I am wondering what people have done with these radios. One person told me that it can be used as a full duplex mobile radio and can be moved down to the 440 frequency range. I was just wondering if this would be a good radio to make a repeater out of, and if so, where can I get documents on the radio and where can I find a duplexer that will fit in the radio.

If anyone has any information that would be helpful, I would really appreciate a response.

73s

Earl
KA7WFU

email: earl@qualcomm.com

684. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1901971257220001@news.vcnet.com>
Source record: 98534

In article <19970118154700.KAA06703@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <measures-ya02408000R1701971803350001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
> If Dave had not corrected you in public about the real cause of his
> TL-922's arcing (a bad lightning arrestor), you likely would have posted a
> picture of the capacitor on your web page and slammed Kenwood ...snip...

Dave contacted me privately before the public announcement. About 4 years ago, in my 8169 amplifier, I experienced a similar tank arc which was caused by an arc in my 160m Hertz antenna's L-network tuner, 100 feet down the coax feedline, out in the back yard.

According to Dave, he bought the TL-922 used. Dave said he noticed there were arc marks on the tuning capacitor before he put the TL-922 into service.
According to QST Staffer Dave Newkirk, the TL-922 at W1AW had a tune capacitor that became so badly erroded from mysterious arcing, the tune capacitor was replaced with a new unit. At Dave's request, I sent suppressor retrofit kit s/n 293 (5/23/89) to to the folks in charge of W1AW. The factory-stock suppressors were reportedly replaced with low VHF-Q suppressors. According to my records, the ARRL paid for retrofit kit s/n 293.

The burned bandswitch shown in "Parasitics Revisited" (9/90, 10/90 QST magazine) was removed from a TL-922. The ham who owned this amplifier lives in Phoenix, AZ. No lightning arrestor was connected to the TL-922. The burned bandswitch was replaced with a new unit. The beautiful silver plated factory-suppressors were replaced with ugly, low VHF Q suppressors. I have spoken with a number of TL-922 owners who have had also had the 10m and 15m contacts burn up on the bandswitch.

> More recently you declared all amateur PA's poorly designed because they
> had no rheostats like commercial transmitters, and declared no proper
> engineer would purchase a transmitter without one. Several people rebuked
> you for saying that, one of whom is a top notch engineer for a large
> commercial BC transmitter manufacturer.

W6TG said that all ten of the commercial amplifiers he takes care of have continuously adjustable control of the filament voltage.
Unless my news server missed a post, the 'top notch engineer' failed to answer the question about the peak inrush current through the rheostat brushes, failed to explain why they were using carbon rheostat brushes instead of graphite rheostat brushes, and failed to say whether or not the

amplifiers with the high rheostat-failure rates used a step-start circuit.
.
As I recall, the Collins KWS-1, 208-U... general coverage amplifiers, and 30S-1 amplifier use a rheostat to adjust filament voltage. I have never heard of a rheostat failure in one of them. // Was the 'top notch engineer' title awarded by a recognized amplifier expert? If so, who recognized this expert? Based on my experiences, knowledgeable engineers do not stonewall questions.

> Now you've moved on to the AL-80 or something with more Richard L.
> Measures picture "evidence". ...snip...

There is no 'or something', Mr. Rauch. According to the AL80A's owner, Rick May, the original bandswitch burned up, and the first replacement bandswitch burned up. He is currently using bandswitch #3, which is not arcing. However, Rick said he is no longer using the AL-80's original VHF parasitic suppressor. The photographs of the original and the replacement AL-80A bandswitches with missing/vapourized contacts are available at:
http://www.vcnet.com/measures/
See Figure 15.
Rick's e-mail address is listed.
Seems like Mr. Rauch is suggesting that my two AL-80A bandswitch photographs are somewhat less than authentic---i.e., fake..
Hmmm.
OJ swore that the picture evidence of him wearing size 12 Bruno Magli shoes is a fake. Tom: In your expert opinion, are the news photographers, who subsequently produced 30 other photographs of OJ wearing size 12 Bruno Maglis, slamming OJ? IMO, prevaricators slam themselves. Is impeachment slamming? A well-known teacher reportedly said that everything that defiles a man comes out of his own mouth.

A while back, you groused about a lack of discussing technical issues on this thread. How about discussing Wes Stewart's VHF Rp measurements? VHF Rp is a determiner in VHF voltage gain, so discussing it seems appropriate.

BTW, Tom, what are the values of Rs and Ls in your new suppressor design that will exhibit equal to or better VHF characteristics than any of the suppressors Wes tested?
---
e-mail copy to Mr. Rauch

--
--Rich-- ag6k, 805-386-3734

685. Solid State amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Randy Alexander <alexan@teleport.com>
Message-ID: <32E2B09F.2822@teleport.com>
Source record: 98535

I do not find my previous inquiry. So I repeat: I would like to build a legal limit solid state HF amplifier. I would like to hear from anyone who has built one. I am looking for the problems and pitfalls and their solutions. TNX AB7QR

686. Re: Solid State amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Jim Garver <k7@teleport.com>
Message-ID: <32E2E1FA.2E92@teleport.com>
Source record: 98536

Randy Alexander wrote:
>
> I do not find my previous inquiry. So I repeat: I would like to build
> a legal limit solid state HF amplifier. I would like to hear from
> anyone who has built one. I am looking for the problems and pitfalls
> and their solutions. TNX AB7QR

Haven't built one, but talked to a guy on 160 the other nite who
had one from this outfit:

http://users.aol.com/rfelectron/rfelect.htm

They sell kits, 500 & 1000 watt solid state. Not legal limit but...
A 65 amp power supply to run it might be another project in itself.

K7YO

687. Mailloop - #1 Rated Mass Mailing Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: jorge@mailloop.com
Message-ID: <5bslgi$a9f@news.mia.bellsouth.net>
Source record: 98537

Mailloop v2.0 is an industrial strength bulk mailer.

Using it is easy:

1) Create a message (http://www.mailloop.com/editor.html)
....by using the pull down menus or
....by using any editor

2) Create a newsgroups list (http://www.mailloop.com/news3.html)
....by filtering an NNTP server or
....by importing from any text file or
....by manually creating with any editor or
....by extracting from any FTP file or
....by extracting from any HTTP file

3) Create an e-mail list (http://www.mailloop.com/em3.html)
....by extracting from newsgroups or
....by importing from any text file or
....by manually creating with any editor or
....by extracting from a WHOIS response or
....by extracting from a fingering response or
....by extracting from a UNIX response or
....by extracting from any FTP file or
....by extracting from any HTTP file or

4) Broadcast the message
....to the e-mail list or (http://www.mailloop.com/embc.html)
....to the newsgroup list (http://www.mailloop.com/ngbc.html)

5) Then process the remove requests
....by using the mailbox processor (http://www.mailloop.com/pop.html)

For more info visit http://www.mailloop.com

688. Travelling wave tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: angel vilaseca <100604.1242@CompuServe.COM>
Message-ID: <5bu4g0aac1@mhafn.production.compuserve.com>
Source record: 98538
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.equipment

Ladies and/or Gentlemen:
I would like to find five ...and perhaps more...10 GHZ TWTs

TWT types:
Siemens: RW 2135, RW 1127, RW 1125, RW1125 D, F, or G.
Hughes: 8731H , 8762H , 8713H, 1235H, 771HD, 783H,
Hughes: 8010H16, 8010H06, 8010H07, 8010H03, 8010H17, 8010H15,
Hughes: 8010H11
STC or ITT :W3MC12D, W3MC11A, W3MC15C, W3MA6A, W3MA9A, W3PA1W,
W3PA5A
VARIAN: VTX-6186B2 VTJ-6370J1 VTH6375F1 VTU-6297C1
VARIAN : VTH-6270F1 VTX6385A1 and others
EEV: N10012, N10016, N1080A, N10030, N1089B, N1081, N10020,
N10020
Other TWTs not cited above are of interest if they will work
from
10.0 to 10.5 GHZ with FM television power outputs above 5 watts.
If you have no TWTs but can recommend sources, please do so.
73 de John Jaminet W3HMS
Mechanicsburg, PA 17055
phone 717-697-3633
E-mail: w3hms@aol.com

689. Solid State amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Randy Alexander <alexan@teleport.com>
Message-ID: <32E29735.3FA9@teleport.com>
Source record: 98539

I am interested in building a legal limit solid state amp. On perusal of a few catologs the max I see is 1kw. I do have reference material from Motorola. I also have kit information from a couple of houses. It concerns me that I don't find any commercial units. I would like to hear from anyone out there who has done this. What kind of problems came up. The obvious ones that I see are the high currents in the filters transformers and relays. How were those handled? TNX AB7QR

690. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <32e29270.19377235@news.airmail.net>
Source record: 98540

measures@mail.vcnet.com (R. L. Measures) wrote:
> my 160m Hertz antenna
That would be a dipole?
I take it you are referring to me in your post when you say I
> failed to answer the question about the peak inrush current through the rheostat
>brushes and failed to say whether or not the
>amplifiers with the high rheostat-failure rates used a step-start circuit
But in the original post I said that low-capacity transformers were
used that limited the inrush current to twice operating. No
step-start would be needed since the voltage comes up gradually as the
current drops. (As an aside, I experimented with the use of
thermistors as inrush current limiting devices. They were widely used
in many older TV sets. They worked quite well for me but their
lifetime was limited--which kept TV repairmen in business.)
>failed to explain why they were using carbon rheostat brushes
>instead of graphite rheostat brushes, .
Well, I did fail to explain that but did, instead, point out that we
have noted a great deal of unexplained brush failure in filament
circuits when the same RMS current causes no failure in a commutating
supply transformer primary, e.g., a bias supply. (We never changed
the brush type or the filament control mechanism in the production
transmitter because it was out of production when we started seeing
the problem.) Forrest Cummings, the designer, may have been
influenced in his selection of filament adjust mechanisms by the
transmitter designs you mention below.
> As I recall, the Collins KWS-1, 208-U... general coverage amplifiers, and
>30S-1 amplifier use a rheostat to adjust filament voltage. I have never
>heard of a rheostat failure in one of them.
Well, we got two separate issues here. The 30S-1 used a 4CX1000A
which had a strontium-oxide coated cathode while the KWS-1 used
(originally) 4X150A's. The 4CX1000A tube was still a new item when
the 30S-1 was designed and the tube manufacturer had not been
able--has never been able--to get more than 6000 hours out of that
type cathode when operated at full current (big proviso). The tube
was also oriented at an angle rather than mounted vertically as in the
KWS-1. Good heater/cathode temperature control was considered
essential to maximize the life expectancy when these amplifiers were
used in commercial service (higher duty cycle). High cathode
temperature could lead to oxide flaking and internal shorts. Because
the filament transformer was located in a difficult-to-access area, no
taps were provided and yet the amplifier had to operate over a wide
range of voltages. That's why the heater control was incorporated.
The choice of a rheostat was made, I assume, because of cost and size.

The second issue is whether there have been rheostat failures in these Collins transmitters with heater/cathode tubes. And I can't comment on that except from personal experience. I've owned two 30S-1's and one KWS-1 and never had any problem. The low-capacity filament transformer of the 30S-1 limited the surge current of the heater--just as it did in the filaments of the more-recently designed MW transmitter I used as an example. You realize, of course, that the fact I never had any failures doesn't mean there weren't any. I can tell you, however, that rheostat failures on other broadcast transmitters (the Gates FM-20H, for example) were quite common and that we haven't used them in a new commercial design for twenty years.

I hope this post clarifies any questions about my previous post.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

691. Ham Radio in Scouting ScoutRadio WWW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: myriad1@ix.netcom
Message-ID: <myriad1-ya02348000190197154655000 1@nntp.ix.netcom.com>
Source record: 98541
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,

ScoutRadio WWW is a "good turn project" of Troop 319, Huntington Beach, California USA. Our goal is to promote amateur radio in Scouting. Over 500,000 Past & present Scouts & Scouters. Scouts & Scouters in amateur radio helping their communities in times of natural disasters, emergencies and humanitarian aid.

ScoutRadio projects since we went online 6 months ago: Scouts helping US Huricane Center; ScoutRadio Summer Camp HF Net; Scouts Protecting the Ham Bands; Stateside ScoutRadio HF Net; Egyptian HF Communications for Humanitarian Medical Relief; JOTA "Matchmaking" Service; Featured in ARRL newsletter; Red Cross Communications for Scouts & Scouters.

If you wish to subscribe ScoutRadio email list please send us an email with the SUBJECT to read exactly "SCOUTRADIO SUBSCRIBE".

Mel KO6TF
ASM Troop 319 & Webmaster Advisor
ScoutRadio@Scout.net
http://www.ocbsa.org/troop319/ham.htm

692. Harris series 450 ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-19 00:00:00 UTC
From: Earl <railnut@juno.com>
Message-ID: <32E30B40.213A@juno.com>
Source record: 98542

Hello all,

First of all, thank you for reading my message.

I have aquired a Harris series 450 car telephone order number ct 450. It has most of the crystals in it for the 450 mobile phone band. It is missing the duplexer.

I am wondering what people have done with these radios. One person told me that it can be used as a full duplex mobile radio and can be moved down to the 440 frequency range. I was just wondering if this would be a good radio to make a repeater out of, and if so, where can I get documents on the radio and where can I find a duplexer that will fit in the radio.

If anyone has any information that would be helpful, I would really appreciate a response.

73s

Earl
KA7WFU

email: earl@qualcomm.com

693. ** FREE MONEY **

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: MKRUSE@FNALD.FNAL.GOV
Message-ID: <MKRUSE-2001972335250001@callback17.fnal.gov>
Source record: 98293

TURN $5.00 INTO $50,000 NO SWEAT!!!!

THIS IS THE SIMPLEST WAY I KNOW OF TO MAKE CASH!!!

Hello! Would you like to make thousands of dollars from just a few, legally, with NO CATCH? OF COURSE!! Please take a few minutes to read this article, it will change your life, just as it did to me. It's easy and true. You can make up toor over $50,000 in just 4 - 6 weeks, maybe sooner!

I SWEAR I'M NOT LYING TO YOU, AND THIS IS NOT A SCAM!!

Here we go, a little while back I was browsing these newsgroups just as you are now, and I came across an article similar to this that said you could make thousands of dollars within weeks for an initial investment of $5.00! First thing I thought was " SCAM ". Anyway, it said that you send $1.00 to each of the 5 names and addresses stated in the article. You then place your own name and address on the list at the number 5 position, and post the article in at least 200 newsgroups. THERE ARE THOUSAND OF NEWSGROUPS!!! NO catch, that was it. OH, and wait for our money to start flowing through the mailbox. There is nothing to loose except $5.00 and 5 stamps.

Well guess What!... within 7 days,I started getting money in the mail. I was shocked! I still figured it would end soon, and I didn't give it another thought. But the money just kept coming in. My first week I made $20.00-30.00 dollars. That already at least quadrupled my initial investment. By the end of the second week I had well over $1000.00!!!!!!In the third week I had over $10,000.00 and it was still coming. This is know my forth week and I have made a total of just over $42,000.00 and it still comes. That is all in CASH. Certainly worth

the initial $5.00.

Let me tell you how this works and most importantly WHY. Also, make sure you PRINT a copy of this article NOW so you can refer to it easily. There are three easy steps:

STEP 1

Get 5 separate pieces of paper and write the following statement on each piece:

"PLEASE PUT ME ON YOUR MAILING LIST. YOU ARE NUMBER (their number on the list below)."

now get 5 $1.00 bills and place one inside each of the 5 pieces of paper sothe bill will not be seen through the envelope to prevent thievery. Next, place one paper with the money in each of the 5 envelopes and seal them. By this you are creating a service. THIS IS PERFECTLY LEGAL.

NOW MAIL ALL 5 ENVELOPES TO THE FOLLOWING:

1. M.V. Harrington P.O. Box 8751, Portland, OR 97207

2. Jerome Sanders 110 Orange Dr., San Luis Obispo, CA 93405

3. Nathan Gonzales 7180 Hurley Dr., Beaumont, TX 77708

4. B.M. Mahoney 34 Tamara CT., Melville, NY 11746

5. M. Kruze 1423 N. Leavitt St., #2F, Chicago, IL 60622

STEP 2

Now take the #1 name off of the list that you see above, move the other 4 names up a space (5 becomes 4, 4 becomes 3, 3 becomes 2, 2 becomes 1) and asdd YOUR NAME as number 5 on list.

STEP 3

Change anything you need to but keep this article as close to the same as possible. Now post your article to at least 200 newsgroupes. (I think there is close to 18,000 newsgroups). All you NEED is 200, but remember, the more you post the more CASH YOU MAKE!!!

Here is how to post to a newsgroup:

FOR NETSCAPE:

1. Click on any newsgroup loke normal. Then click on 'TO NEWS' which

is in the top left corner of the newsgroup tool bar.

This will bring up the message box.

2. Fill in the Subject with a title that stands out, like theone I

used.

3. Now go to the message part of the box and retype this letter exactly

as it is here, except with your few changes.

4. When your done typing in the WHOLE letter, click on 'FILE' above the

send button. Then on 'SAVE AS' DO NOT SEND YOUR POSTING UNTIL YOU SAVE

IT. THis is so you do not have to type the letter again and again.:)

5. Now that you have saved the letter, go a head and send your first

copy. (click the send button in the top corner)

6. THIS IS WHERE YOU POST ALL 200+!!! OK, go to ANY newsgroup article

abd click the ' TO NEWS' button again. Type in your eyecatching,

interesting subject in the SUBJECT BOX then go to the body part of the

messeage and leave your cursor there. NOW click on 'ATTACHMENT' which

is right below the SUBJECT BOX. Click on attach file, then find your

posting, whatever you saved it as, then click OK. If you did this right

you should see your filename in the attachment box and it will be shaded

green.

NOW POST AWAY

THATS IT

All you have to do is jump to different newsgroups and post away,after

you get the hang of it it should take you about 20 seconds a newsgroup.

***** REMEMBER THE MORE NEWSGROUPS YOU POST IN THE MORE MONEY YOU MAKE

***** AT LEAST 200

You will recieve money in you mailbox from around the world.

NOW THE WHY PART

Out of 200 postings, say you only recieve 5 replies (very very

unlikely) SO then you make $5.00 with your name at #5 on the letter.

NOW, each of the 5 persons who sent you $1.00 make a minimum 200

postings, each with yor name at #4 and only 5 persons respond to each of

the original 5,. that is another $25.00 for you, now those 25 each make 200 postings with your name at #3 and only recieve 5 replies each, you will bring in an additional $125.00, thise 125 persons turn around and 200 withyour name at #2 and only recieve 5 replies each, you will make and additional $625.00!!!!OK now here is the fun part, Each of those 625 persons post 200 with your name at #1 and they each only recieve 5 replies. YOU HAVE JUST MADE $3,125.00 That is only with 5 responses. Average is 20 - 30. Lets say each time you get a 15 person response. Here is what YOU will make:

#5 $15.00

#4 $225.00

#3 $3,375.00

#2 $50,625.00

#1 $759,375.00

When your name is no longer on the list you can find the latest posting and start over again.

Thousands of people all over the world come onto the internet everyday. This is the FAIREST AND MOST HONEST WAY I HAVE EVER SEEN TO SHARE THE WEALTH OF THE WORLD WITHOUT COSTING ANYTHING BUT A LITTLE BIT OF TIME!!!!!!!!!!

Thanks

694. Re: 6m duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: kc5ng@dlep1.itg.ti.com
Message-ID: <5c0fmf$bbl@sf18.dseg.ti.com>
Source record: 98294

I've heard of people using shorted and open lengths of hardline in
place of a duplexer. A local 2m repeater that I occasionally use
has some tuned hardline stubs in place as a notch filter to kill a
pager signal that gets into the front end. This is worth a try...

73 de K5DH

In article <32E2A954.2203@idecc.com>, tim_hynde@idecc.com says...
>
>I finally have enough 6m FM "stuff" to put a machine on the air. Can
>anyone advise my options on duplexers. I could go remote site for the TX
>but prefer to keep it all at one location.
>
>I've priced new ones, I could take a second mortgage on my home but I
>thought perhaps building some would be more economical.
>
>Can I use less (as far as the duplexer is concerned) if I go with a 1Mhz
>split as apposed to .500 Mhz.
>
>73, Tim

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

695. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Curt Steger <csteger@earthlink.net>
Message-ID: <32E42847.72AD@earthlink.net>
Source record: 98295
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Holstein wrote:
>
> Does anyone know of a mod to make the Realistic HTX-212 transmit out
> of band??? I want to be able to use this radio on my boat on the
> marine band instead of buying another radio.
>
> Thanx for any help.
> David, N3NGB@KE3GP.MD.USA.NOAM
> holstein@erols.com
> dholstein@comcastpc.com

The HTX-212 will not X-mit out of band, with the exception of MARS/CAP.

696. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2001971034110001@news.vcnet.com>
Source record: 98296
Body handling: HTML body converted to readable text

In article ,
measures@mail.vcnet.com (R. L. Measures) wrote:
snip...
> Since Windows is basicly ancient MS-DOS, ...snip...

I caught some flak on this statement, so I did some research. What follows is an explanation of the DOS/Windows-kinship written by a more knowledgeable person than yours truly. For those who are interested in reading the explanation, the format is html, so copy the text below the line, paste it into an html WP in html mode, switch to edit mode, and it should be readable. You can also read it with Netscape Navigator.

By Andrew
Schulman

According to Microsoft, "Windows 95 isn't a layer
on top of MS-DOS. It is a complete operating system with 32-bit,
protected-mode subsystems to keep your PCs running. If an errant
application or component goes down everything continues to run."
("

Windows 95 Fact Sheet for Information System
Professionals.")

Is it true that Windows 95 (Win95), unlike Windows
3.x, isn't a layer on top of DOS? Is it true that it's robust enough
to keep going in the face of buggy programs?

Certainly, these claims aren't merely advertising hype from
Microsoft, because much of the PC industry -- power users,
developers, IS professionals, and computer journalists -- backs up
Microsoft's claims. That so much of the industry is heavily invested
in these claims makes them worth examining.

DOS is dead; Long live DOS

As one example,
Windows Magazine (December 1994) enthuses that
"Windows no longer has to hand off to DOS or bypass DOS or work with
DOS or do anything with DOS -- because there is no DOS," and a

letter in the same issue gushes, "DOS is
dead-- hurray for WINDOWS Magazine! ... I recently tried a sample
copy of another Windows publication and their article on Windows 95
was filled with incorrect information, including the misconception
that in Windows 95, DOS boots up first and then calls Windows.

Needless to say, I will never read that magazine again." And while Microsoft itself is careful never to claim that Win95 is some sort of "NT Lite," the company has definitely given developers and computer journalists the impression that Win95 is architecturally closer to NT than to the old Windows/DOS combination. Even Charles Petzold, probably the world's leading authority on Windows programming, has written that "While Windows 95 was originally going to run on top of DOS 7.0, the architecture was revised to replace DOS entirely. Thus, Windows 95 is closer to Windows NT than any previous version of Windows" (PC Magazine, January 24, 1995).

Another good example, perhaps, is O'Reilly's own book, Networking Personal Computers with TCP/IP. The chapter on Win95 TCP/IP opens with: "The newest generation of Windows is not dependent on DOS.... Windows 95 is not simply a new version of Windows; it is an entirely new operating system." The book goes on to say that Win95 is a "fully integrated operating system. Windows 95 does not depend on DOS; it replaces it. The PC boots directly into Windows 95.... The kernel is 32-bit protected mode code, which should greatly enhance reliability.... Only modules that require backward compatibility with Windows 3.1 use 16-bit code."

The PC industry -- even a company such as O'Reilly with every reason to be skeptical of Microsoft's claims -- seems almost desperate to believe that DOS is dead, and that Win95 isn't merely a very compelling upgrade -- Windows 4.0, combined with MS-DOS 7.0 -- but a brand new operating system, similar in design to NT, redesigned from the ground up, which ushers in a new era in personal computing. Major purchasing/development/deployment decisions are being made based on these beliefs.

Yet, its difficult to know what's really being claimed for Win95. While on the one hand Microsofts Win95 "World Tour" displayed the slogan "NO MS-DOS!" (see Computer Reseller News, June 5, 1995), at the same time the Microsoft Windows 95 Resource Kit contains a short section, "Technical Notes on MS-DOS Components in Windows 95" (pp. 560-561), which directly contradicts this assertion. The section starts off by acknowledging that "Many users have wondered whether Windows 95 contains MS-DOS code, and if so, whether that means that Windows 95 is somehow built on top of MS-DOS." The section goes on to list over a dozen functions which Windows 95 handles by calling MS-DOS. No MS-DOS?

Microsoft merely states that "Functions implemented in this manner ensure backwards compatibility with existing real-mode software, such as the Novell NetWare client." This is very odd. Microsoft's attitude in its resource kit -- "gee, we could really get rid of DOS if it weren't for this wooden leg called

NetWare" -- hardly matches the claims in its advertising that DOS is already gone.
What does it mean to explain why DOS is present (even if the explanation given isn't a very convincing one -- for one thing, software such as NetWare isn't interested in some of the calls such as Get Date and Get Time that Win95 passes down to DOS), when the company widely broadcasts claims that DOS is already gone?

This is typical of the sloppy thinking around this issue. The more you look at them, what at first appear to be statements on Win95's architecture turn out to be a feel-good exercises. Back in February 1994, the Microsoft Systems Journal claimed that Windows no longer can be likened to a fancy paint job on an old MS-DOS Yugo. "Because the entire operating system is freshly designed from the ground up, you now have killer features such as threads, memory-mapped files, and asynch I/O." Move ahead to October 1994, and this same statement appears in Dave Edson's oddly titled book, Dave's Book of Top Ten Lists for Great Windows Programming, except now the entire operating system is merely most of the operating system (p. 251). Aside from the amusing sight of Microsoft employees describing MS-DOS -- the most successful software product ever, and the foundation for Microsoft's fortunes and success -- as a Yugo, you have to wonder about the apparent ease with which these phrases such as "freshly designed from the ground up" are thrown around.

So whats the truth here?

My Una
uthorized
Windows 95 (IDG Books, 1994) showed in detail -- perhaps an absurd amount of detail -- that Win95 still relies on DOS. DOS is part of Win95, not simply a convenient place from which to boot, nor simply for "compatibility." The system still has MS-DOS at its core.

As one example, every Windows program, even the newest Win32 program, requires a DOS data structure, called the Program Segment Prefix (PSP), which the system allocates in conventional memory, and initializes with a DOS call (INT 21h function 55h). And every program that exits, whether DOS, Win16, or Win32, calls the DOS Terminate Process function (INT 21h function 4Ch). Win95 most certainly does sit on top of DOS, albeit a copy of DOS that comes in the same package.

Now, it is true that Win95 runs DOS in Virtual-8086 mode. This means that Win95 runs DOS, rather than the other way around. But exactly the same could be said of Windows 3.x 386 Enhanced mode. And its true that Win95 provides 32-bit file access that bypasses the file I/O code in DOS. But the same could be said of Windows for Workgroups 3.11. Win95 relates to DOS in the same way that Windows 3.x Enhanced mode has always related to DOS. Win95

continues to use DOS for many non-file operations, including getting the current date and time, getting and setting the current drive, managing PSPs, and so on. (One important difference, however, is that Win95 provides memory-mapped file I/O: this new feature is a good example of what bypassing DOS really looks like.)

So, to whatever extent you can say that Win95 is not a layer on DOS, you could say the exact same of Workgroups 3.11. Yet, Microsoft spokesmen today trash that product as hopelessly lame. Check out the interview with Microsoft VP Brad Silverberg in Adrian King's Inside Windows 95: "When I have to go back to the Windows for Workgroups machine, its like, 'This is the old stuff. How did I ever use this? How did I ever like it?'" (p. 415). Will we one day be hearing of how Win95 is a joke? Remember, it wasn't so long ago that Microsoft claimed that Windows 3.x was not a mere "operating environment" layer on DOS, but a full-blown operating system, part of an "integrated whole" with DOS. Now it turns out according to Microsoft to have been a mere layer, after all.

Perhaps its worth spending some time up front anticipating how Microsoft, in its next fit of "creative destruction," will describe Win95 a few years from now. A Microsoft spokesperson seeking to encourage you to jump on the Windows 97 bandwagon might, for example, note that Win95 obviously rests on top of DOS, and if you doubted it, might point out a ridiculously easy way to see that this is so: If Win95 isn't a layer on top of DOS, then obviously overwriting DOS in memory should have no effect on the running of Windows itself. Oh, it might make it impossible to run DOS programs, but clearly a DOS-free Windows would be able to run Windows programs even in the case of a corrupted in-memory DOS.

Well, it turns out that overwriting DOS in memory kills off all of Win95 -- not just the DOS box. For example, the following C code brands the first two bytes of the DOS INT 21h handler with the number of the Beast thereby crashing the system on the next DOS call.

This next DOS call may come from a Win16 or even from a Win32 program.

That trashing DOS trashes all of Win95 shows how ludicrous is the idea that DOS is gone from Win95. So where does this idea come from? Is it just wishful thinking? Certainly it's not based on even a cursory examination of the product. That overwriting MS-DOS from a DOS program brings down the entire system means that Win95 can't survive without working DOS code underneath it -- even if you never run a single DOS program. DOS is gone from Win95 in only the most superficial and meaningless sense that it's also gone from Windows 3.x Enhanced mode.

Win95 is an excellent product, but it's crucial that the industry get its expectations in line with the realities of

the product. Otherwise, Microsoft and those who repeat its slogans could face a nasty backlash from those who believed they were getting NT Lite, only to find they have nothing more -- though also nothing less -- than Windows 4.0 lashed together with MS-DOS 7.0.

Return to Windows 95

--
--Rich-- ag6k, 805-386-3734

697. Re: Travelling wave tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: keng@techlock.com
Message-ID: <32e3b953.905309@news.erinet.com>
Source record: 98297
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.equipment

On 19 Jan 1997 21:42:24 GMT, angel vilaseca
<100604.1242@CompuServe.COM> wrote:

>Ladies and/or Gentlemen:
>I would like to find five ...and perhaps more...10 GHZ TWTs
>
>TWT types:
>Siemens: RW 2135, RW 1127, RW 1125, RW1125 D, F, or G.
>Hughes: 8731H , 8762H , 8713H, 1235H, 771HD, 783H,
>Hughes: 8010H16, 8010H06, 8010H07, 8010H03, 8010H17, 8010H15,
>Hughes: 8010H11
>STC or ITT :W3MC12D, W3MC11A, W3MC15C, W3MA6A, W3MA9A, W3PA1W,
>W3PA5A
>VARIAN: VTX-6186B2 VTJ-6370J1 VTH6375F1 VTU-6297C1
>VARIAN : VTH-6270F1 VTX6385A1 and others
>EEV: N10012, N10016, N1080A, N10030, N1089B, N1081, N10020,
>N10020
>Other TWTs not cited above are of interest if they will work
>from
>10.0 to 10.5 GHZ with FM television power outputs above 5 watts.
> If you have no TWTs but can recommend sources, please do so.
>73 de John Jaminet W3HMS
>Mechanicsburg, PA 17055
>phone 717-697-3633
>E-mail: w3hms@aol.com

Do you have access to high voltage power supplies and filament
supplies, or do you need that, too (making it a TWTA- A for
amplifier)? Many of the above tubes have different beam voltages, some
might have depressed collectors, etc. That is a MAJOR factor.

Are you looking for new tubes/TWTAs, or used but working? I can get
tubes from a variety of sources, but only new.

Regards,

Ken Gunton WB6QWF Techlock Distributing Microwave & RF Components
http://www.techlock.com
Phone 937-434-5078, Fax 937-434-5079

698. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Curt Steger <csteger@earthlink.net>
Message-ID: <32E4282C.4561@earthlink.net>
Source record: 98298
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Holstein wrote:
>
> Does anyone know of a mod to make the Realistic HTX-212 transmit out
> of band??? I want to be able to use this radio on my boat on the
> marine band instead of buying another radio.
>
> Thanx for any help.
> David, N3NGB@KE3GP.MD.USA.NOAM
> holstein@erols.com
> dholstein@comcastpc.com

The HTX-212 will not X-mit out of band, with the exception of MARS/CAP.
Why do you need to X-mit out of band anyway?

699. Re: HF and VHF kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c12q3$5jo@news1.mnsinc.com>
Source record: 98299

Many many KITS sources are listed in MEGALIST.TXT

The information you are needing can be found on my Web Site in the
HAM RADIO RESOURCES section at the address listed below.
ENJOY!

I have a number of unique resources available for radio etc.

MEGALIST + HAM RADIO + HOCKEY = Bry's Page!

http://www.mnsinc.com/bry/

All the very best - Brian, AF4K / G3XLQ

Will White <will.white@asu.edu> whistled a happy tune like:

|>Where are some good sources of HF and VHF solid state kits? I am in
|>the PHX, AZ area. Thanks.

|>--Will

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

700. Re: Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c127j$5jo@news1.mnsinc.com>
Source record: 98300

Jack - hello - have you checked out the GLOWBUGS e-mail list group?
We have many many guys who like to build these older style xmtra there!
It's a LOT of fun!

E-mail to listserv@theporch.com
and send text:
subscribe glowbugs yourname

ENJOY!

WA8GHZ /5 Jack Dougherty <jdougher@wt.net> whistled a happy tune like:

|>My first rig in '66 was a used Heath DX-35 that had a grid-modulated
|>6146 final setup (essentially a DX-20 with grid modulation added for
|>AM). It worked, and was cheap, but the modulation was never equal to a
|>plate modulated setup - my audio was always weak, but the rig was $20.
|>used and was all I could afford. Still, it was a compromise sollution
|>at the time to save transformer cost, etc.

|>--
|>WA8GHZ /5 / === === o === o === o o === === o
|>Jack /Houston / "I know the guy who built my radio."

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

701. Re: Need high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c1298$5jo@news1.mnsinc.com>
Source record: 98301

Stan Aughenbaugh <Stan.Aughenbaugh@MCI.COM> whistled a happy tune like:

|>Winston Chan wrote:
|>>
|>> I am repairing a high voltage power supply and need a transformer with
|>> about 1500 V secondaries for line voltage (115 V) input. I have checked
|>> the major transformer manufacturers and they all seem to have stopped
|>> making transformers with secondaries of more than a couple of hundred
|>> volts. Does anyone know of a source for high voltage transformers?
|>>
|>> --
|>> Winston Chan | phone: (319) 353-2398
|>> Dept. of Electrical Engineering | fax: (319) 353-1115
|>> University of Iowa | email: wkchan@icaen.uiowa.edu
|>> Iowa City, IA 52242

|>Try Peter Dahl Corp.
|>www.pwdahl.com I believe.
|>73,
|>--
|>Stan Aughenbaugh II

Or if you want a MUCH cheaper source, try an old microwave oven!
Most of those transformers put out about 1500-1800 volts I believe!

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

702. IC706 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Freeman Cheong <freeman@macau.ctm.net>
Message-ID: <32E2FA77.DAB@macau.ctm.net>
Source record: 98302

I have a IC-706 USA Version.I want to cut all freq. outside the Amateur
Band to get
Govern approval.
Please help me to do this, XX9ER.
Many Thanks.

703. 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5c0f10$l93@hpcvsnz.cv.hp.com>
Source record: 98303

I'd appreciate pointers to designs of low phase noise VCOs
in the 150MHz range, with a control range of 5MHz or so.
Lower control range (down to 1MHz or so) with band selection
thru diodes would also be OK. Would especially like pointers
to articles that discuss the designs in some detail, not just
say, "build it like this and it will be fine." Practical as
well as theoretical info would be helpful: things like,
"this series of varicap diode is especially good," as well
as, "the varicap diode should have these characteristics
for optimal performance."

--
Cheers,
Tom
tomb@lsid.hp.com

704. Re: 2 M CW QRP Xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970120075900.2032A-100000@supreme>
Source record: 98346

On Thu, 16 Jan 1997, Steve Allen wrote:

> Looking for schematic and/or info regarding HB 2 meter CW qrp
> transceiver.
>

Steve - Solid State Design has a circuit for a DSB VXO 2m transmitter. You could remove the bal modulator and key the PA stage and operate it as a CW rig. However the circuit is a little complicated, so you could start from circuits in the ARRL h/book.

If you want a VXO, use a fundamental frequency crystal (say 1/8 or 1/9 the transmit freq - ie 16 or 18 MHz) and multiply. If you just want a fixed frequency, an overtone crystal at a higher frequency will require fewer multiplication stages. I used a 36.025 MHz crystal successfully. For the xtal osc, I used the circuit in Solid State Design for the 10 metre Universal transmitter. This worked OK.

Then build up one or two multipliers, key the final stage, and you have a rig. You might want to make up a band pass filter as well. I've been heard 5-10km away with about 10-30 milliwatts into ordinary antennas. However my experiments with 500mW of SSB from hilltops show that distances of 100-300km should be possible.

73, Peter VK1PK

705. is anyone doing anything?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5bueqn$9pm@camel4.mindspring.com>
Source record: 98347

I discovered that there isn't any AM and never was, then I discovered that others had seen this before me, and my discovery was 20 years ago.

Every time I have tried to get people to listen to it, I am told on "authority" that it can't be so.

Anyone got time and money and management skills to make a project?

I can show you how it works, If I get credit. Plenty people want to steal ideas, but I am a hillbilly and will lie it sink into the mud first.

If interested, snail mail

Lou WB0NRU
PO Box 635
Tulsa OK 74158

Thanks.

706. Re: 6m duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Bigdad <Bigdad@Rworld.com>
Message-ID: <5buj0n$12m@kirin.wwa.com>
Source record: 98348

Take a look at the Fair Radio Sales catalog...seems to me there
is a duplexer in there that will work. The address for em is:

Fair Radio Sales
1016 E. Eureka
P.O.Box 1105
Lima Ohio 45802

They have a web site too but i dont remember the URL for it. Hope
this helps out. 73 Art WB9HNJ

707. Magazine Article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Bigdad <Bigdad@Rworld.com>
Message-ID: <5buoqb$1vo@kirin.wwa.com>
Source record: 98349

Im in need of the October 1974 CQ magazine article on converting the R-1170/ARR-52a Sonobouy receiver to a 2meter receiver. Email me if ya can help me out at: Bigdad@Rworld.com Thanks Art

708. Magazine Article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Bigdad <Bigdad@Rworld.com>
Message-ID: <5buoqt$24s@kirin.wwa.com>
Source record: 98350

Im in need of the October 1974 CQ magazine article on converting the R-1170/ARR-52a Sonobouy receiver to a 2meter receiver. Email me if ya can help me out at: Bigdad@Rworld.com Thanks Art

709. -REQ: TTL to 232 suggestions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: "David A. Minster" <david.minster@bigfoot.com>
Message-ID: <01bc069a$896725e0$76a4aec7@io.org>
Source record: 98351

Looking for some suggestions on interfacing a
Kenwood TS440SAT to a PC serial cable. I have
a 1488/1489 in the junk box I could use, though
I understand the MAX232 is quite popular for the
job.

Your experiences would be appreciated.

David

710. any amplifier schematics on the web?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Karl-Heinz Merscher <Karl-Heinz.Merscher@uvw.uni-bayreuth.de>
Message-ID: <32E31C1B.446C@uvw.uni-bayreuth.de>
Source record: 98352

Hi homebrewers,

I tried search several search engines for "amateur radio amplifier schematics" without success.

Any info on that subject? I would like to start with a simple project (e. g. amplifier with a single 3-500 Z).

Thanks in advance!

Karl-Heinz, DL6RDE/AA1KD

711. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc0683$f8d93c40$0fd866cf@default>
Source record: 98353
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.digital,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radi

Brian,

Lat I tried your software, it crashed under Windows 95. Did you fix it?

73 de VE7MDL ....Erik.

Brian E. Cauchi <gcauchi@keyworld.net> wrote in article
<01bc0566$8ad8d340$0100a8c0@mstcp.keyworld.net>...
> Hello...
>
> If you have a RADIO and a SOUND BLASTER (or compatible card) you already
> have all the hardware necessary to receive WEFAX, FAX, SSTV and RTTY.
>
> You can also transmit monochrome FAX and SSTV, with the current version.
>
>
> *** Put the power of your 80386, 80486 or Pentium processor to real use
***
>
> The external "decoder" units that are used by conventional users are
> modelled inside the software. This makes it easy to get started,
> inexpensive and rids you of the inevitable tangle of wires and boxes of
> decoders.
>
> Absolutely no external hardware, other than a simple audio lead, is
> required by FTV. The current version decodes:
>
> WEFAX (from weather satellites, e.g. 137-138 MHz)
> HF-FAX (from terrestrial stations)
> SSTV (from radio amateurs, e.g. 14.230 MHz)
> Baudot (press, naval, weather etc)
>
>
> Here is a run down of the more interesting features:
>
> (1) It keeps the demodulated signal in memory, so that the signal can be
> analysed again at a different keying rate or polarity! Garbage can be
> resampled on the fly, which means that minutes of received signals
decoded
> at the wrong baud rate or keying polarity are recovered, on the fly,
while
> still receiving.

>
> (2) The incoming signal is analysed automatically - standard modes, line
> rates, baud rates and keying polarity are automatically determined
> following analysis.
>
> (3) Tuning oscilloscope available at all times, without loss of copy.
>
> (4) Program works in real time.
>
>
> *** What are you waiting for? Try it now! ***
>
> Take a look at my web site for futher details, from where you can
download
> an evaluation copy, at: http://www.geocities.com/SiliconValley/2504
>
> Be fore warned! A registered copy costs US$ 25, but after all, registered
> promotes the further development of this and other software while giving
> you the right to acquire all future versions paying only for delivery
> expenses, if any.
>
> Fianlly, just in case some of you have trouble accessing my web site,
here
> is my postal address (if you want a reply, send a self-addressed label
and
> IRC's to cover expenses):
> Brian E. Cauchi,
> Gawhra, Domenico Cachia Street, Birkirkara BKR06, MALTA.
>
>
> What can I say? Try it, and may you have as much fun as I am having...
> 73's from Brian.
>
>
>
>

712. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: garyk9gs@pitnet.net
Message-ID: <32e315bb.261037433@news.pitnet.net>
Source record: 98354

On Sat, 18 Jan 1997 21:36:55 -0800, Clifford Buttschardt
<cbuttsch@slonet.org> wrote:

>I have been told to be sure and use electronic grade RTV for long term use
>in outside antennas in which the exposed ends of coax must be sealed for
>extended periods. What is this material and where can it be purchased?
> As a first guess I would think that it is RTV in which a non acedic
>base is use. If this is true, can any clear RTV be used that does NOT
>smell like acidic acid (vinegar) when opened? Cliff Buttschardt K7RR
>

Hello Cliff,

What you want is Dow Corning 3140, available at most electronics parts
suppliers.

73,
Gary K9GS
garyk9gs@solaria.sol.net

73,
Gary K9GS

____
/ K9GS |_____________________________
/ FP/K9GS, TO5M |Society of Midwest Contesters |_____________________
(| garyk9gs@solaria.sol.net |Secretary/Treasurer/
\ Gary Schwartz | K9GS@WA9KEC.WI.USA.NOAM | Greater Milwaukee/
_____________________| PacketCluster: NB9C | DX Association (
(_____________________________| GMDXA \
(_____________________\

713. RF BRIDGE CIRCUIT WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: workshop@pcm.co.za
Message-ID: <5bva32$6oo$3@proxy01.iafrica.com>
Source record: 98355

Does anyone have a circuit for a fairly siple rf bridge.
I want to use it to measure antenna impedance etc.
I have a signal generator that goes to about 110MHz,so the signal generator
part of the circuit is not realy needed,only the bridge and detector.
Any help would be appreciated
Cheers
Rob
email:workshop@pcm.co.za

714. Re: Egg Beater Antenna (Help)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc0687$a95060a0$0fd866cf@default>
Source record: 98356

Russ,

Looks interesting, but where d you get 93 Ohm coax???

73 de VE7MDL ....Erik.

Russ Renaud <ae517@FreeNet.Carleton.CA> wrote in article
<5biqi0$b35@freenet-news.carleton.ca>...
>
> SWaldrup (swaldrup@aol.com) writes:
> > I am looking for plans on how to build the Egg Beater type Antennas for
> > VHF and UHF. Any one played with these?
>
>
> Yes, point your browser to:
http://fly.hiwaay.net/~harperrc/antenna/ant.html
>
> 73 de va3rr/aa8lu
>

715. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970120114600.GAA17002@ladder01.news.aol.com>
Source record: 98357

In article <measures-ya02408000R1901971257220001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>Dave contacted me privately before the public announcement. About 4
years
>ago, in my 8169 amplifier, I experienced a similar tank arc which was
>caused by an arc in my 160m Hertz antenna's L-network tuner, 100 feet
down
>the coax feedline, out in the back yard.

If Dave contacted you privately before the public announcement, why did
you go ahead announce the arcing was caused by a parasitic? If you
experienced an arc in your tuner that caused your PA's tank capacitor to
arc, why didn't you ever indicate or admit an arcing problem could be load
related?

In article <measures-3010961224430001@port20.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>The voltages that can result from an intermittent vhf oscillation are
>impressive. For instance the TL-922 uses a tuning capacitor that tests
>out at well over 5000vdc.
>The max. RF peak voltage across this capacitor
>is normally around 2700v with the electric-mains supplying 240v to the
>922. Other manufacturers of similar amplifiers typically use a tune
>capacitor with only 60% of the air gap in the 922's tune capacitor, so
the
>safety factor is awesome. However, when the 922 oscillates at 140 MHz,
>the tune cap. can arc. If you are lucky enough to see this happen, the
>arc is purple---a strong indicator that vhf voltage is present.

In article <measures-2312960402070001@port19.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

> I have seen large air gaps arc for no apparent
>reason. An arced TL-922 tune capacitor is currently being shipped to me
>from NM for testing. I will test it and post the results here. When
this
>tune capacitor was replaced with a new unit, it also arced.
>IMO, the
>mysterious intermittent arcing is VHF parasitic related. .

In article <measures-2312961641190001@port10.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>This afternoon I tested David Holtcamp's TL-922 tune capacitor. The
>breakdown voltage was about 6100V. David observed that this capacitor

>arced during operation on the CW tap.
>The HF voltage present on the CW
>tap is around 2000V IMO, the intermittent arcing of the 6000v+ tune cap.
>was due to a largely-unloaded VHF parasitic oscillation.

Three times you indicted the 922 arcing had to be a parasitic. It was your opinion. It was your conclusion.

You posted that conclusion knowing full well that it could be a load problem, you admit you did so **after** Dave indicated in E-mail it was an arcing lightning arrestor.

In article <measures-ya02408000R1901971257220001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>About 4 years
>ago, in my 8169 amplifier, I experienced a similar tank arc which was
>caused by an arc in my 160m Hertz antenna's L-network tuner, 100 feet down
>the coax feedline, out in the back yard.

You intentionally omitted evidence you discovered four years earlier that contradicts your public posture that parasitics are the only cause of tank circuit arcing.

You misled us about the AL-1500 that you NOW admit was not even an AL-1500. (Marvin said there is no way you didn't know that from the very beginning, he said he was very clear about what the PA was.) You did the same with your claims about conversations with Eimac.

Rich, how can anyone trust you?

73 Tom

716. _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: holstein@erols.com
Message-ID: <5bvm3c$qdr@boursy.news.erols.com>
Source record: 98358
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Does anyone know of a mod to make the Realistic HTX-212 transmit out of band??? I want to be able to use this radio on my boat on the marine band instead of buying another radio.

Thanx for any help.
David, N3NGB@KE3GP.MD.USA.NOAM
holstein@erols.com
dholstein@comcastpc.com

717. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970120005725.5152A-100000@prog1.caprica.com>
Source record: 98359
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Wed, 15 Jan 1997, Dick Flanagan wrote:
> In article <32DCE015.547@ldecs.ericsson.se>, Tommy Karlberg
> <ecstka@ldecs.ericsson.se> wrote:
>
> >Has anyone seen "teddy bears" callsign?

My call sign is MY business OFF the air. So is yours. If you don't like that, tough tetrodes!

Since when is a ham callsign required to post in usenet?

As I have said to someone here before, I do not give my callsign off the air.

If you need a callsign, my internet "callsign" appears at the top of my messages. Deal with it.

718. Re: Wanted! 2M RHCP Helical for EME designs!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970120010559.5152B-100000@prog1.caprica.com>
Source record: 98360
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

On Thu, 16 Jan 1997, RickH wrote:

> > On Fri, 10 Jan 1997, tyler wrote:

> > Beggars can't be choosy.
> > >
> > WHAT makes me a begger? I also have info to give on other topics pal!
> > Fair exchange is not robbery as the old saying goes. So get off your high
> > horse because you do not have a corner on knowledge and even though I dont
> > know it all, I certainly am not knowledgabley bankrupt!
> >
> > And AGAIN if I ask for a screwdriver and you give me a hammer then your
> > idea of "help" is not help at all!
> >
> > What is so hard to understand about that? IT HAPPENS TO BE TRUE!
>
> Ted
>
> But what if what you really need is a hammer?

Then I'd have asked for one. I'm a pioneer. I dont follow trails, I cut them.

719. 2SK879 Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199701201308.FAA27597@mail.ucsd.edu>
Source record: 98361

I need info on the transistor 2SK879, mounted on the FM Dual Bander
rtx Kenwood TH77E.

Thanks

e-mail address: chalpm@hqlab.ico.olivetti.com

720. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: bbowers@townsqr.com
Message-ID: <5bvu02$16r@tofu.alt.net>
Source record: 98362
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

holstein@erols.com (David Holstein) wrote:

>Does anyone know of a mod to make the Realistic HTX-212 transmit out
>of band??? I want to be able to use this radio on my boat on the
>marine band instead of buying another radio.

In addition to being very illegal, there is only one modification that
will work, legally or otherwise, to make the 212 go out of band
transmit.

Here it goes. Take a clean work surface, and cover it with something
to ensure that the screws do not get lost.

Take the 212, and set it face down on the surface.

Take a type accepted radio, for the band you need, and set it, face
up, on the back of the 212.

Take duct tape, and tape liberally.

There you have it!

721. Re: 2SK879 Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: vvv@radio.stack.net
Message-ID: <5bvvbc$lhc@ns.serpukhov.su>
Source record: 98363

chalpm@hqlab.ico.olivetti.COM wrote:

> I need info on the transistor 2SK879, mounted on the FM Dual Bander
> rtx Kenwood TH77E.

> Thanks

> e-mail address: chalpm@hqlab.ico.olivetti.com

Technical specifications for the 2SK897

Function : POWER STAGES (VERTICAL MOSFET)

Polarity : N-MOSFET ENHANCEMENT

Drain-source voltage [VDS Max] : 550 V

Gate-source voltage [VGS Max] : 20 V

Drain current, dc [ID Max] : 4 A

Total power dissipation [Ptot Max] : 40 W

Zero-gate-voltage drain current [IDSS Max] : 560 ΅A

PinOut : 1= G , 2=D , 3=S

Check out http://www.tds-net.com/pages/us/discrete.htm

and find specification and image of transistor

73! de RX3DIN Victor
---
http://www.stack.net/~victor/hamradio/

722. Re: 2SK879 Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: vvv@radio.stack.net
Message-ID: <5c01kl$lhc@ns.serpukhov.su>
Source record: 98364

Victor V Voronkov (vvv@radio.stack.net) wrote:
> chalpm@hqlab.ico.olivetti.COM wrote:

> > I need info on the transistor 2SK879, mounted on the FM Dual Bander
> > rtx Kenwood TH77E.

> > Thanks

> > e-mail address: chalpm@hqlab.ico.olivetti.com

> Technical specifications for the 2SK897

> Function : POWER STAGES (VERTICAL MOSFET)

> Polarity : N-MOSFET ENHANCEMENT

> Drain-source voltage [VDS Max] : 550 V

Sorry, for mistake with search data on 2SK897. Here's data on the
2SK879:

Function : FET

Polarity : N-FET

Material : SILICON

Drain-gate voltage [VDG Max] : 50 V

Static gate current [IG Max] : 10 mA

Total power dissipation [Ptot Max] : 100 mW

Zero-gate-voltage drain current [IDSS Min] : 300 ΜA

Zero-gate-voltage drain current [IDSS Max] : 6,5 mA

PinOut : 1= D , 2=S , 3=G

Victor

723. Help with TR switch hookup - pin_tr.txt (1/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: JOHNWHITE@gnn.com
Message-ID: <5c07f4$ofa@news-e2d.gnn.com>
Source record: 98365
Body handling: Inline uuencoded payload not displayed: pin_tr.txt

```
-------cut here-------CUT HERE-------PART (1/1)

[Inline uuencoded payload not displayed: pin_tr.txt]

-------cut here-------CUT HERE-------PART (1/1)
```

724. Re: ? Oszi and Spectrum Analyzer using Sound

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Andy <muldowne@wilde.oit.umass.edu>
Message-ID: <01bc06eb$ee3eb720$02b47780@oit.umass.edu.umass.edu>
Source record: 98366

Koellner, Guenter <guenter.koellner@oen.siemens.DE> wrote in article
<1997Jan14.130300.1895.156077@descn121.oen.siemens.de>...
>
> Hello,
>
> is there any SW that allows to use a soundblaster card as a oszilloscope
> or a spectrum analyzer? Where can I get it?
>
> Thanks for your help=21
>
> vy 73, Guenter, DL4MEA=40DB0KCP.=23BAY.DEU.EU (AX.25)
> dl4mea=40amsat.org (Internet)
> http://www.scn.de/=7Ekoellner (WWW)
>
>
I got one called Scoper from Shareware.com (you can download it from and
simtelnet mirror in the win3/sounds/ directory.) It is a scope and
spectrum analyzer. It doesn't have that many options, but works fine for
me! You just put the input into your mic jack on the soundblaster. KB0MMU

725. Re: Request help on 2.4GHz antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: filipg@paranoia.com
Message-ID: <5c072f$pa6@villa.fc.net>
Source record: 98367

In Article <01bc03e2$ecbe06a0$cd7993cf@cliffs>, through puissant locution, "Cliff Soderback" <Cliff-s@worldnt.att.net> soliloquized:
>Jim Lee <jlee@proaxis.com> wrote in article
>> I have two 2.4GHz frequency-hopping spread spectrum tranceivers (100
>> mW each). I would like to construct two directional antenna systems
>> (parabolic dish? yagi? helical?) that would give me a range of 20
>> miles or so. The two sites where the radios will be located are
>> pretty much line of sight (except for maybe some trees and other
>> variable terrain). Any suggestions? Any ideas where I might find
>> related info on the net? Thanks in advance....
>
>Check out the local swap meets and Hamfests for some old
>MDS receiver dishes. These were used quite widely a few years
>back and are cut quite closely to 2.4g. The feed horns and the antennas
>will work, but just throw the rest away.

Greetings. Say, for the uninformed, how serious are the problems with interference from household Microwave ovens (which happen to be right there in the middle of the 2.45GHz)? How accurate is the frequency of the $35 magnetron? Does it drift? (since the drive depends on the household power quite a bit) Anything else you can add on this?

Take care.

P.S. Just fixed a nice Kenmore with a new HV diode... and another GE spacemaker (nice one) with a new door-interlock switch... because:
--
+-->Filip "I'll buy a vowel" Gieszczykiewicz | E-mail: filipg@paranoia.com
| http://www.paranoia.com/~filipg/ |SCI.ELECTRONICS.REPAIR FAQ + LOTS MORE!
| Enjoy your job, work within the law, make lots of money : Choose any two.
| I think for myself. I listen. I make decisions. I speak what I believe.

726. Could anybody help me building a QRP transceiver?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: wyan@cryogen.com
Message-ID: <5c0asq$ri5@lince.lander.es>
Source record: 98368

I don't know how to begin... could anybody point me to a page or send me
some info about QRP building?
Thank you very much :)
--
Wyan the Wonderful, wyan@cryogen.com
Leon, Spain

[Posted with Free Agent 1.0. For info, email agent-info@forteinc.com.]

727. Re: HF and VHF kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: landisj@nad.com
Message-ID: <1997Jan20.102604.679@main03>
Source record: 98369

In article <5bot0n$3jh@sf18.dseg.ti.com>, kc5ng@dlep1.itg.ti.com (Mustang Maniac) writes:
> In article <32DF1686.6ECA@asu.edu>, will.white@asu.edu says...
>>
>>Where are some good sources of HF and VHF solid state kits? I am in
>>the PHX, AZ area. Thanks.
>>
>>--Will
>
>
> Ten-Tec has some -- http://www.tentec.com
>
and...
Down East Microwave has some for VHF+ - http://www.downeastmicrowave.com

Joe - AA3GN
--
landisj@nad.com - speaking only for myself, of course
No, this is not a sig.

728. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2001971019520001@news.vcnet.com>
Source record: 98370

In article <9700138531.AA853185279@mail.creo.com>, lhalliday@creo.COM wrote:

snip.......
> BTW: can we slow down a bit on the ARRL bashing, please? At least they
> did *something*, rather than sitting around on their backsides and
> whining. The fact that their first attempt was imperfect means exactly
> that. With some constructive criticism, future CDs will be better.
>
Laura
It seems to me that 'ARRL bashing' and questioning a questionable decision
is hardly in the same league.

How can you know that 'future CDs will be better' unless you are psychic?
If it happens, we may have to wait a while. The *Radio Amateur's Handbook*
published erronius PI-L formulae in the amplifier chapter for many years
before the problem was eventually fixed.

The new Handbook isn't much better. On page 13.13 there is a formula to
calculate the RF current in an amplifier's HV blocking cap. that appears to
be off by about 700%. .

--
--Rich-- ag6k, 805-386-3734

729. Re: 2 M CW QRP Xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <32e3fab0.7139810@news.erols.com>
Source record: 98371

At a hamfest yesterday I picked up a little 20 dollar 35 Watt solid state Class C 2 meter amp. Brought it home and this morning I was wondering what to do with it. Then I remembered the old Heath HW-30 (Twoer - Benton Harbor Lunch Box) I'd picked up a while back. Cleaned it up, re-capped it, disabled the regen receiver, connected the amp and fired it up on CW. It sounds good and I think I'm getting about 20 watts out of the amp. I had to go back and cathode key the driver to minimize the annoying backgwash tone (and emission) caused by the continuously running osc and driver.

I intend to use it for RS-10 and maybe RS-15. I need some rocks. Anyone have crystals in the 8103 - 8104 khz area?

730. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Jon Bloom <jbloom@arrl.org>
Message-ID: <32E3A9B5.5236@arrl.org>
Source record: 98372

Gary Coffman wrote:
>
> In article <32DE9B6F.4C8F@arrl.org> Jon Bloom <jbloom@arrl.org> writes:
> >> It's not just Mac users, but OS/2 users, *.nix users, people with older
> >> DOS systems that can't run Windows ... all of them are excluded by a
> >> Windows only product.
> >
> >True, but all of them put together consist of a miniscule part of the
> >potential market for ARRL products. Nobody (outside of Redmond) likes
> >that fact, but it's true.
>
> At the risk of repeating myself, let me say that there appears to be
> some confusion (on both sides) as to what is the product here. The
> product is the information in 80 years of QST. It is not a Windows
> browser that happens to be included on the disk to display it. There
> should be nothing about the data which is platform specific. If there
> is, then that is a seriously flawed decision.

At the risk of repeating *my*self, there is nothing platform-specific
about CCITT G4 TIFF files or comma-delimited database files. But I think
you overstate the case in saying that's the sole element of the product.
Clearly, the viewer, including the database engine as well as the image
viewer, is part of the product--the Mac users certainly seem to think
so, and so do I.

Jon
--
Jon Bloom, KE3Z | jbloom@arrl.org
American Radio Relay League |
225 Main St., Newington CT 06111 |

731. Re: 455Khz Resonator - What is it

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5c0fse$q8k@nnrp1.news.primenet.com>
Source record: 98373

tim_hynde <tim_hynde@idecc.com> wrote:
: In the Epiphite 2 (80m SSB tranciever) I am building there is a call for
: a 455Khz Resonator. I understand 455Khz as an I.F and for the most part
: how that works but:

: The P.C board spacing appears larger than a standard 455Khz filter.
: Would someone please explain the difference between the resonator and
: the filter, if there is one?

The 455 KHz resonator is a ceramic device that has a low real
impedance at the centre frequency, in this case 455 KHz. They are
commonly used as the resonator for an oscillator, similar to using a
crystal.

They can also be used as crude single-pole bandpass filters, and
both the Toko and MuRata catalogues show them as being used in place of
a bypass capacitor in the emitters of IF amplifiers.

I gotta go.

Regards,

Chris

,----------------------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _______,--------------'
_ |/
oo\ Chris Trask / N7ZWY
(__)\ _ Principal Engineer
\ \ .' `. ATG Design Services
\ \ / \ 1863 East Palmcroft Drive
\ '" \ Tempe, Arizona 85282
. ( ) \
'-|)__| :. \
| | | | \ '. TEL: (602) 966-7395
c__; c__; '-..'>.__ Email: ctrask@primenet.com

Graphics by Loek Frederiks

732. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Frank Scaraglino <fas@rtp.ericsson.se>
Message-ID: <32E3E69C.381D@rtp.ericsson.se>
Source record: 98374

Gary K9GS wrote:
>
> On Sat, 18 Jan 1997 21:36:55 -0800, Clifford Buttschardt
> <cbuttsch@slonet.org> wrote:
>
> >I have been told to be sure and use electronic grade RTV for long term use
> >in outside antennas in which the exposed ends of coax must be sealed for
> >extended periods. What is this material and where can it be purchased?
> > As a first guess I would think that it is RTV in which a non acedic
> >base is use. If this is true, can any clear RTV be used that does NOT
> >smell like acidic acid (vinegar) when opened? Cliff Buttschardt K7RR
> >
>
> Hello Cliff,
>
> What you want is Dow Corning 3140, available at most electronics parts
> suppliers.
>
> 73,
> Gary K9GS
> garyk9gs@solaria.sol.net
>
> 73,
> Gary K9GS
> _____
> / K9GS |_____
> / FP/K9GS, TO5M |Society of Midwest Contesters |_____
> (| garyk9gs@solaria.sol.net |Secretary/Treasurer/
> \ Gary Schwartz | K9GS@WA9KEC.WI.USA.NOAM | Greater Milwaukee/
> _____| PacketCluster: NB9C | DX Association (
> (_____| GMDXA \
> (_____\
They only problem with this "stuff" is it is a lot runnier then RTP
Frank

733. Re: Gap, do they still exist ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Andy Vavra <avavra@erols.com>
Message-ID: <32E38D34.62DD@erols.com>
Source record: 98375

I also <had> a Gap at one time, and experienced similar problems with shorted 80 mtr resonating caps. Eventually the whole antenna failed due to water incursion into the coax where it enters the base of the antenna. As it turns out, Gap did a poor job of deburring the hole where the coax passed through the antenna mast, which caused a hole to wear through the jacket of the cable, allowing water to enter.

I doscovered this when one day, while troubleshooting the antenna, I noticed water seeping out from the connector end of the antenna at the base of the antenna.

Eventually the Gap became nothing more for me than an end support for my tuned random dipole which worked considerably better than the gap.

Bottom line: The Gap is a reasonably decent antenna if you can't set up anything else, but it's considerably fragile in design and construction, relying on too many gimmicks and gadgets to resonate it across multiple bands.

For some good information, check out the books "Reflections" by Walt Maxwell, "Transmission Line Transformers" by Jerry Sevik, and the Antenna Book by Lew McCoy. Your opinions on antennas will change -- mine did!

avavra@erols.com (KD3RF)

Bart Mudde wrote:
>
> I bought a Titan DX II from Gap. In the middle of september 1996 I
> erected this antenna but had some problems with the swr on some bands.
> I wrote a letter to Gap, after six weeks I got an answer and an other
> Cap for the 80 meter band. They gave instructions, but I have still
> problems. So they promised to sent an other Cap again, wich was 7 weeks
> ago. Until now I received nothing and a letter and several e-mails were
> not answered. The PACC contest is coming, then my antenna must be good.
> Who has a better address than gap@digital.net, or who can help me in an
> other way ?
> 73 de Bart PA3GGM
> In the beginning there was nothing, therefor I'm satisfied now

734. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: lafont02@cn.ca
Message-ID: <5c0g75$iq8@nr1.ottawa.istar.net>
Source record: 98376
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.digital,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radi

On 20 Jan 1997 03:32:12 GMT, "Erik Skovgaard"
<Erik_Skovgaard@bc.sympatico.ca> wrote:

>Brian,
>
>Lat I tried your software, it crashed under Windows 95. Did you fix it?

Did you try rebooting to MS-DOS mode? Programs that demand heavy duty
CPU time run better (At least run) only in MS-DOS mode (Not DOS IN A
BOX). SBFFT is like this.

Don VE2UFO

735. Re: 117L7 tube data needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Madjid <mboukri@cam.org>
Message-ID: <32E3BE8D.3CB6@cam.org>
Source record: 98377

Jim Tury wrote:
>
> Cesare Lavazza wrote:
> >
> > Does anyone know the data of this tube?
> > Which are the possible substitutes for the 117L7 tube?
> > Thanks.
> > Saluti.
> >
> > ----------
> > E-mail: Cesare.Lavazza@nemo.it
> > WWW: http:\\radionostalgia.net\Users\Lavazza
> > http:\\www.geocities.com\CapeCanaveral\4573
>
> 117L7GT/117M7GT are Rectifier-Beam Power Tubes
>
> Half-Wave rectifier and usually Class A Amplifier
>
> Pin Number Internal Connection
>
> 1 Cathode of Diode
> 2 Heater (117V @ .09A)
> 3 Plate of Beam Pentode
> 4 Grid 1
> 5 Grid 2
> 6 Plate of Diode
> 7 Heater
> 8 Cathode and Grid 3
>
> I don't know of a direct substitution, but you could improvise from the
> above data. These tubes were used in cheap phonograph players in the

Tube specs also at:
http://linux.cec.army.mil/hamradio/tube/tubefind.html

Main page of NJ7P
http://linux.cec.army.mil/noframe.html

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

736. Re: QST on CD BEWARE!!!!OS Whining

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Mark Bryant <bryant@sohobusiness.com>
Message-ID: <01bc070d$5904fe40$a3d879a8@soho>
Source record: 98378

Joe,

If you cannot discern the difference between conveniences for minimal use operating systems and accommodations for physical handicaps you cannot be expected to understand my original post.

Mark

Joe Subich <subich@ibm.net> wrote in article <5bpb2s$2dbi$2@news-s01.ny.us.ibm.net>...
> In message <01bc03e6$a0cecc80$a3d879a8@soho> - "Mark Bryant"
> <bryant@sohobusiness.com> writes:
> :>
> :>Maybe I can just whine at my OS or car decisions and hope that the world
> :>will drop everything and accommodate my special desires and needs. By the
> :>way I also used OS/2 until market conditions required me to switch to
> :>Windows for practical reasons. Should I whine about that also? Maybe I
> :>should just be adult enough to accept the results of my decisions.
>
> And, just perhaps, the general population should require government to
> stop spending tax money on programs and regulations that benefit a very
> few. We should pass laws banning closed captioning and/or signed TV
> programs. There should be laws against special/preferential parking for
> the handicapped. Wheelchair ramps, wide doors, and other "special"
> facilities should similarly be banned because they increase the cost of
> product to the rest of "normal" society.
>
> To use your automobile analogy ... highways costs are greatly inflated
> by the cost of roadbeds designed to support the weight of heavy trucks
> and overpasses high enough to permit tall vehicles to pass under them.
> You and I pay those increased costs every time we fill our gas tanks.
>
> QST is available on audio tape and by braile for the blind ... I would
> not doubt that some of the cost (even if it is only the cost of shipping
> copy) comes from the League's general fund budget. Perhaps people with
> minority sensory abilities should not expect the general membership to
> spend funds to support them either.
>
> --
> ==
> Joe Subich, W8IK ex-AD8I
> <W8IK@IBM.NET>

> <W8IK@AMSAT.ORG>
> <subich@ibm.net>
> <71350.1204@compuserve.com>
> ==========
>
>

737. Re: Transmitter Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Madjid <mboukri@cam.org>
Message-ID: <32E3C611.308D@cam.org>
Source record: 98379

Brian Carling wrote:
> Hello Gregg!
> We have a number of them available directly off of the Internet!
> You can view and download the articles right now, by pointing your web
> browser to:
>
> http://www.mnsinc.com/bry/hamfiles.htm
Tried to look at your site, but boy I was hit by a
barrage of cookies (at least two dozens to get the
main page).

Note: I am allergic to cookies :)

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

738. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d4da1faeac95012989786@news.planet.net>
Source record: 98380
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5bvm3c$qdr@boursy.news.erols.com>, holstein@erols.com says...
> Does anyone know of a mod to make the Realistic HTX-212 transmit out
> of band??? I want to be able to use this radio on my boat on the
> marine band instead of buying another radio.
>
> Thanx for any help.
> David, N3NGB@KE3GP.MD.USA.NOAM
> holstein@erols.com
> dholstein@comcastpc.com
>
>
From past posts, it can't be done, despite what you'll read to the
contrary
--
Steve KF2TI
ARRL LIFE Member

If you push something hard enough, it will fall over
Fudd's 1st law

if it goes in, it must go out
Testlicurs deviate to Fudd's law

739. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Connie Hulst <chulst@polar.polarcomm.com>
Message-ID: <32E3DD91.3A33@polar.polarcomm.com>
Source record: 98381
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Holstein wrote:
>
> Does anyone know of a mod to make the Realistic HTX-212 transmit out
> of band??? I want to be able to use this radio on my boat on the
> marine band instead of buying another radio.
>

If you have checked ftp://oak.oakland.edu/pub/hamradio/mods and found nothing, you're probably out of luck. Mods for Radio Shack radios are quite limited; that's why I never buy one.

If you ever need a Kenwood mod, e-mail me and I will do my best for you.

In reference to the other response you received, I do wish people would lighten up about type acceptance (and I mean the general public, not the FCC, which has more serious concerns than type acceptance to worry about.) I would certainly appreciate reading anyone's comments on this issue.

73 de Nick Hulst, AA0VY
chulst@polar.polarcomm.com

740. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: msimon@rworld.com
Message-ID: <5c0v5e$3nt@kirin.wwa.com>
Source record: 98382
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

What size cap did you use with your 1/2 meter on a side loop
with 22 turns of wire?

Thanks

Gary Tennyson <gary.j.tennyson@bridge.bst.bls.com> wrote:

>Scott Coburn wrote:
>>
>> I have built a WWVB (60kHz) VLF radio receiver. It is the receiver
>> designed by Bob Roehrig and described in the article "Most Accurate
>> Frequency Standard, Parts 1,2,3", 73, Jan/Feb/Mar 1994. It is a
>> Tuned Radio Frequency (TRF) receiver with an active ferrite rod antenna.
>>
>> I constructed the ferrite rod antenna/preamplifier as described in the
>> article and the receiver powers up OK and gets through all of the
>> alignment procedures outlined in the article. I have not yet gotten
>> the WWVB signal, but I suspect that is more a misfortune of my location
>> than a receiver problem.
>>

>I also built one of the 60 kHz receivers from the '73' magazine articles. I found that the
>system was going into regeneration, by way of the 'tickler coil'. The regeneration
appeared
>as an envelope, at a 120 Hz rate. It turned out that that the antenna was 'seeing' spikes
at
>this same rate, probably from some local source. The resultant regeneration was totally
>obscuring WWVB.

>I then connected a frequency-selective voltmeter to a 30-foot wire antenna and clearly
'heard'
>WWVB (when tuned for a 500 Hz offset). Next I connected the frequency-selective voltmeter
to
>the ferrite-core antenna (mine only had 400 or so turns). While I could hear WWVB, it was
>well below the noise. The level of the signal (+noise) was about 1 uV.

>Here in Central Alabama, the NIST pub indicates that the signal strength should be between
100
>and 500 uV/meter. After working through the equation for the voltage from a loop antenna,
I
>think that it is the wrong antenna for a fixed-frequency application. (While the high
>inductance allows wide tuning with a variable capacitor, the small cross-sectional area
limits
>the signal voltage.) I have built a 22-turn air-wound loop antenna with a cross-sectional

>area of 0.5 meter and tuned it to 60 kHz with a (fairly-large) capacitance. I measure about
>200 uV.

>Gary Tennyson

>gary.j.tennyson@bridge.bst.bls.com

741. Re: Need high voltage transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Winston Chan <wkchan@icaen.uiowa.edu>
Message-ID: <32E400F1.7500@icaen.uiowa.edu>
Source record: 98383

Ian White, G3SEK wrote:

>
> BTW, the Peter W Dahl Company is at http://www.pwdahl.com
> Their amateur catalog is one huge downloadable page which seems to
> contain every power transformer they ever made.
>

Thanks to all who responded. I found something close enough to what I
want at Peter W. Dahl.

Winston

--
Winston Chan | phone: (319) 353-2398
Dept. of Electrical Engineering | fax: (319) 353-1115
University of Iowa | email: wkchan@icaen.uiowa.edu
Iowa City, IA 52242

742. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: Gary Tennyson <gary.j.tennyson@bridge.bst.bls.com>
Message-ID: <32E3821D.78C7@bridge.bst.bls.com>
Source record: 98384
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Scott Coburn wrote:
>
> I have built a WWVB (60kHz) VLF radio receiver. It is the receiver
> designed by Bob Roehrig and described in the article "Most Accurate
> Frequency Standard, Parts 1,2,3", 73, Jan/Feb/Mar 1994. It is a
> Tuned Radio Frequency (TRF) receiver with an active ferrite rod antenna.
>
> I constructed the ferrite rod antenna/preamplifier as described in the
> article and the receiver powers up OK and gets through all of the
> alignment procedures outlined in the article. I have not yet gotten
> the WWVB signal, but I suspect that is more a misfortune of my location
> than a receiver problem.
>

I also built one of the 60 kHz receivers from the '73' magazine articles. I found that the system was going into regeneration, by way of the 'tickler coil'. The regeneration appeared as an envelope, at a 120 Hz rate. It turned out that that the antenna was 'seeing' spikes at
this same rate, probably from some local source. The resultant regeneration was totally obscuring WWVB.

I then connected a frequency-selective voltmeter to a 30-foot wire antenna and clearly 'heard'
WWVB (when tuned for a 500 Hz offset). Next I connected the frequency-selective voltmeter to
the ferrite-core antenna (mine only had 400 or so turns). While I could hear WWVB, it was well below the noise. The level of the signal (+noise) was about 1 uV.

Here in Central Alabama, the NIST pub indicates that the signal strength should be between 100
and 500 uV/meter. After working through the equation for the voltage from a loop antenna, I think that it is the wrong antenna for a fixed-frequency application. (While the high inductance allows wide tuning with a variable capacitor, the small cross-sectional area limits
the signal voltage.) I have built a 22-turn air-wound loop antenna with a cross-sectional area of 0.5 meter and tuned it to 60 kHz with a (fairly-large) capacitance. I measure about 200 uV.

Gary Tennyson

gary.j.tennyson@bridge.bst.bls.com

743. Re: 3-500z help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c12lm$5jo@news1.mnsinc.com>
Source record: 98385

Hello Gary -
The ARRL Handbook says that the maximum safe grid current would be
undefined(!)
Plate current maximum is 400 mA
Remember that is an absolute maximum rating. You wouldn't want to run it
anywhere close to that high if you want good tube life.

Now the grid current is typically run at about 115 mA on a 3-500Z
and most other tubes in that class seem to have amaximum grid current
rating of around 120 mA so I sure wouldn't want to push it much beyond that!
To be on the safe side I would always run it a little lower than
what ARRL says is "typical operation."

That way you don't have to ever spring for new tubes!

w8pu@aol.com (W8PU) whistled a happy tune like:

|>I have a first generation Prime Industries AL80 amplifier and I would like
|>to know just what is the max current that should be applied to the single
|>3-500z grid. Also what is the max key down plate current. The manual
|>suggests no more than 100 watts input but this amp will put out 700 watts
|>with as little as 60 watts and 150 mils on the plate. This is approx a KW
|>input if the amp's meter is accurrate. This amp will do almost 900 watts
|>if pushed to the 100 watt max input suggested but the grid current is
|>closer to 200 mils or more. I use this amp for SSB mostly and I am more
|>interested in the tube's life than an extra 100 watts or so as it
|>realistically is not going to make my signal any better.

|>Thanks de Gary W8PU

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

744. Re: Antenna Parts Sources

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c123g$5jo@news1.mnsinc.com>
Source record: 98386

Hi Scott!
Antenna parts can be had from a number of suppliers listed in my file:
MEGALIST.TXT

The information you are needing can be found on my Web Site in the
HAM RADIO RESOURCES section at the address listed below.
ENJOY!

I have a number of unique resources available for radio etc.

MEGALIST + HAM RADIO + HOCKEY = Bry's Page!

http://www.mnsinc.com/bry/

All the very best - Brian, AF4K / G3XLQ

ssouva@dreamscape.com (Scott Souva) whistled a happy tune like:

|>Winter is getting a bit long. To help make the time pass, I want to
|>build a new beam for 10 meters. As a newbie to building yagis, I am
|>going to need a good source for brackets, gamma matching tubes, and
|>whatever else I need. Can someone please give me some good sources
|>for antenna parts.

|>Many thanks for any help. 73s from the very cold Central NY!

|>Scott Souva
|>KG2GT

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

745. Re: 117L7 tube data needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c1202$5jo@news1.mnsinc.com>
Source record: 98387

Hello Cezare! I see no one else answered your request, so here is what I
have on the 117L7GT tube:

Cesare.Lavazza@nemo.it (Cesare Lavazza) whistled a happy tune like:

|>Does anyone know the data of this tube?
|>Which are the possible substitutes for the 117L7 tube?
|>Thanks.
|>Saluti.

|>--
|>E-mail: Cesare.Lavazza@nemo.it
|>WWW: http:\\radionostalgia.net\Users\Lavazza
|> http:\\www.geocities.com\CapeCanaveral\4573

Rectifier-amplifier tube
8AO socket connections (see below)
Heater 117 Volts at 0.9 Amps
Typical Use as a Class-A amplifier Plate (anode) supply 105 Volts
Grid bias -5.2V DC
Screen voltage 105 volts
Screen current 4-5.5 mA
Anode current 43 mA
Anode resistance 17000 ohms
Transconductance 5300 micro-mhos
Load resistance 4000 ohms
Power output = 0.85 watts
========================
Rectifier section:
Cathode = heater
Maximum AC voltage per anode = 117V AC
DC output current 75 mA

Same specs as a 117M7GT

Octal base connections are as follows:

1 = Kr
2 = H
3 = Pt
4 = G1
5 = G2
6 = Pr
7 = H
8 =Kt

Subscript "r" = Rectifier
Subscript "t" = Tetrode

I hope that this is helpful to you and to others that read it!
The 117L7 makes a great little one tube transmitter or audio
amplifier that can run off USA AC mains power without any power
transformer!

All the best - Bry

746. Replacement For 3SK78

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: David Ward <dave.ward@nt.com>
Message-ID: <32E3E895.7549@nt.com>
Source record: 98388

I recently purchased a old KDK 2025 2M FM rig at a flea market. After
I got it home I discovered the receiver section was almost deaf
(buyer beware). At any rate, as a learning exercise (and to get
a working unit) I would like to try to repair it. I suspect that
there is a problem with the RF amp. which precedes the mixer.
The RF amp consists of some bandpass filters and a 3SK78 FET.
I have two questions.

1. Can anyone suggest where I can get a replacement part or suggest
a substitute?

2. Is there any way with relatively simple test equipment I can
verify the device is defective, short of replacing it?

Thanks in advance.

Dave
VE3BIP

747. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: inet@intellisys.net
Message-ID: <5c0b3k$n4@clark.zippo.com>
Source record: 98389
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <32DBC9E0.63DECDAD@bnl.gov>, scott@bnl.gov says...
>
>
>I constructed the ferrite rod antenna/preamplifier as described in the
>article...
>* I have wound my antenna on a length of 'generic' ferrite rod which
> is 3/8" in diameter and about 7" long. I put 700 turns of 34 AWG
> formvar coated wire on it. This covered about 5 of the 7 inches of
> the rod's length. The article says to use an 820pf fixed capacitor
> and a 10-180pf variable capacitor in parallel with the antenna, and
> to tune the variable capacitor to resonate the whole business at
> 60kHz. Ignoring stray capacitance and setting the variable to 100pf
> (about mid-range) the inductance of the antenna should be about
> 8 mH. I measured my antenna and found it to be about 26 mH. ...
>scott coburn X

The high inductance looks suspicious. If you used the specified number
of turns, it could be that the ferrite's properties are unsuitable at
60kHz (though this is hard to believe!)
Naturally the tuning capacitance required would be smaller.
To check it out, a signal generator (maybe even an audio oscillator
with extended range) should do the trick.

Shadowing from trees should not be a big factor - 60kHz is not a
'line-of-sight' frequency!

Good luck

brian whatcott ,inet@intellisys.net>
altus OK

748. Help with TR switch (was: Can I do this?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: JOHNWHITE@gnn.com
Message-ID: <5c0789$oen@news-e2d.gnn.com>
Source record: 98390

I am constructing a 2M amp (less than 50 Watts out) and want to know if I can connect my PIN diode TR switch this way:

```
********************************** *******
* * * * *
* * ******* * * *
* * * * * *
******* *********** * ******* *
* HT * * RX TX * * * IN * *
* * * * * * * * *
* 5W * * PIN TR * * * AMP * *
* MAX * * Switch * * * * *
* * * * * * OUT * *
* * * * * ******* *
* * * ANT * * * *
******* *********** *************** *
* *
* *
***********************************
```

This setup uses only one PIN diode TR switch. Points of concern are:

1) Received RF is present at amp input during receive. Shouldn't be enough to turn on amp though. If it will turn the amp on; I can slightly attenuate the RF going to the amp input since I don't need all 5 Watts to drive the amp, thus reducing RX RF at the amp input to a low enough level.

2) 5 Watts max output from HT is present at RX connection of PIN diode TR switch during transmit. Assuming that it can handle 5 Watts RF there, that shouldn't be a problem.

3) Am I out of my mind?!

749. Re: Military Surplus WWW INFO?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: filipg@paranoia.com
Message-ID: <5c06os$p8q@villa.fc.net>
Source record: 98391
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In Article <01bc0391$ff717c60$31c7a4c6@uymfdlwk>, through puissant locution, "Reed Park" <reedpark@nbnet.nb.ca> soliloquized:
>I just had the pleasure of checking this out also. Yes, it does still
>work, and works great. Fantastic amount of info on the old gear.
>My compliments to the person responcible for the web site.

Greetings. I had a lot of fun browsing that site:

http://linux.cec.army.mil/hamradio/equipment/mi.html

... If you cheat a bit, and enter only part of the URL:
http://linux.cec.army.mil/hamradio/equipment/

You will noticed that on top of the 2-3MB of text that describes each item, there is also a 12MB directory (and TAR file :-) of schematics for same. I checked out a few of these and while they will never win a prize in clarity, they are more than enough to figure out what's going and what wire does what.

He is looking for images of as many of these items as possible, if you have something, please let him, NJ7P (bbeech@huachuca-emh8.army.mil) know you can help!

Take care.

P.S. Someone should to make a CD-ROM with that info on it...
--
+-->Filip "I'll buy a vowel" Gieszczykiewicz | E-mail: filipg@paranoia.com
| http://www.paranoia.com/~filipg/ |SCI.ELECTRONICS.REPAIR FAQ + LOTS MORE!
| Enjoy your job, work within the law, make lots of money : Choose any two.
| I think for myself. I listen. I make decisions. I speak what I believe.

750. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-20 00:00:00 UTC
From: epotter@mail.utexas.edu
Message-ID: <epotter-2001971624530001@slip-56-1.ots.utexas.edu>
Source record: 98392
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

In article <5b5rml$hds@chaos.dac.neu.edu>, Don Wall <d.wall@nunet.neu.edu>
wrote:
511, 545A, 547
> maybe,

Wouldn't the 545B be more of a classic than the 545A. No scope ever gave
a cleaner trace. The 545A distributed amp was something we can all do
without.

751. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5c1694$7v6@rosenews.rose.hp.com>
Source record: 98304

J&J Mac (jmacd@wco.com) wrote:
: I have used a simple circut from an old RS RC transmitter. I made a few
: small changes to the board to create oscillation, changed the xtal to
: the channel this jerk would 'puke' on and peaked the output
: to a full 50 Milliwatts. I put the whole unit with a pair of 9V in
: parallel into a cigarette hard pack with 108" of magnet wire to work as
: an antenna and hung it in the guys pine tree about 20 yds from his
: Antron. He could be heard but he couldn't hear anyone over the
: osclilator. The bug lasted almost a week-until it rained and soaked thru
: the cigarette pack.

:]not disclosed wrote:
: >
: > does anyone have the plans to make a device in which I could drop next
: > to a offending 27mhz operator? I am looking for a device that will key
: > and buzz with stronger signals <say above 8 s units> so the person
: > will not be able to hear his local cohorts. <high school kids>
: > I appreciate any and all replies.
: > looking forward to hamming it up in the NEAR future....
: > countdown to test time!

Well, I made a jammer for the AM band long ago, you should be able
easily to get it to work at 27.

I used a 555 timer rich in harmonics as the driver and also
designed it so that it would sweep a portion of the AM band
using the vco input. Worked great. Since it was swept, it
didnt matter what station you listened to, it was annoying
to hear and eventually the radio would be turned off.

Somewhere to start, anyway.

tony

752. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: jherman@Hawaii.Edu
Message-ID: <5c1eu7$dj8@news.Hawaii.Edu>
Source record: 98305
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Holstein wrote:
>
> Does anyone know of a mod to make the Realistic HTX-212 transmit out
> of band??? I want to be able to use this radio on my boat on the
> marine band instead of buying another radio.

Cut diode D47 on the main board.

753. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Ocean Surveys 6 <osi6@connix.com>
Message-ID: <Pine.BSI.3.95.970121001518.16291B-100000@comet.connix.com>
Source record: 98306

3M makes several splicing kits. Castall makes several 2 part compounds for casting. I use the castall stuff for side-scan sonar cables, it is very tough stuff. A sand blaster has to be used to remove the compound for cable repairs when the cable gets chopped by a prop.
I use 3m rubber tape and 3m liquid splicing compound in a can. You can get it off, but takes some work. I have put splices under water at well over 500 psi and no leaks for a year using the 3m rubber tape

754. Yaesu FRG 100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: billp@gramercy.ios.com
Message-ID: <32e48632.51128902@news.idt.net>
Source record: 98307

Greetings to all:)

Can someone please advise where I might obtain software (IBM) to control my Yaesu FRG-100 from my computer. I do have the FIF 232C adapter.

Public Domian software would be a plus but I will purchase if price is right

Thanks to all

73's
Bill Pennola
billp@gramercy.ios.com

755. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: cj@hth.com
Message-ID: <32e419b9.41598206@news.buller.se>
Source record: 98308
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is going to be posted to the following
mailing lists and news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics.misc
rec.radio.amateur.homebrew

You can also find the latest version on the following URL...

WWW site:

http://www.hth.com/losa.htm

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

[--- cut ---]
```

```
=========================================================================
- L.O.S.A Contribution Form -
=========================================================================
New Contribution [ ] Update [ ]
-------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=========================================================================

[--- cut ---]

/Christer

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

756. What's 2SK879

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: modinaf@swsupp.ICO.Olivetti.COM
Message-ID: <199701210950.BAA12978@atcnet.ICO.Olivetti.Com>
Source record: 98309

Can anyone give me the specs of the following device (3 pins smd) please ?

2SK879
It's on board of Kenwood TH77

Thanks in advance

73 de Fabrizio IK1VCF

IK1VCF@AMSAT.ORG

757. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5c23r9$9t9$2@nadine.teleport.com>
Source record: 98310

I'm really reluctant to touch this tar baby, but my curiosity has been aroused.

Why do VHF parasitics cause band switches to arc?

Is a VHF parasitic oscillation the only thing which can? (I assume so, since the presence of arcing bandswitches seems to be presented as adequate proof of VHF parasitics.)

Has anyone ever actually directly detected the presence of VHF oscillation (with a simple wavemeter, for example) in one of these amplifiers, then confirmed that the condition no longer exists after applying a fix?

Is this science or art?

Roy Lewallen, W7EL

758. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5c23vl$9t9$3@nadine.teleport.com>
Source record: 98311

In article <Pine.GSO.3.95.970118213251.3897A-100000@oso.slonet.org>,
Clifford Buttschardt <cbuttsch@slonet.org> wrote:
>I have been told to be sure and use electronic grade RTV for long term use
>in outside antennas in which the exposed ends of coax must be sealed for
>extended periods. What is this material and where can it be purchased?
> As a first guess I would think that it is RTV in which a non acedic
>base is use. If this is true, can any clear RTV be used that does NOT
>smell like acidic acid (vinegar) when opened? Cliff Buttschardt K7RR

For a couple of decades now I've used the vinegar-smelling stuff for all
sorts of electronics purposes, indoors and out, and never seen a trace of
corrosion. Has anyone else, or have you just heard (as I have) that it
causes corrosion?

Roy Lewallen, W7EL

759. Re: Could anybody help me building a QRP transceiver?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5c24bm$9t9$4@nadine.teleport.com>
Source record: 98312

In article <5c0asq$ri5@lince.lander.es>,
wyan@cryogen.com (Wyan the Wonderful) wrote:
>I don't know how to begin... could anybody point me to a page or send me
>some info about QRP building?
>Thank you very much :)

A couple of very good and largely builder-oriented magazines devoted to QRP
are published by two of the QRP clubs. Contact

G-QRP Club
Rev. George Dobbs, G3RJV
498 Manchester Road
Rochdale, Lancs. OL11 3HE
England

and

NorCal QRP Club
Jim Cates
3241 Eastwood Rd.
Sacramento, CA 95821

I haven't seen the QRP-ARCI newsletter for some time, so don't know if it's
currently oriented more toward building or operating. Maybe someone else
can provide this information.

Roy Lewallen, W7EL

760. Designs for HF amplifiers using Svetlana 4CX1600B tetrode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: bredenbo@iaonline.com
Message-ID: <32e472ae.30506362@news.iaonline.com>
Source record: 98313

Has anyone seen any designs or circuits for the Svetlana tetrode tubes, such as the 4CX400A or the 4CX1600B? There is an article in COMMUNICATIONS QUARTERLY for Winter 1995 which addresses the RF circuit design fairly well. I need help more in the area of the required screen grid power supply and the associated control and protective circuitry. Any help or hints greatly appreciated.

Barry Redenbo K9YUG

bredenbo@iaonline.com

761. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan21.143848.3836@ke4zv.atl.ga.us>
Source record: 98314
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

In article <5c0g75$iq8@nr1.ottawa.istar.net> lafont02@cn.ca (Don Lafontaine) writes:
>On 20 Jan 1997 03:32:12 GMT, "Erik Skovgaard"
><Erik_Skovgaard@bc.sympatico.ca> wrote:
>>Brian,
>>Lat I tried your software, it crashed under Windows 95. Did you fix it?
>
>Did you try rebooting to MS-DOS mode? Programs that demand heavy duty
>CPU time run better (At least run) only in MS-DOS mode (Not DOS IN A
>BOX). SBFFT is like this.

Yeah, at least you can get the main screen up if you reboot to DOS mode,
but when you give it the run command, it crashes and burns. It appears
to put the SVGA card in a very strange mode. The monitor goes into sweep
protect. And the only way out is a hardware reset. That's with it configured
for the default 640x480 mode, which should work on any hardware. I haven't
tried it yet in 1024x768. PC is a 100 MHz 486DX4 with 16 Mb RAM running
Windows 95 and using an ATI Mach64 video card and a Soundblaster 16 sound
card. I configured the EMS memory, and at sign on the program Oks that and
finds and checks the sound card Ok too. But give the Run command and the
screen goes dead and the machine locks solid. Not pretty.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

762. Has anyone Made a rptr. from MICOR EMS radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <5c2vs3$8ku$2@news.cc.umr.edu>
Source record: 98315

Hi, I would like to hear from anyone who has converted one of those Motorola MICOR EMS radios into a repeater. It has it's own duplexer and control board built in. I think they would make great Emergency mobile/portable repeaters.

I have 4 of them and would like to try the conversion.

Thanks,
Scott Sidener N0WFL sidener@umr.edu

763. NOS Tubes for Sale!!! (List)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: sidener@saucer.cc.umr.edu
Message-ID: <5c2st6$7o6$2@news.cc.umr.edu>
Source record: 98316

I currently have the following tubes for sale. They are all in boxes
and are in New Old Stock (NOS) condition.

Shipping is extra.

If you are interested in any of them please e-mail with your list.

Thanks,

Scott Sidener sidener@umr.edu

They may not be in Numerical order.

TYPE PRICE CONDITION

1619 $8.10 NOS
1642 $3.60 NOS
12BQ6GT $2.16 NOS
15KY8A $4.20 NOS
17AX3 $2.03 NOS
17BF11 $6.89 NOS
17JN6 $5.85 NOS
1A5G $3.47 NOS
1A7GT $2.48 NOS
1DN5 $2.79 NOS
1H5GT $2.12 NOS
1J3 $5.22 NOS
1P5GT $3.11 NOS
1U4 $3.29 NOS
21GY5 $3.51 NOS
22BW3 $3.65 NOS
25CD6 $3.60 NOS
25CK3 $3.51 NOS
25DN6 $3.42 NOS
25E5 $3.60 NOS
25EH5 $3.02 NOS
25F5 $3.60 NOS
25L6GT $4.19 NOS
27GB5 $5.85 NOS
31LR8 $3.60 NOS
32ET5 $1.80 NOS
33GT7 $4.50 NOS
33GY7A $8.10 NOS
34CE3 $3.42 NOS
34DG5 $3.60 NOS
35A5 $3.78 NOS

35B5 $1.80 NOS
35EH5 $2.79 NOS
35HB8 $3.60 NOS
35W4 $2.52 NOS
35Y4 $2.70 NOS
36AM3A $3.60 NOS
36LW6 $10.71 NOS
38HE7 $8.87 NOS
3A3 $4.37 NOS
3BY6 $1.80 NOS
3CY5 $1.80 NOS
3DC3 $8.10 NOS
3DG4 $5.40 NOS
45Z3 $3.60 NOS
4AV6 $3.02 NOS
4BL8 $2.61 NOS
4BS8 $3.60 NOS
4BU8 $2.84 NOS
4BU8 $2.84 NOS
4BZ6 $3.60 NOS
4BZ7 $2.97 NOS
4CB6 $3.33 NOS
4CS6 $2.70 NOS
4DJ6 $3.60 NOS
4DK6 $3.33 NOS
4EH7 $3.33 NOS
4EJ7 $4.28 NOS
4EW6 $2.25 NOS
4GJ7 $4.91 NOS
4GK5 $3.60 NOS
4GM6 $2.25 NOS
4HA5 $3.15 NOS
4HM6 $4.68 NOS
4HS8 $2.03 NOS
4JC6 $4.68 NOS
4KE8 $3.60 NOS
4KT6 $4.91 NOS
6AC5GT $7.29 NOS
6AC7 $3.69 NOS
6AF4 $4.28 NOS
6AH6 $2.70 NOS
6AU4GTA $4.55 NOS
6AY3 $4.36 NOS
6B10 $5.18 NOS
6BA11 $4.41 NOS
6BZ7 $4.82 NOS
6CM3 $4.59 NOS
6CM8 $3.60 NOS
6CQ6 $3.60 NOS
6CQ8 $3.51 NOS

6CT7 $3.60 NOS
6CU5 $3.78 NOS
6CU7 $3.60 NOS
6CU8 $3.20 NOS
6CW5 $4.50 NOS
6CX8 $4.68 NOS
6CY5 $5.31 NOS
6CY7 $2.61 NOS
6DB5 $1.80 NOS
6DC8 $3.74 NOS
6DE4 $3.15 NOS
6DE6 $2.21 NOS
6DE7 $4.82 NOS
6DK6 $3.38 NOS
6DL5 $4.95 NOS
6DM4 $1.80 NOS
6DN7 $4.46 NOS
6DQ5 $8.78 NOS
6DS4 $10.13 NOS
6DT5 $2.21 NOS
6DW4 $4.10 NOS
6DX8 $4.23 NOS
6EA8 $4.95 NOS
6EH5 $2.34 NOS
6EH7 $4.01 NOS
6GH8A $3.47 NOS
6HJ8 $2.34 NOS
6HR6 $4.50 NOS
6HS5 $8.96 NOS
6J7 $3.65 NOS
6JT8 $3.38 NOS
6K6GT $3.47 NOS
6LQ8 $3.56 NOS
6LX8 $3.06 NOS
6LY8 $3.92 NOS
6MB8 $4.05 NOS
6S7 $3.60 NOS
6S8GT $2.70 NOS
6SJ7 $3.15 NOS
6SK7 $3.38 NOS
6T4 $1.80 NOS
6U10 $4.59 NOS
6X4 $3.47 NOS
7Q7 $3.20 NOS
7S7 $3.60 NOS
8LT8 $4.19 NOS
EDF89 $3.74 NOS
VT49 $3.60 NOS

764. scam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Mark Kruse <mkruse@fnal.gov>
Message-ID: <32E51F9F.FF6@fnal.gov>
Source record: 98317

Hi,

This is in response to a message that was sent under my name sometime last night (20-jan). Apparently some "friends" who I had allowed use of my computer at home to check out some newsgroups, put my name down in some pyramid scheme "as some sort of joke". They did not realise that this
is such flagrant abuse of the net. I totally abhore this type of behaviour
and ask for your forgiveness for this extremely annoying invasion of your
newsgroup. Apparently it was sent to about 5 newsgroups, which I don't yet
know all of them, but I'm avidly searching, so if you happenchance upon a similar such message under my name please feel free to copy this message
to that newsgroup. Again I'm terribly sorry for this invasion. Thanks,
Mark.

765. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Michael Berg <mikeberg@midstate.tds.net>
Message-ID: <32E54D27.5F9F@midstate.tds.net>
Source record: 98318
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

I tried the FTV demo program and keep getting a memory error
when it loads. Any ideas?
73 Mike N0QBH

766. Software for doing system noise calcs.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: au156@yfn.ysu.edu
Message-ID: <5c3b45$ltc@news.ysu.edu>
Source record: 98319

I'm looking for a simple shareware program that will make it possible
to evaluate the path losses and system noise for a system comprising
an airborne transmitter and earth-based antenna, preamp, feedline,
and receiver.

The important part is the system noise temperature, but the path loss
and output carier-to-noise would be nice to have, too. This program
should accomodate total antenna effective noise temperature; and the
noise temp. of the preamp and receiver, of course

Niceties such as separate inputs for cosmic noise, earth thermal
noise as seen by the antenna, and other refinements are good
but not necessary.

This is to answer a question about the performance of an amateur radio
application (high altitude balloon beacon). A *quick* search of Oakland
did not yield anything that looked appropriate.

Anyone have any obscure ham or *industry* software that will handle this?

Hank Riley, N1LTV
h1riley@umassd.edu

http://www.geocities.com/capecanaveral/3161

767. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: lafont02@cn.ca
Message-ID: <5c3ee4$7b@nr1.ottawa.istar.net>
Source record: 98320
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

On Tue, 21 Jan 1997 14:38:48 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
wrote:

>Yeah, at least you can get the main screen up if you reboot to DOS mode,
>but when you give it the run command, it crashes and burns. It appears
>to put the SVGA card in a very strange mode. The monitor goes into sweep
>protect. And the only way out is a hardware reset. That's with it configured
>for the default 640x480 mode, which should work on any hardware. I haven't
>tried it yet in 1024x768. PC is a 100 MHz 486DX4 with 16 Mb RAM running
>Windows 95 and using an ATI Mach64 video card and a Soundblaster 16 sound
>card. I configured the EMS memory, and at sign on the program Oks that and
>finds and checks the sound card Ok too. But give the Run command and the
>screen goes dead and the machine locks solid. Not pretty.

Interesting, I tried it last night, and it worked right off the bat.

486DX4-100
Trio S3 svga board
Soundblaster 16 w/WaveBlaster daughtercard
32 Megs RAM
Running QEMM.

I still haven't managed to decode anything yet, but I will persist!

Sorry, but that was the only clue I could offer.

Don Lafontaine VE2UFO

768. sw receiver plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: jeff <jeff@vahometeam.com>
Message-ID: <32E572F4.6634@vahometeam.com>
Source record: 98321

I'm trying to find a set of plans for a general purpose shortwave receiver.=
=

Please advise.
thanks,
-- =

"Jeff" Washington, Associate Broker 800-446-8573 (toll free)
Mike Washington, Builder 804-436-5819 (fax)
109 Volvo Parkway, Suite 9 jeff@vahometeam.com (email)
Chesapeake, VA 23320 Newsletter: VaRealEstateInvestor
=91One Stop Real Estate Shop=92 Site URL: http://www.vahometeam.com

769. Re: ** FREE MONEY **

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Mark Kruse <mkruse@fnal.gov>
Message-ID: <32E550CB.6231@fnal.gov>
Source record: 98322

Hi,

This is in response to a message that was sent under my name sometime last night (20-jan). Apparently some "friends" who I had allowed use of my computer at home to check out some newsgroups, put my name down in some pyramid scheme "as some sort of joke". They did not realise that this
is such flagrant abuse of the net. I totally abhore this type of behaviour
and ask for your forgiveness for this extremely annoying invasion of your
newsgroup. Apparently it was sent to about 5 newsgroups, which I don't yet
know all of them, but I'm avidly searching, so if you happenchance upon a similar such message under my name please feel free to copy this message
to that newsgroup. Again I'm terribly sorry for this invasion. Thanks, Mark.

p.s. since writing this I have now located all references to such postings from my account, and either had them cancelled using news@hammer.msfc.nasa.gov, and/or responded with this message. Sorry about all this unpleasantness which is so contrary to the spirit of the net.

770. DXER Updates

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <32e597e7.21026357@news.primenet.com>
Source record: 98323

New additions to the following indexes

Contest Clubs, DX Clubs, Ham Radio Clubs,
Ham Radio Info, Manufacturers, Propagation
and Satellites.

Visit our new Sponsor "COMET ANTENNA"

We will soon be adding a Product Evaluation
Page. If you would like to comment on a product
use the interactive BBS at the top of our page.

Check us out "http://www.dxer.com"

771. WIND GENERATOR PROBLEMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Brian Padgett <bpadg@uniserve.com>
Message-ID: <32E507F0.1B02@uniserve.com>
Source record: 98324

I'm wondering if anybody operating mountaintop repeater sites have had any success using wind generators. Our experiences have led us to conclude that no one makes wind generators that have any long term reliability. I would be interested to share any information with the goal, at some point, of being able to have a reliable source of wind power.

We use wind to supplement the sixteen solar panels already installed and connected to about 2500 AH of bateries.

Our best wind generator survival period is only about 4 weeks after which time either the generator has bornt up, slip rings have disintegrated, blades have broken off, and so on. This using wind generators that supposedly have 100 MPH survival ratings and at a site where the wind doesn't exceed 50 MPH.

Brian Padgett VE7ICX

Fraser Valley Amateur Radio Emergency Service Society
British Columbia
Canada

772. Re: Solid State amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <32E4EFCD.C31@gte.net>
Source record: 98325

Randy Alexander wrote:
>
> I do not find my previous inquiry. So I repeat: I would like to build
> a legal limit solid state HF amplifier. I would like to hear from
> anyone who has built one. I am looking for the problems and pitfalls
> and their solutions. TNX AB7QR

I am currently building a pair of the 600 watt amps listed in the Motorola bulletin AN 104. I am combining them for 1 KW. Each amp uses 4 MRF-150's with 50 VDC supply voltage. This eases the problems with IR loses from heavy currents, and gives redundancy in the event of transistor failures. I have used the MRF devices in extreme industrial applications and have found them to be almost (I said almost) industructable. I think out of hundreds of units, in unbelieveable conditions, I've seen one failure.

There is a company in Ohio, Communications Concepts, I think, which offers kits of parts. But you must provide the packageing. (513)426-8600.

Hope this helps.
73,
Ray, W4BYG

773. Re: Need high voltage transformer

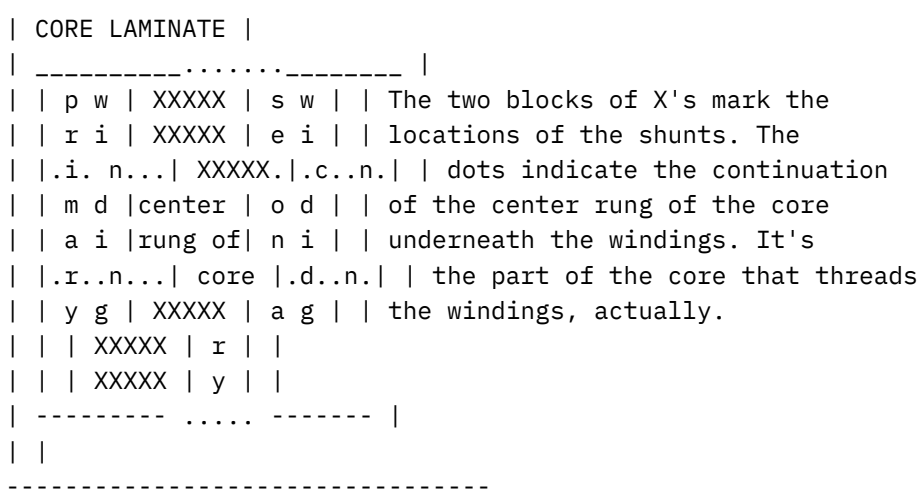
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5c33us$5th@lace.colorado.edu>
Source record: 98326

>Bruce,
>I have just such a transformer from a 550W microwave with 1500V on the
>secondary and everything is as you describe it. But - what are the
>'shunts' you speak of. If you describe them I can look see and learn.

In words:

If the core is a figure eight, standing upright, then the windings are at the left and at the right of the center horizontal bar, and the shunts are little rectangular bars about the size of two after dinner mints stacked atop one another. There are two, they separate the windings on the left from those on the right. Mine weren't stuck in by any kind of glue, they were just press-fit into the space. Tapping on them with a hammer pushed them out, and now the transformer is shuntless.

In ASCII:



I hope this helps. One way to convince yourself that you have actually located the shunts is to see where the magnetic field goes. If there's a low-reluctance (i.e. iron) path for the magentic field to go from the primary back directly to the primary again without having to also go through the secondary, it's a shunt. If all the magnetic field going from the primary, through iron paths, MUST also thread through the secondary, then there are no shunts.

Bruce
N6URH

774. Re: any amplifier schematics on the web?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c2c0v$a0u@news1.mnsinc.com>
Source record: 98327

We are working on this!
We have some transmitters so far, and will soon add some amplifier
schematics.
Check the web pages of N6EV and mine at:
http://www.mnsinc.com/bry/hamfiles.htm

ENJOY!

Karl-Heinz Merscher <Karl-Heinz.Merscher@uvw.uni-bayreuth.de> whistled a
happy tune like:

|>Hi homebrewers,

|>I tried search several search engines for "amateur radio amplifier
|>schematics" without success.

|>Any info on that subject? I would like to start with a simple project
|>(e. g. amplifier with a single 3-500 Z).

|>Thanks in advance!

|>Karl-Heinz, DL6RDE/AA1KD

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

775. Re: Facts vs Opinions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: sm7paf@mbox300.swipnet.se
Message-ID: <5c1nmc$imb@mn5.swip.net>
Source record: 98328
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.space,rec.radio.amateur.homebrew

In article <Pine.BSF.3.91.970120005725.5152A-100000@prog1.caprica.com>,
teddyb@caprica.com says...
>
>
>On Wed, 15 Jan 1997, Dick Flanagan wrote:
>> In article <32DCE015.547@ldecs.ericsson.se>, Tommy Karlberg
>> <ecstka@ldecs.ericsson.se> wrote:
>>
>> >Has anyone seen "teddy bears" callsign?
>
>My call sign is MY business OFF the air. So is yours. If you don't like
>that, tough tetrodes!
>
>Since when is a ham callsign required to post in usenet?
>
>As I have said to someone here before, I do not give my callsign off the air.
>
>If you need a callsign, my internet "callsign" appears at the top of my
>messages. Deal with it.
>

Oh, well.......

I think it gives a friendly and nice atmosphere to this group, since most
of the writers include their call. But judging from your mail you dont seem
to be interrested in keeping that atmosphere.......... It's as they say:
You get what you ask for!

SM7PAF / Tommy

776. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <E4DJvJ.1sG@eskimo.com>
Source record: 98329
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Gary Tennyson <gary.j.tennyson@bridge.bst.bls.com> writes:

(reformatted)

>and 500 uV/meter. After working through the equation for the
>voltage from a loop antenna, I think that it is the wrong
>antenna for a fixed-frequency application. (While the high
>inductance allows wide tuning with a variable capacitor, the
>small cross-sectional area limits the signal voltage.) I have
>built a 22-turn air-wound loop antenna with a cross-sectional
>area of 0.5 meter and tuned it to 60 kHz with a (fairly-large)
>capacitance. I measure about 200 uV.

>Gary Tennyson

>gary.j.tennyson@bridge.bst.bls.com

I have a little 'c' program that calculates what you need for loop
antennas. Note that there is a "permiability" times "area" term.
You can use a rod or large loop to get the same effective height-- which
is what you care about. Ferrite will give more phase shift.

I will post the program, which is based upon Chapter 4 of "VLF radio
engineering" by A.D. Watt. A must read if you want to pursue VLF antennas.
You'll have to find a good library to get this book.

Steve.

--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

777. beacon circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: randalll@apollo.ruralnet.net.au
Message-ID: <32e5e90a.0@ren2.netconnect.com.au>
Source record: 98330

Hi There

Does anyone have a circuit for a 6m and 2m beacon, a CW type of about
5 watts. Have a ident keyer.

VK2EFA Randall

email randalll@apollo.ruralnet.net.au

778. Re: Silver salts & urban legends

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2101971306100001@news.vcnet.com>
Source record: 98331

In article <19970118154700.KAA06708@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <measures-ya02408000R1701971340060001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
> > I evaluated the roller to coil contact resistance with a current of 2A.
> >The source impedance was 4 ohms. I measured the voltage-drop between
> the
> >coil and the roller with sharp tipped probes so that I would penetrate to
> >bare metal. This voltage averaged about 80mV after several roller
> passes.
> >At numerous points on the coil, some kind of breakdown effect appeared to
> >be taking place--i.e., no current initially flowed, but current began
> >flowing almost immediately. After several roller passes, the coil to
> >roller voltage-drop remained fairly constant.
>
> Eight volts at two amperes could easily destroy any resistive layer.

That was the idea. Does it seem likely or unlikely that the average ham station would produce 8v or more at the antenna tuner?

> When silver plated relay contacs fail to connect, all that is required is
> application of a few volts at a few mA and the contact is "healed". That's
> why relay contacts have a minimum current design rating, as well as a
> maximum.

Good point, Tom, although this caveat does not apply to all types of relays.

> If you would have measured the contact resistance with a very low current
> very low voltage meter, it would have shown something. You ruined an
> excellent opportunity to prove something.
>
I proved that SWLs should use fine steel wool to remove silver-sulphide tarnish, and for hams running 100w, it's optional.

--
--Rich-- ag6k, 805-386-3734

779. Re: RF BRIDGE CIRCUIT WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <32E57264.39D8@gte.net>
Source record: 98332

workshop wrote:
>
> Does anyone have a circuit for a fairly siple rf bridge.
> I want to use it to measure antenna impedance etc.
> I have a signal generator that goes to about 110MHz,so the signal generator
> part of the circuit is not realy needed,only the bridge and detector.
> Any help would be appreciated
> Cheers
> Rob
> email:workshop@pcm.co.za

The 1985 edition of the ARRL Hanbook, page 25-33 has a nice circuit in
it. Also, 73 Magazine, Dec 1965, p 21. Also another in Ham Radio
Magazine, May 73 p 6. Hope this is of some help.
73,
Ray, W4BYG

780. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Dave Moran <dmoran@h2net.net>
Message-ID: <01bc07f0$c42c14e0$dd13e3cc@default>
Source record: 98333
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

Don Lafontaine <lafont02@cn.ca> wrote in article
<5c3ee4$7b@nr1.ottawa.istar.net>...
> On Tue, 21 Jan 1997 14:38:48 GMT, gary@ke4zv.atl.ga.us (Gary
Coffman)
> wrote:
>
> >Yeah, at least you can get the main screen up if you reboot
to DOS mode,
> >but when you give it the run command, it crashes and burns.
....
>
> Interesting, I tried it last night, and it worked right off
the bat.
>
>
> 486DX4-100
> Trio S3 svga board
> Soundblaster 16 w/WaveBlaster daughtercard
> 32 Megs RAM
> Running QEMM.
>
> I still haven't managed to decode anything yet, but I will
persist!
>
> Sorry, but that was the only clue I could offer.
>
> Don Lafontaine VE2UFO

Works for me 486 - 33mhz, 8meg, soundblaster, etc
(Gotta use EMM386 or as Don has Qemm.)
Decoding takes some tweaking but I got it working in the ham
bands on rtty and weather FAX.

Every decoder I have (hardware) really takes tweaking and
experience, I am still evaluating this
software (shareware), but it looks promising.

Dave - W0PYP

781. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2101971252110001@news.vcnet.com>
Source record: 98334

In article <5c23r9$9t9$2@nadine.teleport.com>, w7el@teleport.com (Roy Lewallen) wrote:

> I'm really reluctant to touch this tar baby, but my curiosity has been
> aroused.
>
> Why do VHF parasitics cause band switches to arc?

Might there be fireworks if a 1000W, 100MHz oscillator were operated with virtually no load?
In a typical HF amplifier, the tank circuit is a low-pass Pi filter that blocks VHF energy. Thus, if VHF regeneration appears at the anode, it has no where to go. IMO, something would be likely to give.
Bandswitches do not necessarily arc during a VHF parasitic. When Heath was using a 3500v-rated tune-capacitor in the SB-220, bandswitches rarely arced, but reports of tune capacitor arcs were common. I own such an amplifier, and the tune-cap. has numerous pits from arcing. However, when Heath started using a tune-capacitor with a higher v-rating, reports of bandswitch arcing in such amplifiers became fairly common.
Arcs typically prefer to jump the gap with the lowest breakdown voltage. However, like Murphy said, Nothing is as simple as it looks. Thanks to tests performed by Mr. Rauch, another factor appears to be the internal VHF resonances in the tune-capacitor. Based on his measurements, it seems that a tune-capacitor which does not exhibit a VHF resonance near the frequency of parasitic oscillation is less likely to arc than are contacts on the bandswitch. (see Figure 15 on <http://www.vcnet.com/measures/>) In these photographs, the 10m and 15 meter contacts are partially vapourized. The amplifier from which the two burned bandswitches were removed has no VHF resonance near the frequency of oscillation (c.160MHz). IMO, burned 10m & 15m bandswitch contacts is the signature of a VHF parasitic oscillation. [See kaput bandswitch in "Parasitics Revisited", 9/90 and 10/90 QST. Also see my first post on 1/17 (<measures-1601970917370001@port17.vcnet.com>,)]

> Is a VHF parasitic oscillation the only thing which can? (I assume so,
> since the presence of arcing bandswitches seems to be presented as adequate
> proof of VHF parasitics.)

There are other sources of tank arcs. An antenna-tuner capacitor arc caused an arc in the Johnson 226 roller-inductor in my general-coverage homebrew 8169 amplifier. David Holtcamp, K5KH, recently discovered that a defective lightning arrestor installed in the feedline caused a tank arc in his TL-922. Moths, spiders, and heavy lint accumulation can cause arcs. I had an occasional spider-problem in an 8171 amplifier that uses a 9100v anode supply.

The best protection against peripheral amplifier damage, as the result of arcs, is a fault-current limiting (a.k.a. 'glitch') resistor, in series with the anode supply. Such a resistor must be able to survive discharging the high voltage filter capacitor. Svetlana recommends a glitch R of c.25 ohms for a 1500w anode-dissipation tube. Glass-coated, wire-wound resistors can be used for this purpose, provided that they have a high length/diameter ratio. Eimac began recommending such resistors around1986.

> Has anyone ever actually directly detected the presence of VHF oscillation
> (with a simple wavemeter, for example) in one of these amplifiers, then
> confirmed that the condition no longer exists after applying a fix?

Marvin Born reportedly saw a 78MHz parasitic oscillation on a spectrum analyzer and on an oscilloscope in a Create Electronics 3CX3000A7 g-g amplifier. After replacing the burned bandswitch and installing a 100% nichrome VHF parasitic suppressor, no arcing was observed in the replacement bandswitch. However, I am certain that low-level damped wave oscillations at 78MHz still existed in this amplifier whenever the anode current decreased or increased suddenly. The best way to observe this phenomenon is to send 50wpm dits with a CW keyer.
I do not have a spectrum analyzer, so I have to depend on those who do.
A customer who bought a suppressor retrofit-kit for an SB-220 reported that he could see damped-wave VHF ringing in the anode circuit when the amplifier appeared to be stable. No mystery there, Roy,---ringing a tuned-circuit with a current pulse is basicly how spark transmitters generated RF in days of yore.

> Is this science or art?

Some say art. Some say black art. Some say $cam. Some say unsliced bologna. Some say science. However, it's nothing new. F.E. Handy wrote about the method on page 72 in the 1926 *Radio Amateur's Handbook*.
I find it somewhat curious that one of the naysayers who claim that low VHF Q suppressors are the worst kind of 'wurst', rejects areas of science that do support his conclusion. This person is seemingly unfamiliar with algebra and scientific notation, and rejects accepted AC Circuit Analysis methods whenever they fail to support his conclusions.
When Wes Stewart's scientific measurements indicated that a conventional VHF suppressor would create 63% more VHF voltage gain than a similar low VHF-Q suppressor, this person switched into ignore-mode and smokescreen-mode.
---
e-mail copy to Mr. Lewallen

--
--Rich-- ag6k, 805-386-3734

782. Kenwood TS-520 for $125

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: w5kft@nts-online.net
Message-ID: <5c3cva$3j7@news.nts-online.net>
Source record: 98335
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have a Kenwood TS-520 transciever that has started blowing fuses
when it is turned on. I don't want to mess with fixing it, will sell
it as is for $125 plus shipping. This will make somebody a good cheap

fixer supper.

Bryan

783. Re: Egg Beater Antenna (Help)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: griffin@jgfl1.allcon.com
Message-ID: <E4DLoE.1yn@jgfl1.allcon.com>
Source record: 98336

I don't know the RG-xx number, but it was used in networking.
ARCnet used 93 Ohm coax.

Hope that helps,
73, Jens, DB9LL

Erik Skovgaard (Erik_Skovgaard@bc.sympatico.ca) wrote:
> Russ,

> Looks interesting, but where d you get 93 Ohm coax???

> 73 de VE7MDL ....Erik.

> Russ Renaud <ae517@FreeNet.Carleton.CA> wrote in article
> <5biqi0$b35@freenet-news.carleton.ca>...
> >
> > SWaldrup (swaldrup@aol.com) writes:
> > > I am looking for plans on how to build the Egg Beater type Antennas for
> > > VHF and UHF. Any one played with these?
> >
> >
> > Yes, point your browser to:
http://fly.hiwaay.net/~harperrc/antenna/ant.html
> >
> > 73 de va3rr/aa8lu
> >
--
at work: jg@combtx.com, bofh@combtx.com (http://barbara.combtx.com/~jg)
at home: griffin@jgfl1.allcon.com
at play: jg@beach, griffin@rpg, db9ll@g-qrp/darc
"You beeped me for WHAT?"

784. 706 USA to EURO.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Freeman Cheong <freeman@macau.ctm.net>
Message-ID: <32E49544.4EB7@macau.ctm.net>
Source record: 98337

I have a Icom IC-706. It is USA version. Does anyone can tell me
how to change USA version to Europe version?
Many thanks,XX9ER(Macau)

785. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Bill Beam <wbeam@polarnet.com>
Message-ID: <32E5B31D.AA1@polarnet.com>
Source record: 98338
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

Dave Moran wrote:
>
> Don Lafontaine <lafont02@cn.ca> wrote in article
> <5c3ee4$7b@nr1.ottawa.istar.net>...
> > On Tue, 21 Jan 1997 14:38:48 GMT, gary@ke4zv.atl.ga.us (Gary
> Coffman)
> > wrote:
> >
> > >Yeah, at least you can get the main screen up if you reboot
> to DOS mode,
> > >but when you give it the run command, it crashes and burns.
> ....
> >
> > Interesting, I tried it last night, and it worked right off
> the bat.
> >
> >
> > 486DX4-100
> > Trio S3 svga board
> > Soundblaster 16 w/WaveBlaster daughtercard
> > 32 Megs RAM
> > Running QEMM.
> >
> > I still haven't managed to decode anything yet, but I will
> persist!
> >
> > Sorry, but that was the only clue I could offer.
> >
> > Don Lafontaine VE2UFO
>
> Works for me 486 - 33mhz, 8meg, soundblaster, etc
> (Gotta use EMM386 or as Don has Qemm.)
> Decoding takes some tweaking but I got it working in the ham
> bands on rtty and weather FAX.
>
> Every decoder I have (hardware) really takes tweaking and
> experience, I am still evaluating this
> software (shareware), but it looks promising.
>
> Dave - W0PYP

I also run ATI Mach64 card. (also QEMM)
My vidio card required the VESA driver.

This card has some strange behaviour with
programs that make VESA calls without the
driver.

Look for 64VBE200.ZIP from ATI. Contained
in this .ZIP is the driver M64BE.COM which
is a DOS TSR.

BTW the program runs in an OS/2 DOS full screen
session (with the tsr installed.)
--
Bill Beam/NL7F
wbeam@polarnet.com

786. Santa has connections...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: news@127.0.0.1
Message-ID: <5c23ju$ob@news.impulse.net>
Source record: 98339
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.dx,rec.radio.amateur.digital.misc,rec.radio.amateur.antenna

Question: What is a simple, inexpensive, and convenient way to start
this year off in a FUN, intriguing, and romantic fashion?
(Santa must have been holding out on this one!)

Answer: Dateline!

Now that Christmas is over and you have given everyone else presents,
it's time to treat yourself to something nice.....that someone
special. Someone to share in your hobbies, your interests, your
lifestyle, your LIFE.

Dateline is the perfect way to find someone and be found! Dateline
gives you the forum to seek out others whom you find interesting, and
let others know about you! And the best part is - you are in control
of what happens. Call often to leave and receive lots of messages
(remember - this service is HUGE and there are so many people from
all the area codes across the country calling in to find people just
like you!), or call in as little as you like and leave and receive
a few selective messages. You can also call just once to see what the
heck it is all about. Whether you are a little shy or outgoing
in the biggest of ways - it is a simple and inexpensive way to find
other singles. It is amazing how much fun people have with Dateline!

It is so convenient! You can call in from anywhere at anytime to give
and get your messages. This is a 24 hour service and you just punch
in whichever area code you are interested in - whether it is in the
place you live or the places you go! And it is really super if you
relocate and want to meet up with guys and gals who share your
interests and would love to show you around! (No wonder Santa is
always so jolly - his sleigh phone has the Dateline speed dialed in!)

1-900-484-7009 ext. 5241

$2.99/min. Must be 18 years or older.

Serv-U (619) 645-8434

Make this your Happy New Year's Resolution: To call Dateline today
and start giving and receiving those personal messages! Join in the
fun - and don't keep those folks who want to meet you waiting until
next Christmas.....

787. Ruby Laser Kits at Dayton Hamvention 96

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-21 00:00:00 UTC
From: Tom
Message-ID: <32e44fde.0@news.glasscity.net>
Source record: 98340

I have a friend who is trying to locate "Ruby Laser Kits". They were
in the Flea Market area at the Dayton Hamvention last year ('96).
Any information would be appreciated. 73 de KB8PAI, Tom
toms@glasscity.net

788. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: medintz@falcon.cc.ukans.edu
Message-ID: <5c424e$5uu@raven.cc.ukans.edu>
Source record: 98193

Whilst completely naked, Gary Coffman said unto us:

>It would be better, of course, if a higher level standard of data
>commonality were chosen, such as the forementioned HTML, so that
>browsing could be transparent across platforms (and networks). And
>I could certainly recomend an image format better than TIFF, but
>those are minor issues. As long as we can read and display the data
>with any CDROM equipped platform using available native tools, it
>is still usable.

I may have missed something, but what about ASCII and GIF or JPEG?

--
Mike S. Medintz| KB9ODS/0| http://falcon.cc.ukans.edu/~medintz
"I gotta get out of bed, get a hammer and a nail,
learn to use my hands."-Indigo Girls

789. Heil HC-4/Kenwood MC-60a

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: mdonohue@renc.igs.net
Message-ID: <32e75c09.26658093@news.igs.net>
Source record: 98194
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi:
Has anyone used the above combination. As per the Heil Specs
the Impedence Selector on the Mic should be set at 500 ohms, but
the performance seems to be lacking. I have also tried placing the
switch in the 50k position and it seems to work much better. Any
help or comments on this matter would be greatly appreciated. Tnx

73 De Mike
VE3DMJ

790. Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: medintz@falcon.cc.ukans.edu
Message-ID: <5c42lk$5uu@raven.cc.ukans.edu>
Source record: 98195

Hi. If those of you who hang out on the misc and antenna newsgroups aren't sick of my newbie questions yet, I've got another one...

I'm moving on towards getting my station running, and I was wondering what kind of test and monitoring equipment I'll need. So far, I figured out a multitester (but haven't decided between analog or digital, and I doubt I can afford both) and an SWR meter (fof HF). Does anybody have any recommendations? (Preferably inexpensive ones) How would y'all go about evaluating used gear of this sort? What about kits-any good ones out there for these needs?

--
Mike S. Medintz| KB9ODS/0| http://falcon.cc.ukans.edu/~medintz
"I gotta get out of bed, get a hammer and a nail,
learn to use my hands."-Indigo Girls

791. Re: 117L7 tube data needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5c3sud$rdk@usenetp1.news.prodigy.com>
Source record: 98196

It's also a 117M7GT. A near substitute - with a little rewiring - is
117N7GT or 117P7GT (117P7 is electrically identical to 117L7/117M7);
Pins are:
117N7/117P7
1 NC
2 H
3 Pentode plate
4 G1 pentode
5 G2 pentode
6 K+G3 pentode
7 H + P Diode
8 K diode

792. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: dmcnutt@macnauchtan.com
Message-ID: <dmcnutt.1204290129C@news-2.csn.net>
Source record: 98197
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I played around with a ferrite rod and a tuned winding to look at the 60kHz the other day. I was using a tuned voltmeter. I'm in Colorado Springs and the signal was HUGE - a millivolt or more.

The funny thing was a distinct 120 Hz modulation on the signal - synchronized with the power line. I didn't do much checking, but I believe it is a kind of intermodulation caused by nonlinearity in the ferrite when exposed to stray power fields.

It was an Aidon rod.

-> From the USA. The only socialist country that refuses to admit it. <-

793. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9701212246013263@atdbbs.com>
Source record: 98198

> Does anyone know of a mod to make the Realistic HTX-212 transmit out
> of band???

STEVE>>From past posts, it can't be done, despite what you'll read to
STEVE>>the contrary -- Steve KF2TI ARRL LIFE Member

Funny...my HTX-212 CAME WITH INSTRUCTIONS for extended TX/RX...

I think you have confused it with the HT, HTX-202, Steve.

-Clint Bradford, KE6LCS
ARRL Member

794. FS WE 416C Tubes,Varian VDS-1023

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Steve Tolley <radio@MATNET.com>
Message-ID: <32E5D32D.798F@MATNET.com>
Source record: 98199
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Have 140 (approx) WE 416C UHF/Microwave tubes. NIB $5ea min order of 5
+ ship. Lots of gold! Will dicker for lot.
1 ea VDS-1023 Varian tube $150 +ship
STEVE KL7FZ Alaska
PH 907-376-6467 Fax 907-373-6467 E-mail radio@matnet.com

795. FS: 75A4,51J4

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Steve Tolley <radio@MATNET.com>
Message-ID: <32E5D4F6.61AE@MATNET.com>
Source record: 98200
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Collins 75A4 rough shape, works,2K serial number $250 +ship
Collins 51J-4 Fair shape works OK 2K serial number $250 + ship
STEVE KL7FZ
Ph 907-376-6467 Fax 907-373-6467 E-mail radio@matnet.com

796. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: grohe@galaxy.nsc.com
Message-ID: <32e6f225.3005031@139.187.128.43>
Source record: 98201
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.digital,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radi

On 20 Jan 1997 19:14:45 GMT,
in the newsgroup rec.radio.scanner,
lafont02@cn.ca (Don Lafontaine)
from iSTAR internet Incorporated thoughtfully posted:

> On 20 Jan 1997 03:32:12 GMT, "Erik Skovgaard"
> <Erik_Skovgaard@bc.sympatico.ca> wrote:
>
> >Brian,
> >
> >Lat I tried your software, it crashed under Windows 95. Did you fix it?
>
> Did you try rebooting to MS-DOS mode? Programs that demand heavy duty
> CPU time run better (At least run) only in MS-DOS mode (Not DOS IN A
> BOX). SBFFT is like this.

The "other" problem is that Win95 still seems to "own" the
soundcard when you are in a "DOS" box. The program does not like
that. You will get an "interrupt" error or similar.

Make sure himem.sys is loaded in your config.sys and "emm386.exe
auto" is in your dosstart.bat. Exit windows with the "restart
computer in dos mode" menu. You will then drop right into DOS.

I have had good success with it. It works! I got a perfect copy
tonight using a DX-440.

Pentium 120
S3 Vision 330 PCI 2MB
Soundblaster 16 value PNP
64 Megs RAM
Running Win95's stock EMM386.exe and himem.sys

640x680 and 600x800 worked fine, 1024x768 seemed to revert back
to VGA.

Unless you have a "magic" soundcard, you will probably have to
tweak the <esc>/Settings/Demodulator/Clock-cal setting.

Type <ESC> S D C

At first, I got a screen-full of scrambled lines. Totally out of
sync. Slowly decrementing the value, I got it to "straighten
out". It straightens out all the stored data, too. So the whole

image should "snap" into place.

My final clock-cal setting was 0.98698. You may need to step in increments as little as 0.0001 to "zero" it in.

Good Luck!

Cheers,
Paul Grohe

Paul Grohe National Semiconductor Corp.
Sr. Electronics Technician 2900 Semiconductor Drive
I-Sig New Products Eng Group Mail Stop C2693
Mailto:grohe@galaxy.nsc.com Santa Clara, CA. 95052-8090 USA
(408) 721-7389 Tel (408) 721-2513 Fax

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---

797. Thompson TH-320 tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: magne@radar.no
Message-ID: <5c5053$3f0_002@magne.radar.no>
Source record: 98202

Looking for information about a Thompson TH-320 tube.
Plate Voltage, max. dissipation, filament voltage/current etc.

--Magne / LA1BFA

798. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: "James P. Meyer" <jimbob@acpub.duke.edu>
Message-ID: <Pine.SOL.3.91.970122093130.24397D-100000@godzilla2.acpub.duke.edu>
Source record: 98203
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 22 Jan 1997, Douglas P. McNutt wrote:

> The funny thing was a distinct 120 Hz modulation on the signal -
> synchronized with the power line. I didn't do much checking, but I believe
> it is a kind of intermodulation caused by nonlinearity in the ferrite when
> exposed to stray power fields.

Quite likely, IMHO.

Jim

799. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Don Lafontaine <lafont02@cn.ca>
Message-ID: <5c5bna$faq@nr1.ottawa.istar.net>
Source record: 98204
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

On Tue, 21 Jan 1997, charles copeland wrote:

> >I still haven't managed to decode anything yet, but I will persist!
>
> Try 14385 and tell whats up there? Always RTTY there.
>

By the time I get home, 20 meters is dead unfortunately. :(

Don Lafontaine (VE2UFO) 935 de la gauchetiere Fl. 5
Senior System Programmer Montreal Quebec
Telecom Engineering, access Canada
Canadian National Railways
packet -=> ve2ufo@ve2ike.#mtl.pq.can.noam Internet: lafont02@cn.ca

800. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Gary Tennyson <gary.j.tennyson@bridge.bst.bls.com>
Message-ID: <32E6158E.2CFD@bridge.bst.bls.com>
Source record: 98205
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

M Simon wrote:
>
> What size cap did you use with your 1/2 meter on a side loop
> with 22 turns of wire?
>
> Thanks

I used the technique described in the Spring '91 Issue of
Communications Quarterly to size the capacitance. For my antenna,
a 22-turn sqaure loop with a cross-sectional area of 1/2 square meter
(not 1/2 meter on a side) it turned out to be 0.0126 uF.

This particular antenna has the windings fairly well separated. This
gives rise to a fairly low value of distributed capacitance (the
self-resonant point was on the order of a MHz or so) and hence requires
a lot of external capacitance to resonate at 60 kHz.

Gary Tennyson
gary.j.tennyson@bridge.bst.bls.com

801. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Siegfried Rambaum <siram@light.lightlink.com>
Message-ID: <Pine.SUN.3.95.970122105200.17596C-100000@light.lightlink.com>
Source record: 98206
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

On 22 Jan 1997, Don Lafontaine wrote:

> > Try 14385 and tell whats up there? Always RTTY there.
>
> By the time I get home, 20 meters is dead unfortunately. :(

it is not dead, it only moved to sunnier places. Simply come home early :)

802. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Don Lafontaine <lafont02@cn.ca>
Message-ID: <5c5f1q$h7i@nr1.ottawa.istar.net>
Source record: 98207
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

On Wed, 22 Jan 1997, Siegfried Rambaum wrote:

> On 22 Jan 1997, Don Lafontaine wrote:
>
> > > Try 14385 and tell whats up there? Always RTTY there.
> >
> > By the time I get home, 20 meters is dead unfortunately. :(
>
> it is not dead, it only moved to sunnier places. Simply come home early :)

Now there's a great plan!!

Don Lafontaine (VE2UFO) 935 de la gauchetiere Fl. 5
Senior System Programmer Montreal Quebec
Telecom Engineering, access Canada
Canadian National Railways
packet -=> ve2ufo@ve2ike.#mtl.pq.can.noam Internet: lafont02@cn.ca

803. Need Info & Comments, Differential-T Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: mmss@mmss.sdi.agate.net
Message-ID: <5c5gnm$jes@service-2.agate.net>
Source record: 98208
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi,

I am set to embark on an adventure. I want to try building a computer controlled fully automatic antenna tuner. This ought to be fun...

It would simplify things if I only had two components to adjust (at least I think so) instead of the usual three. I have noticed something called a "Differential-T" tuner that is being produced commercially, which has just two adjustments: the roller inductor and the differential capacitor. Hmm, interesting... maybe.

Can anyone who owns one of these tuners please tell me something about it? Does it tune easily or is it terribly finicky? Does it require a lot of juggling back and fourth between the inductance and capacitance settings to achieve a match? Or is it more or less possible to adjust one element, then the other and have a reasonable match right off? Are there situations where it will not tune? (I am primarily interested in tuning coax-fed antennas. For example, I have a 5 band trap vertical that doesn't provide low enough SWR on some frequencies for my rig).

Also, can anyone tell me the circuit configuration and component values? I'm not at all sure how they have the inductor and capacitor connected. Oh, yeah, are both sections of the differential cap the same value, or are they different?

Any information would be appreciated. I can probably build my own differential cap, but I'd just as soon not go that far until I have some idea whether this circuit will work for me and what value to shoot for.

Ahh, I do love projects that let me combine computer programming with ham radio!

73,
Paul, N1BUG
mmss@agate.net

804. Re: Solid State amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970122114222.23221O-100000@prog1.caprica.com>
Source record: 98209

On Sun, 19 Jan 1997, Randy Alexander wrote:
>
> I am interested in building a legal limit solid state amp. On perusal
> of a few catologs the max I see is 1kw. I do have reference material
> from Motorola. I also have kit information from a couple of houses. It
> concerns me that I don't find any commercial units.

You don't?

What bands are you looking for one for? JEC makes one for the HF bands
and so do a few other companies.

805. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970122111244.23221M-100000@prog1.caprica.com>
Source record: 98210

On Thu, 16 Jan 1997, Jon Bloom wrote:
> I don't think grep searches are going to go over too well. "Coupling
> back into the browser" is one objection to using HTML and standard
> browsers. Another is that HTML doesn't give you a lot of page-layout
> control. It leaves a lot up to the browser, and not all browsers work
> quite the same. By the way, "everyone" doesn't feel comfortable with a
> browser. Believe it or not, there are still quite a few people who are
> equipped with a computer but don't browse the Web!

And don't forget the MANY who prefer using Lynx because we prefer a Unix shell account.

> Jon Bloom, KE3Z | jbloom@arrl.org
> American Radio Relay League |
> 225 Main St., Newington CT 06111 |

Oooooh, so your one of THEM! One of that organization that is supposed to be representing us, yet plays "See no evil, hear no evil, speak no evil" when it comes to the fact that the majority of licensed hams,(many of whom are General class & above), want CW testing and CW priviledges made OPTIONAL for General Class & above, and many of whom would prefer to see a hands-on "lab" project,(with the degree of project difficulty based upon the license class being applied for), offered as an alternative to CW testing.

I brought up and said all of that to say this... WHEN DO WE GET THIS ALLEDGED REPRESENTATION???

806. 240V VHF MOSFET PA's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970122112421.23221N-100000@prog1.caprica.com>
Source record: 98211

Is there such a thing yet as a 240 Volt MOSFET Power Amplifier device for upto 300 MHz yet? The last I checked there was a line of 240V MOSFET's made by the Harris Corperation for upto 3 MHz, 300 Watts Max Output, which is what the Harris AM Broadcast Power Amps use as their finals now,(most commercial 530-1700 kHz AM Broadcast stations in the world now have completely solid-state transmitters upto 100kW).

I've been waiting and waiting for such a device for HF and VHF use... so like the old Campbell's commercial used to say... "Is it soup yet?"

807. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Stan Aughenbaugh <Stan.Aughenbaugh@MCI.COM>
Message-ID: <32E68040.10D7@MCI.COM>
Source record: 98212

Ted wrote:
<snip>
> Oooooh, so your one of THEM! One of that organization that is supposed to
> be representing us, yet plays "See no evil, hear no evil, speak no evil"
> when it comes to the fact that the majority of licensed hams,(many of
> whom are General class & above), want CW testing and CW priviledges made

Where on earth is the survey that proves that ??(my sig tells it all)

> OPTIONAL for General Class & above, and many of whom would prefer to see
> a hands-on "lab" project,(with the degree of project difficulty based
> upon the license class being applied for), offered as an alternative to
> CW testing.
>
> I brought up and said all of that to say this... WHEN DO WE GET THIS
> ALLEDGED REPRESENTATION???

WHERE AND WHEN WILL WE SEE THESE 'STATISTICS' ?
If you're gonna quote 'em, cite 'em.
In any event what does this have to do with the QST CD?
73,
Stan KF0NC
"90% of all statistics are made up"

808. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970122115146.23221P-100000@prog1.caprica.com>
Source record: 98213

I can't believe you guys are acyually encouraging each other, and what's worse, encouraging new hams to STOOP to the same kind of ILLEGAL crap that the CB operators do. If you stoop to an illegal CB'ers level, then that makes YOU nothing but an illegal CB'er yourself and deserve to have your license revoked and all of your ham equipment auctioned.

What the HELL were you dimwitts THINKING? What the HELL is WRONG with you? How could you even fix your face to suggest that a fellow ham do illegal crap like that. WE are SUPPOSED to be ABOVE that! WE are SUPPOSED to do things LEGALLY! Let ME catch a fellow ham pulling that shit and I won't bother looking for an Official Observer... I'll personally drag his ass to the FCC myself and have him made an example of.

HOW DARE you idiots lower the ham standards of conduct, and in PUBLIC too!!!

You need your license and equipment taken, and maybe you need your ass kicked too for making the rest of us hams look bad! WE ARE NOT OUTLAW OPERATORS! DO YOU UNDERSTAND THAT? So if you want to clean up the airwaves, we can start right here, by disciplining our OWN ranks!

Anyone wanna form a physical-discipline committee? I have a razor-strap!

On 21 Jan 1997, Tony Zugec wrote:

>
> J&J Mac (jmacd@wco.com) wrote:
> : I have used a simple circut from an old RS RC transmitter. I made a few
> : small changes to the board to create oscillation, changed the xtal to
> : the channel this jerk would 'puke' on and peaked the output
> : to a full 50 Milliwatts. I put the whole unit with a pair of 9V in
> : parallel into a cigarette hard pack with 108" of magnet wire to work as
> : an antenna and hung it in the guys pine tree about 20 yds from his
> : Antron. He could be heard but he couldn't hear anyone over the
> : osclilator. The bug lasted almost a week-until it rained and soaked thru
> : the cigarette pack.
>
>
>
> :]not disclosed wrote:
> : >
> : > does anyone have the plans to make a device in which I could drop next
> : > to a offending 27mhz operator? I am looking for a device that will key
> : > and buzz with stronger signals <say above 8 s units> so the person
> : > will not be able to hear his local cohorts. <high school kids>
> : > I appreciate any and all replies.
> : > looking forward to hamming it up in the NEAR future....

> : > countdown to test time!
>
>
> Well, I made a jammer for the AM band long ago, you should be able
> easily to get it to work at 27.
>
> I used a 555 timer rich in harmonics as the driver and also
> designed it so that it would sweep a portion of the AM band
> using the vco input. Worked great. Since it was swept, it
> didnt matter what station you listened to, it was annoying
> to hear and eventually the radio would be turned off.
>
> Somewhere to start, anyway.
>
> tony
>
>
>
>

809. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: J M Woodgate <jmwa@thenet.co.uk>
Message-ID: <ant221535868fSH%@sci.electronics.design>
Source record: 98214
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <5c0b3k$n4@clark.zippo.com>, brian whatcott
<URL:mailto:inet@intellisys.net> wrote:
>
> In article <32DBC9E0.63DECDAD@bnl.gov>, scott@bnl.gov says...
> >
> >
> >I constructed the ferrite rod antenna/preamplifier as described in the
> >article...
> >* I have wound my antenna on a length of 'generic' ferrite rod which
> > is 3/8" in diameter and about 7" long. I put 700 turns of 34 AWG
> > formvar coated wire on it. This covered about 5 of the 7 inches of
> > the rod's length. The article says to use an 820pf fixed capacitor
> > and a 10-180pf variable capacitor in parallel with the antenna, and
> > to tune the variable capacitor to resonate the whole business at
> > 60kHz. Ignoring stray capacitance and setting the variable to 100pf
> > (about mid-range) the inductance of the antenna should be about
> > 8 mH. I measured my antenna and found it to be about 26 mH. ...
> >scott coburn X
>
> The high inductance looks suspicious. If you used the specified number
> of turns, it could be that the ferrite's properties are unsuitable at
> 60kHz (though this is hard to believe!)
> Naturally the tuning capacitance required would be smaller.
> To check it out, a signal generator (maybe even an audio oscillator
> with extended range) should do the trick.
>
> Shadowing from trees should not be a big factor - 60kHz is not a
> 'line-of-sight' frequency!
[snip]

True, but the *antenna* is directional. If the thread is about lack of
reception, Murphy's Law says that the rod is aligned *exactly* in the null
direction. (;-))

--
Regards, John Woodgate Tel. +44 (0)1268 747839
Fax +44 (0)1268 777124 OOO (Own Opinions Only)

810. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: n7ory*@*primenet.com
Message-ID: <32e88d89.25958407@news.primenet.com>
Source record: 98215

Someone kick the soap-box out from under this guy before the wind at that altitude carries him off by his over-inflated head.

"We're sorry, the newsgroup you have posted to is not receptive to posts of this kind. Please, fix your sense of humor and try your post again."

Rob Neff (N7ORY)

811. Wanted 2M Repeater Freq. and Tones for Barstow/Victorvile CA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: gpsrul@aol.com
Message-ID: <19970122211201.QAA20557@ladder01.news.aol.com>
Source record: 98216

need Repeater Frequencys and sub-audible Tones for repeaters up in Barstow / Victorvile area in CA. Travel Up that way A lot. Your help would be appreciated!

GpsRul@aol.com

812. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan22.143722.8700@ke4zv.atl.ga.us>
Source record: 98217
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

In article <32E54D27.5F9F@midstate.tds.net> Michael Berg <mikeberg@midstate.tds.net>
writes:
>I tried the FTV demo program and keep getting a memory error
>when it loads. Any ideas?
>73 Mike N0QBH

Well, I might be able to help you with that. Make sure you have your
EMS memory manager installed in config.sys, and make sure it isn't set
for NO EMS (that's the default way it'll be with Windows). Just delete
the NO EMS from the line and reboot.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

813. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: "James P. Meyer" <jimbob@acpub.duke.edu>
Message-ID: <Pine.SOL.3.91.970122092940.24397C-100000@godzilla2.acpub.duke.edu>
Source record: 98218
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Tue, 21 Jan 1997, Steven Swift wrote:

> You can use a rod or large loop to get the same effective height-- which
> is what you care about. Ferrite will give more phase shift.

Phase shift of what with respect to what?

Jim

814. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <E4F0GA.125@eskimo.com>
Source record: 98219
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"James P. Meyer" <jimbob@acpub.duke.edu> writes:

>On Tue, 21 Jan 1997, Steven Swift wrote:

>> You can use a rod or large loop to get the same effective height-- which
>> is what you care about. Ferrite will give more phase shift.

> Phase shift of what with respect to what?

Compared to a perfect frequency standard. The transmission path contributes
a time delay (phase shift). Since ferrite has temp/freq dependent properties,
you will measure a shift in the relative phase of your received signal compared
to your reference standard. If you are using the antenna in a calibration
system and the antennna experiences a large temperature swing you can see the
phase shift. Note that this is hard to see unless you are doing better than
about 1e-9 relatively frequency measurements. Good enough for most of us.

> Jim

--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

815. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <E4F0rG.19C@eskimo.com>
Source record: 98220
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

novatech@eskimo.com (Steven Swift) writes:

>I have a little 'c' program that calculates what you need for loop
>antennas. Note that there is a "permeability" times "area" term.

See below. You can easily convert the program to basic as it just
asks for inputs and prints out the answer. (Kirk: can you post yours?)

>I will post the program, which is based upon Chapter 4 of "VLF radio
>engineering" by A.D. Watt. A must read if you want to pursue VLF antennas.
>You'll have to find a good library to get this book.

The exact reference is: "VLF Radio Engineering," Arthur D. Watt, Pergamon
Press, 1967, Library of Congress Catalog Card No. 67-18166. However it
looks like I really got the formula from the Radio Designer's Handbook.

>Steve.

```
/***********************************************
COPYRIGHT 1990 Steven D. Swift

Rights to copy are granted provided that the program is neither sold nor
used for commercial purposes and that this notice stay with all copies.

history:
rev 0: June 7, 1990 Steven D. Swift
Seattle, Washington
rev 1: June 20, 1990 Fixed units in formula

coil.c

This program calculates the voltage induced on a solenoidal loop antenna
immersed in an uniform field of e uV/meter. Inputs to the program are
permeability, turns, area, field strength, and frequency.

***********************************************************/

#include <stdio.h>
#include <math.h>

main()

{
float freq;
float N; /* number of turns */
float A; /* area of core */
float mu; /* permeability of core */
float e; /* field strength in uV/meter */
```

```
float V; /* induced voltage in uV */
float L; /* effective length of coil */
float d; /* diameter of coil */
float pi=3.141593;

/* input all the user data first */

printf("\n\tinput the center frequency in kHz: ");
scanf("%f", &freq);
printf("\n\tinput the core permeability: ");
scanf("%f", &mu);
printf("\n\tinput the number of turns: ");
scanf("%f", &N);
printf("\n\tInput the value of the incident field in uV/m: ");
scanf("%f", &e);
printf("\n\tInput the diameter of the solenoid in cm: ");
scanf("%f", &d);
printf("\n");

/* calculate the values from the given */

freq = freq/1.0e3; /* formula requires MHz */
d = d/100.0; /* convert to meters for use in formula */
A = pi*(d/2.0)*(d/2.0); /* ignores wire thickness */
L = 0.021*mu*N*A*freq; /* formula from 5th ED Radio Engineers HB */
V = L*e; /* effective length times field */

/* output the results */

printf("\n\tA field strength of %.1f uV/m a coil with\n",e);
printf("\t%.0f turns on a %.2f cm diameter core with a\n",N,100.0*d);
printf("\tpermeability of %.1f will produce a voltage of\n",mu);
printf("\t%.3f uV\n",V);
printf("\tThe effective height is %.1f cm.\n\n", L*100.0);

}
```

--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

816. Re: Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: ianls@patrol.i-way.co.uk
Message-ID: <32e69e91.14579055@news.i-way.co.uk>
Source record: 98221

On Thu, 16 Jan 1997 08:01:24 +0100, Dietrich Morgenstern
<76050.1341@CompuServe.com> wrote:

>Monty Wilson wrote:
>>
>> I'm interested in hearing from anyone who has built
>> a screen grid modulated HF transmitter.
>>
>> --
>> ....Monty N5NVM.
>> mwilson @ flex.net (with spaces deleted)
>Monty:
>I built a screen grid modulated TX way back in 1951. (Actually these
>designs were very popular then for people who could not afford a big
>class B Audio amplifier for plate modulation).
>The transmitter worked very well, I needed only very low audio power to
>modulate a 813 with approx. 100 watts RF power output. Obviously the
>disadvantage was that I could not get more RF out of the PA.
>Apart from that audio quality was quite good.
>
>73 Dietrich DJ1VA.

I have a couple of Heathkit transmitters using this type of mod, the
DX40 and DX60.

Advantages: requires less power to modulate the carrier.
Disadvantages: Amount of distotion depends on antenna loading, so to
get best results u need an audio sinewave generator and a scope
looking at the mod envelope!!! But this way good mod can be achieved -
providing you don't want to QSY!!! 100 percent mod not usually
possible.

Even though the DX60 was the successor to the DX40, the mod quality
fiddly and tune-up for best results were no better! (Although the
chassis design was MUCH better. Pitty it made no difference on the
air!)

As u can see, it's not worth the effort unless u are restoring an old
amateur radio transmitter.

G4JQT
--
Ian
ianls@patrol.i-way.co.uk

817. Re: Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: ianls@patrol.i-way.co.uk
Message-ID: <32e6a1a3.15366182@news.i-way.co.uk>
Source record: 98222

On Thu, 16 Jan 1997 08:01:24 +0100, Dietrich Morgenstern
<76050.1341@CompuServe.com> wrote:

>Monty Wilson wrote:
>>
>> I'm interested in hearing from anyone who has built
>> a screen grid modulated HF transmitter.
>>
>> --
>> ....Monty N5NVM.
>> mwilson @ flex.net (with spaces deleted)
>Monty:
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>designs were very popular then for people who could not afford a big
>class B Audio amplifier for plate modulation).
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>modulate a 813 with approx. 100 watts RF power output. Obviously the
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>73 Dietrich DJ1VA.

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looking at the mod envelope!!! But this way good mod can be achieved -
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Even though the DX60 was the successor to the DX40, the mod quality
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chassis design was MUCH better. Pitty it made no difference on the
air!)

As u can see, it's not worth the effort unless u are restoring an old
amateur radio transmitter.

G4JQT
--
Ian
ianls@patrol.i-way.co.uk

818. Re: Any info on Homebrew repeater controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Jessica <jhoo219@pop.crown.net>
Message-ID: <5c5q2c$8sh$1@kiwi.crown.net>
Source record: 98223

hi name is toby i build a cw ider for a repearter out of qst about
10 years ago.. i still have the mag. it work just fine.and for many
years with no problem..it had two cw message on it.
if you want this info i copy send it to you de n9fdf toby

819. Re: WIND GENERATOR PROBLEMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: Possum <fnjlh1@aurora.alaska.edu>
Message-ID: <Pine.OSF.3.95.970122164603.18506A-100000@aurora.alaska.edu>
Source record: 98224

Howdy...

The Alaska Railroad guys are using some small wind gen sets for
their remote signal crossing power. I've blown off the name, but they were
built in Merry Olde and were stainless steel, marine units. ARR said they
were happy with them. ARR's conditions were more on the cold side rather
than the really big wind side, tho. I may be able to track them down if
you need more info..

j harris/fairbanks

820. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: John Harper <j..harper@worldnet.att.net>
Message-ID: <32E6D55F.76A7@worldnet.att.net>
Source record: 98225

Get a life, Geek.
--
John

821. Data sheets of analog ICs needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: ik0rnt@quipo.IT
Message-ID: <1.5.4.32.19970122221405.0067bfa8@quipo.it>
Source record: 98226

Does anyone know the direct URLs for getting the data sheets of analog integrated circuits such as NE 602 , TDA 1220B or ZN414 ? I would like to avoid time-consuming searches on the search engines .

I thank in advance .

Andrea IK0RNT

822. Re: Need Info & Comments, Differential-T Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: George Baker <w5yr@swbell.net>
Message-ID: <32E6FBCF.7682@swbell.net>
Source record: 98227
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Paul N. Kelley wrote:
>
> Hi,
>
> I am set to embark on an adventure. I want to try building a computer
> controlled fully automatic antenna tuner.

> 73,
> Paul, N1BUG
> mmss@agate.net

Paul, your project sounds very interesting. The automatic antenna tuner in my Icom IC-765 does just what you are talking about - you might want to get hold of the tech manual for that or a similar rig for ideas.

I have done a limited amount of tuner circuit modelling by deriving the equations for the circuit and then expressing them in a spreadsheet using complex notation and operations to handle reactances and complex impedances. Very interesting exercise and very enlightening as to to capabilities of a given circuit with specified component value ranges to handle various load impedances.

A good modelling/simulation program, such as the one ARRL markets, would probably be much more convenient to use. At any rate I urge you to consider modelling first to arrive at a suitable design and approximate component values as a starting point for the software phase.

Keep us posted on your progress.

--
73, George
W5YR (original, not vanity)
Fairview, TX

823. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2201971535510001@news.vcnet.com>
Source record: 98228

In article <19970120114600.GAA17002@ladder01.news.aol.com>, w8jitom@aol.com wrote:
...snip...
....
...snip..

Bzzzzzzzzzzzzzzzzzzt. (cough, cough).....and the sensitivity control is set on zero. Amazing.......... (cough)

Mr. Rauch:
Wes Stewart, N7WS, appears to have gone to considerable trouble making scientific measurements of conventional copper vs. Ni-Cr-Fe and Ni-Cr suppressors with a Hewlett-Packard Model 4191A RF Impedance Analyzer. IMO, discussing Wes' suppressor measurements could resolve the core issue in this debate to the satisfaction of most. .
---
e-mail copy to Mr. Rauch

--
--Rich-- ag6k, 805-386-3734

824. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: aziz@turnet.NET.TR
Message-ID: <32E5D542.31A6@turnet.net.tr>
Source record: 98341

```
SUBSCRIBE ham-homebrew
```

825. FS: TUBES!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-22 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5c3t29$2576@usenetp1.news.prodigy.com>
Source record: 98342

UPDATED 1/16/97

Lab collection of tubes, all of which should be considered
USED unless otherwise marked. All are guaranteed to be
within normal test limits when shipped. All tubes are
either American made or made by Amperex, Mullard, Siemens, or
Telefunken. TUBES ARE NOT SORTED BY MANUFACTURER, AND SORTING
BY MANUFACTURER IS NOT AVAILABLE. (Please don't ask!) All
items subject to prior sale. When they are sold, they are
gone forever; there will be no restocking.

****
* *
* PLEASE DO NOT REPOST THIS ARTICLE IN YOUR REPLY *
* *
****

$1.00 EACH: (USED, GUARANTEED)

0A2, 0A3, 0B2, 0C2, 0G3/85A2, 1BC2, 1G3GT/1B3GT, 1J3, 1K3,
1V2, 1X2A, 1X2B, 2BN4, 2D21, 2E26, 3A3C, 3BN6, 3BZ6, 3CB6,
3GK5, 3HQ5, 4BZ6, 4CB6, 4DK6, 4JC6, 4JD6, 5AQ5, 5CG8, 5EW6,
5JB8, 6AC7, 6AG7, 6AH6WA, 6AK5, 6AL5, 6AN5, 6AQ5A, 6AQ7GT,
6AR6, 6AS6, 6AU6, 6AV6, 6AW8A, 6AX4GT, 6BV11, 6BC7, 6BG6GA,
6BH6, 6BJ6, 6BJ8, 6BK7, 6BN6, 6BQ6GA/6CJ6, 6BQ7A, 6BS8, 6BW4,
6BX6/EF80, 6CB6A, 6CB6A/6CF6, 6CG7, 6CG8A, 6CH8, 6CL8A, 6CM6,
6CM7, 6CN7, 6CX7, 6DQ6A, 6DS4, 6DZ4, 6EN4, 6ES8, 6FG7, 6GB5,
6GC5, 6GF7, 6GH8, 6GM6, 6GU7, 6GY6, 6H6, 6HZ6, 6J5, 6J6,
6JU8, 6KA8, 6KZ8, 6LU8, 6MD8, 6S4A, 6SF5, 6U8, 6W4, 6X4,
6Y6GT, 8B10, 8CG7/8FQ7, 8FQ7, 8FQ7/8CB7, 8JV8, 8KA8, 10JT8,
10LZ8, 11BQ11, 12A6, 12AE10, 12AL11, 12AT7, 12AX4GTB, 12AY7,
12BF6, 12BN6, 12BQ6GTB, 12BV11, 12DT8, 12EQ7, 12H6, 12HG7,
12JB6A, 12MD8, 12R-K9, 12SG7, 12SJ7, 12SN7GT, 12T10, 14BR11,
15BD11, 15KY8, 17AY3, 17CU5, 17JZ8, 19CL8, 19EA8, 21HB5A,
21LU8, 22JU6, 22JG6, 23Z9, 25L6GT/G, 25Z6, 25Z6GT/G, 33GY7,
34CE3, 35C5, 42KN6, 50EH5, 3223/5735, 5654, 5692, 5696, 5725,
5725, 5726, 5727, 5841, 5844, 5933, 5963, 5965, 6072, 6135,
6143 (short leads), 6186, 6201, 6202, 6211, 6227, 6293, 6350,
6485, 6661, 6682, 7316, 9002, CK6528, EF88, M3104.
Ballast tubes: 3-14, 9-7, 12-4

****
$2.00 EACH: NEW IN CARTON
6BK4/6EL4A, 33GY7, 5799, CK547DX, CK5517,
CK5886, CK5889, CK6174, 7788/E810F
****

* *
* EVERYTHING - Over 700 tubes - $425 *
* (shipping included) *
* *
****

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Up to $200, $9.00
Over $200: FREE
COD AVAILABLE (CASH ONLY!!) add $5.00

TERMS: Payment with order. Checks will be held 5 business
days. Money orders clear in 1 day. COD: $5 additional.
All items subject to prior sale. E-mail for information.

ORDERING: Please order by e-mail so that we can confirm your
order and hold the tubes for you!

PLEASE DO NOT REPOST THIS ARTICLE IN YOUR REPLY.

826. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5c6ci4$1ct$1@news3.microserve.net>
Source record: 98229

Tom,

Your best bet might be to buy a MiniCircuits VCO. They make
both thru the board and surface mounted units that will tune
100-200 mhz with -105 dbc/hz phase noise with all harmonics
at -25db. Their single lot price is about $15.00 ea

Try their web site at http://www.minicircuits.com

73 Steve N3FTI
In article <5c0f10$l93@hpcvsnz.cv.hp.com>, tomb@lsid.hp.com says...
>
>I'd appreciate pointers to designs of low phase noise VCOs
>in the 150MHz range, with a control range of 5MHz or so.
>Lower control range (down to 1MHz or so) with band selection
>thru diodes would also be OK. Would especially like pointers
>to articles that discuss the designs in some detail, not just
>say, "build it like this and it will be fine." Practical as
>well as theoretical info would be helpful: things like,
>"this series of varicap diode is especially good," as well
>as, "the varicap diode should have these characteristics
>for optimal performance."
>
>--
>Cheers,
>Tom
>tomb@lsid.hp.com

827. Re: Kenwood TS-520 for $125

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: "Walter S. Szachara" <szachara@gulftel.com>
Message-ID: <01bc08b7$b7401980$a15070ce@portal.gulftel.com>
Source record: 98230
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Bryan,

What kind of shape is it in otherwise? What does it include: PS? Mike?
Etc.?

Thanks,

Walt
szachara@gulftel.com

Bryan Edwards <w5kft@nts-online.net> wrote in article
<5c3cva$3j7@news.nts-online.net>...
>
> I have a Kenwood TS-520 transciever that has started blowing fuses
> when it is turned on. I don't want to mess with fixing it, will sell
> it as is for $125 plus shipping. This will make somebody a good cheap
>
> fixer supper.
>
> Bryan
>
>

828. Re: QST on CD BEWARE!!!!OS Whining

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5c6gpeqfa1@news-s01.ny.us.ibm.net>
Source record: 98231

In message <01bc070d$5904fe40$a3d879a8@soho> - "Mark Bryant"
<bryant@sohobusiness.com> writes:
:>
:>If you cannot discern the difference between conveniences for minimal
:>use operating systems and accommodations for physical handicaps you
:>cannot be expected to understand my original post.
:>

.. and you can't accept that to discriminate against users of
non-windows operating environments is is one of the few remaining legal
forms of discrimination. Like other windows bigots, if anyone dares
suggest that your "windows or nothing" stance smacks of Aryian super
race dogma, you resort to ad hominem and ignore the messanger as one who
"cannot be expected to understand."

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==

829. WTB: SB-1000 Schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Ron Fitzgerald <ron@ykm.com>
Message-ID: <01bc08e1$3d7b8420$d5af3ace@larry>
Source record: 98232

Help,
Looking for original or copies of schematics for the SB-1000.
Gladly pay whatever for copies or an original.
Ron Fitzgerald
KO6BY
ron@ykm.com

830. WTB GRID-DIP METER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: rncraig@netcom.com
Message-ID: <rncraigE4Fuxq.2Kx@netcom.com>
Source record: 98233

WTB GRID-DIP METER. Absorption wave-meter type for locating resonance&#65533;s.

Robert Craig
CLIFFORD Electronics
800-824-3208 ext 411

--

rncraig@netcom.com
Robert N. Craig (K6AII)
5431 W. Slauson Ave.
LaDera Hts., CA 90056 (near LAX airport Los Angeles)
(310) 216-0555

831. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970123051300.AAA12595@ladder01.news.aol.com>
Source record: 98234

In article <measures-ya02408000R1901971257220001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>Dave contacted me privately before the public announcement. About 4
years
>ago, in my 8169 amplifier, I experienced a similar tank arc which was
>caused by an arc in my 160m Hertz antenna's L-network tuner, 100 feet
down
>the coax feedline, out in the back yard.

If Dave contacted you privately before the public announcement, why did
you go ahead announce the arcing was caused by a parasitic? If you
experienced an arc in your tuner that caused your PA's tank capacitor to
arc, why didn't you ever indicate or admit an arcing problem could be load
related?

In article <measures-3010961224430001@port20.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>The voltages that can result from an intermittent vhf oscillation are
>impressive. For instance the TL-922 uses a tuning capacitor that tests
>out at well over 5000vdc.
>The max. RF peak voltage across this capacitor
>is normally around 2700v with the electric-mains supplying 240v to the
>922. Other manufacturers of similar amplifiers typically use a tune
>capacitor with only 60% of the air gap in the 922's tune capacitor, so
the
>safety factor is awesome. However, when the 922 oscillates at 140 MHz,
>the tune cap. can arc. If you are lucky enough to see this happen, the
>arc is purple---a strong indicator that vhf voltage is present.

In article <measures-2312960402070001@port19.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

> I have seen large air gaps arc for no apparent
>reason. An arced TL-922 tune capacitor is currently being shipped to me
>from NM for testing. I will test it and post the results here. When
this
>tune capacitor was replaced with a new unit, it also arced.
>IMO, the
>mysterious intermittent arcing is VHF parasitic related. .

In article <measures-2312961641190001@port10.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>This afternoon I tested David Holtcamp's TL-922 tune capacitor. The
>breakdown voltage was about 6100V. David observed that this capacitor

>arced during operation on the CW tap.
>The HF voltage present on the CW
>tap is around 2000V IMO, the intermittent arcing of the 6000v+ tune cap.
>was due to a largely-unloaded VHF parasitic oscillation.

Three times you indicted the 922 arcing had to be a parasitic. It was your opinion. It was your conclusion.

You posted that conclusion knowing full well that it could be a load problem, you admit you did so **after** Dave indicated in E-mail it was an arcing lightning arrestor.

In article <measures-ya02408000R1901971257220001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>About 4 years
>ago, in my 8169 amplifier, I experienced a similar tank arc which was
>caused by an arc in my 160m Hertz antenna's L-network tuner, 100 feet down
>the coax feedline, out in the back yard.

You intentionally omitted evidence you discovered four years earlier that contradicts your public posture that parasitics are the only cause of tank circuit arcing.

You misled us about the AL-1500 that you NOW admit was not even an AL-1500. (Marvin said there is no way you didn't know that from the very beginning, he said he was very clear about what the PA was.) You did the same with your claims about conversations with Eimac.

Rich, how can anyone trust you?

73 Tom

832. Re: Software for doing system noise calcs.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: daveb@connect.net
Message-ID: <32e6c9da.2569744@news.connect.net>
Source record: 98235

au156@yfn.ysu.edu (Hank Riley) wrote:

>
>I'm looking for a simple shareware program that will make it possible
>to evaluate the path losses and system noise for a system comprising
>an airborne transmitter and earth-based antenna, preamp, feedline,
>and receiver.

While it's not shareware, I've always used Excel or Lotus 123 to do
such calculations. None of the calculations involved strike me as
particularly complicated, once you master the Friis equation (And can
keep the difference between dB and numeric values straight).

My favorite reference for that sort of stuff is
"RF Design Guide" by Peter Vizmuller. Published by Artech house,
it's a nice updating of Ernst's book "Receiver system Calculations".

Dave Bengtson

833. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Larry Robison <robison@amnorth.com>
Message-ID: <01bc08f9$7abcbe40$d104fa26@larry>
Source record: 98236

Well Rob that's your opinion and I think YOU are a bit out of line to attempt to speak for the newsgroup! I subscribe to this newsgroup and you sure don't speak for me.

I happen to think that he's right in step with what's going on here and I am pissed off about it too! Have you ever bothered to post the same message of inappropriateness to those who are responsible for the thread in the first place?

Does anyone else out there think it is appropriate to post a question asking how to jam someone (or post a reply telling him how) and jump on the guy who brings the absurdity to light?

Larry W9MDX

834. Sat weather maps the cheap way: questions o plenty...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: helling@uwindsor.ca
Message-ID: <E4G89B.B0x@news.uwindsor.ca>
Source record: 98237
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

A few questions on the fine points of weather satellite image
reception...
(on a shoestring budget.......)

I have read the article in Nuts and Volts, picked up the LM741
fuzzbox interface for my Pc (it does reemble a crude guitar
fuzzbox effect...what an odd way to get square waves!!!!)

My ancient heathkit GR-64 has a BFO, am bust dusting it off,
Won't hook the mess up until I get an isolation xformer for
the patch...

AND.... Tadah.... just scored an ancient Radio-shack PRO-33
20 channel scanner for that all-important 137 MHZ reception...
As the scanner tunes in 5KHZ steps, it might even
tolerate the reported doppler shift...

SO......
1) Assuming I find an antenna, will the little 741 interface
and the shareware program for weather fax I got with it do the
job for 137 MHZ reception ?

2) the Nuts &volts article has a diagram of a double crossed
dipole antenna. Bottom cross must be grounded as "reflector",
right? Top one is PVC and wire along the sides, just like the
ancient RLL handbook design... OK. but what length??? The
formula in my 1970 Arrl book doesn't look too useful over 50MHZ
or am I banging the calculator wrong???

Any suggested lengths???? Got baling wire o plenty...
(then off to the cable co dumpster for coax.... and away we
go...)

3) I am really interested in the High Orbit 1691 MHZ sat
images... But that $US600 downconverter.... ulp...
On the other hand, I garbage picked an old sat reciver a while
back (swapped it off.... they aren't worth much if they don't
de-cypher) Now.... hmmmmm..... Conversions anyone???

3B) Those really cheap mini-sat disk systems being sold to
hook one in to paying subscription fees forever.... wonder how
modifyable these are....

Ok...at this point my ignorance is REALLY SHOWING, but heck...
one week ago I was ripe for a Ramsey 137 MHZ kit (fortunately

I am perpetually broke), and then I pick up the scanner at a
2nd hand store for CAN$30.... As a bonus, I get to hear the
walky-talkies at macdonalds 4 blks away (YAWWNNNNNNN!)

This sat stuff looks great.... (I used to mess with
electronics and DX a bit, went to University, got useless
degree, decided to have FUN, went to ART school, got a REAL
USELESS DEGREE, and now do gallery sized set-ups involving
wonky technology... Still can't draw worth a %$&....
So what If I recycle a few sci-fi plot lines here and there...

TRY this....
Sat receiver => computer => stored images scripted to slide
show mode, adding latest image to end => cheesy VGA-2-video
coverter => rented scan rate doubler => rented video projector
high up projecting on the floor of a darkened room...

OOOOHhhhh..... View from a height....

The pro sat pictures from high orbit would be best, but the
low orbit ones are a good start...

Any tips, sites, advice, apreciated big time...
Thanks & regards.... B/H
helling@server.uwindsor.ca

835. Re: PC lpt1 interface info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: hamster@loose.org
Message-ID: <5c7p29$e89$1@hammer.msfc.nasa.gov>
Source record: 98238

In article <5bq4q4$mgk@yama.mcc.ac.uk>, david@comms.ee.man.ac.uk says...
>
>hamster (hamster@loose.org) wrote:
>: I would like to interface a DTMF decoder chip, M8870, to my LPT1. Has
>: anyone done this and have info or ideas?
>
>Yes: http://home.aol.com/pdrunen
>
>David G0JVY
Got it...Thanks
Paul

836. Re: Data sheets of analog ICs needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Gabe Nemeth <gabe@bnr.ca>
Message-ID: <32E76C56.63D8@bnr.ca>
Source record: 98239

Andrea Grillini wrote:
>
> Does anyone know the direct URLs for getting the data sheets of
> analog integrated circuits such as NE 602 , TDA 1220B or ZN414 ? I
> would like to avoid time-consuming searches on the search engines .
>
> I thank in advance .
>
> Andrea IK0RNT

I have used the following in the past: (can't guarantee the status of
the pages)

http://www.chip.de/
http://www.hitex.com/chipdir/
http://www.semi.com.tw/
http://www.engineers.com/tec.html

Good Luck and '73 de VE3SLJ, Gabe.

837. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: "James P. Meyer" <jimbob@acpub.duke.edu>
Message-ID: <Pine.SOL.3.91.970123093451.14056B-100000@godzilla5.acpub.duke.edu>
Source record: 98240
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Wed, 22 Jan 1997, Steven Swift wrote:

> > Phase shift of what with respect to what?
>
> Compared to a perfect frequency standard. The transmission path contributes
> a time delay (phase shift). Since ferrite has temp/freq dependent properties,
> you will measure a shift in the relative phase of your received signal compared
> to your reference standard.

There's supposed to be a small cyclical phase shift over a 24 hour
period due to changes in the path between the transmitter and receiver. Is
the typical shift due to a ferrite antenna a lot larger than that?

Jim

838. GDO needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c7spc$po5@news1.mnsinc.com>
Source record: 98241

I am looking for a Grid Dip Oscillatir if anyone has one for sale.

Please E-mail me.

73 & Thanks - Bry, AF4K
73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

839. Re: Transmit and Receive antennas in close proximity

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: efricha@alumni.cs.Colorado.EDU
Message-ID: <5c7vut$1e2$1@csnews.cs.colorado.edu>
Source record: 98242
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Eric F. Richards (efricha@alumni.cs.Colorado.EDU) wrote:
[lots of my annoying questions deleted]
: (Is it even practical to use a low-pass filter considering that 108 and
: 144MHz aren't even an octave apart?)

I forgot to ask: How would I calculate the attenuation at each stage, and
how much attenuation would be enough?

Thanks again,

--
Eric F. Richards
KB0YDN
efricha@alumni.cs.colorado.edu

840. RS frequency counter -- comments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: ddenter@nortel.ca
Message-ID: <5c7uu5$2ma@bcarh8ab.bnr.ca>
Source record: 98243
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Anybody got any comments on the Radio Shack frequency counter?

I'm looking for one and theirs seems to be one of the cheaper ones
(they currently have it on special at $30 off).

reply be email to ddenter@ottawa.com and I'll summarize.

regards,
Dean.
--
Dean Denter work -> ddenter@nortel.ca
VA3CDD play -> ddenter@ottawa.com
[[[[[[[[[[[[[I speak only for myself]]]]]]]]]]]]]

841. Transmit and Receive antennas in close proximity

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: efricha@alumni.cs.Colorado.EDU
Message-ID: <5c7vaf$18e$1@csnews.cs.colorado.edu>
Source record: 98244
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Greetings, all...

I have a 50 Watt 2-meter rig in my car. I also have a car stereo system in this car, which had been dead for years but I recently had repaired. Since having the stereo repaired I've not transmitted because I'm concerned about the possibility of damaging the front-end of the stereo.

The antennas (antennae?) are only 4 feet apart. Is my concern valid?

If I should be concerned, what are my options? It seems to me that my possibilities are putting a PIN diode across the antenna input, or a low-pass filter with a SHARP roll-off.

How would I choose appropriate components? How are PIN diodes rated? Breakdown voltage, or some equivalent?

For the low-pass filter, it seems that I have enough information between the Handbook, antenna book, and Advanced-class (!) study guide. However, it also looks like a large number of combinations for series L and shunt C are valid. Is there a "best pair?" How do I choose that pair?

(Is it even practical to use a low-pass filter considering that 108 and 144MHz aren't even an octave apart?)

I really could use some guidance in protecting the stereo. It seems like no commercial version of what I want exists.

Thanks much in advance,

--
Eric F. Richards
KB0YDN
efricha@alumni.cs.colorado.edu

842. Need Filter cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: k4to@mis.net
Message-ID: <32e77ed1.3238762@netnews.mis.net>
Source record: 98245

I need to replace the filter cap in my homebrew amp. I need about 30 to 50 UFD at at least 5500 v. Anyone got one or know of a reasonably priced source? Thanks for reading and 73.

Dave, K4TO
Email reply pls to: k4to@mis.net

843. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: gsparks@ix.netcom.com
Message-ID: <5c81tu$a9l@dfw-ixnews9.ix.netcom.com>
Source record: 98246

From: gsparks@ix.netcom.com(Glenn Sparks)
Newsgroups: rec.radio.amateur.homebrew
Subject: Re: 27 mhz jammer
References: <32d9ea53.145883882@news.flash.net> <32D95DF9.3587@wco.com>
<5c1694$7v6@rosenews.rose.hp.com>
<Pine.BSF.3.91.970122115146.23221P-100000@prog1.caprica.com>
<32e88d89.25958407@news.primenet.com> <01bc08f9$7abcb
e40$d104fa26@larry>

In <01bc08f9$7abcbe40$d104fa26@larry> "Larry Robison"
<robison@amnorth.com> writes:
>
>Well Rob that's your opinion and I think YOU are a bit out of line to
>attempt to speak for the newsgroup! I subscribe to this newsgroup and
you
>sure don't speak for me.
>
>I happen to think that he's right in step with what's going on here
and I
>am pissed off about it too! Have you ever bothered to post the same
>message of inappropriateness to those who are responsible for the
thread in
>the first place?
>
>Does anyone else out there think it is appropriate to post a question
>asking how to jam someone (or post a reply telling him how) and jump
on the
>guy who brings the absurdity to light?
>
>Larry W9MDX

Isn't it amazing how as soon as someone asks how to modify a radio to
use for marine or something they are told right away, how they cannot
do that because it is not a type accepted radio, which while not legal,
is magnatudes less of a problem than advising someone how to jam a
signal, even using spark gap methods.

Could it be because the guy was wanting to Jam a CB users, naw, hams
would never be that prejudiced against another radio service.

I would guess from the original post, that this is a group of high
school or JR high kids who chat at night on CB, unless they are
plotting muggings, or drug deals, I can't think of the reason to jam
them, except for retaliation for something. If it is TVI, call the FCC
and they will send you a book on how to fix your junk consumer

electronics products to fix the problem.

Sparky KI5GY

844. Re: Transmitter Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c82og$rnk@news1.mnsinc.com>
Source record: 98247

WHAT IS a "cookie" ???
How do I get rid of it?

Madjid <mboukri@cam.org> whistled a happy tune like:

|>Brian Carling wrote:
|>> Hello Gregg!
|>> We have a number of them available directly off of the Internet!
|>> You can view and download the articles right now, by pointing your web
|>> browser to:
|>>
|>> http://www.mnsinc.com/bry/hamfiles.htm
|>Tried to look at your site, but boy I was hit by a
|>barrage of cookies (at least two dozens to get the
|>main page).

|>Note: I am allergic to cookies :)
|>-------------------
|>Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
|>NEC4WIN Antenna simulation for Windows

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

845. WTB: BA Parts etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c84g2$s9l@news1.mnsinc.com>
Source record: 98248

I need:

R390-A receiver
R-1155 receiver
T-1154 transmitter
AR-88 receiver
R-109 receiver
AN-GRC-109 transmitter

TV7-D/U tube tester

Any good newer style tube tester that can do the
compactrons etc.

Any good transmitting tube tester.
Such as Hickok, B&K Heath etc.

A Grid Dip Oscillator

PI-WOUND RF chokes such as 2.5 mH at 200mA or better.
Also need some smaller ones.

Any good transmitting tube tester.
Such as Hickok, B&K Heath etc.

Tube socket Adapter kit for I-177B tube tester

Greenlee punches - all types & sizes needed.

ANY BOOKS from 1930-1970 about ham radio construction.
Tube manuals, etc.

QTY of TWO or FOUR: 7-pin sockets for 1625 tubes

807 tubes
811A tubes
572B or similar tubes

1 watt and 2 watt resistors,

FT-243 crystals for 3500 - 3600 kHz & 7000 - 7150 kHz

PL-259 / SO-239 connectors

Capacitors: MICA, MYLAR, Electrolytic etc.

Any useful AF/RF tubes...

Audio transformers.
Interstage transformers, Single anded and P-P Output transformers

Modulation transformers

"MULTI-MATCH" Modulation transformer in the 100 watt to
500 watt class.

Old tube equipment, chassis, carcasses etc.

SO-239 and PL-259 connectors

Older AM and CW transmitters and/or receivers.

Homebrew radio transmitters

Desk microphone - dynamic preferred.

Any straight key.

A BUG

I would like to swap for any of the above items.

WHAT DO YOU HAVE??
MAKE ME AN OFFER!!

E-mail me please at:
bry@mnsinc.com
73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

846. Opinions Ten Tec 6m Transverter....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Jay Johnson <n2mga@fast.net>
Message-ID: <32E79095.7075@fast.net>
Source record: 98249

Anyone here ever build one of these kits? Looking for your opinions, comments, general thoughts, modifications, performance etc. etc. etc. Please reply either by email or to this posting, thanks in advance for any and all information you can supply, 73 for now...

Regards,
Jay Johnson

847. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2301970822260001@news.vcnet.com>
Source record: 98250

In article <19970123051300.AAA12595@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <measures-ya02408000R1901971257220001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
> >Dave contacted me privately before the public announcement. ...snip....
>
> If Dave contacted you privately before the public announcement, why did
> you go ahead announce the arcing was caused by a parasitic?
...snip...
You would do well to check the dates and times of these events in Will's archive, Mr. Rauch.
>
...snip...
> >IMO, the
> >mysterious intermittent arcing is VHF parasitic related. .
>
...snip...
>
Mr. Rauch---FYI, on the Internet, 'IMO' is an abbreviation for 'in my opinion'. Is an opinion the same as a conclusion?
There are obviously lots of things that can cause tank arcs. I provide room and board for a male cat named B.W., who has all of his original equipment, who, when the mood suits him, emits a rather impressive cloud of conductive mist out of his stern end, that smells quite unlike Chanel Number Fiveï¿½.

Why don't you ask David Holtcamp what I told him before and after he discovered that the lightning arrestor was the instigator of the tank arc.

How do you explain the arc pits that David observed on the tune capacitor prior to the use of said lightning arrestor? Why did the TL-922 at W1AW, and numerous other TL-922s, apparently stop arcing after the vhf parasitic suppressors were replaced by low vhf-Q/low vhf-Rp suppressors?

> You posted that conclusion knowing full well that it could be a load
> problem, you admit you did so **after** Dave indicated in E-mail it was
> an arcing lightning arrestor.

Those who would like to see if Mr. Rauch has his facts straight can look in Will's archive.

> In article <measures-ya02408000R1901971257220001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>

> >About 4 years
> >ago, in my 8169 amplifier, I experienced a similar tank arc which was
> >caused by an arc in my 160m Hertz antenna's L-network tuner, 100 feet
> down
> >the coax feedline, out in the back yard.
>
> You intentionally omitted evidence you discovered four years ......snip......

Nah, this was discussed at length on the air at the time it happened. I
have written about it in e-mail.
>
> You misled us about the AL-1500 ...snip...

ROFL, L ,L, L........how many times did I ask you whether or not the
AL-1500, which you say you designed, has a vhf parasitic oscillation
suppressor? I'll bet a large pizza with 3 toppings I asked you at least
six times, Mr. Rauch. Sure the amp. Marvin was working on was built on a
AL-1200 chassis, housed in an AL-1200 cabinet, and it currently has one
8877 instead of one 3CX1200A7. Curiously, when Marvin made this
clarification to me on the telephone, he had no idea whatsoever who Tom
Rauch, W8JI, is. Within an hour after talking to Marvin on the telephone,
I posted the correction. Most fortunately, since I am NOT a
self-recognized amplifier expert, I don't have a title to defend, so
admitting blunders is no-prob. at all
>
> Rich, how can anyone trust you?

Some folks seem to. Some folks do not.

Did you design the Heath SB-1000 amplifier?
Is the bandswitch in the SB-1000 interchangeable with the bandswitch in
the AL-80?

IMO, at this point, we need to discuss Wes, N7WS's parasitic suppressor
measurements..

--
--Rich-- ag6k, 805-386-3734

848. Re: Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5c82oi$rnk@news1.mnsinc.com>
Source record: 98251

medintz@falcon.cc.ukans.edu (Mike S. Medintz) whistled a happy tune like:
>> What about kits-any good ones out there
>>for these needs?

|>Mike S. Medintz| KB9ODS/0|

Sure Mike - you can find a variety of suppliers of such kits in the MEGALIST
available at the URL below in the HAM RADIO RESOURCES section!

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

849. Re: 27 mhz jammer - Lighten up you wank.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32E7963D.2E24@wco.com>
Source record: 98252

Ted, get a life. Anyone reading that thread would know enough to take
things in jest, except maybe you.

Ted wrote:
>
> I can't believe you guys are acyually encouraging each other, and what's
> worse, encouraging new hams to STOOP to the same kind of ILLEGAL crap
> that the CB operators do. If you stoop to an illegal CB'ers level, then
> that makes YOU nothing but an illegal CB'er yourself and deserve to have
> your license revoked and all of your ham equipment auctioned.

Sniff.. Whaaaa.. that hurt my feelings.

> What the HELL were you dimwitts THINKING? What the HELL is WRONG with
> you? How could you even fix your face to suggest that a fellow ham do
> illegal crap like that. WE are SUPPOSED to be ABOVE that! WE are SUPPOSED
> to do things LEGALLY! Let ME catch a fellow ham pulling that shit and I
> won't bother looking for an Official Observer... I'll personally drag his
> ass to the FCC myself and have him made an example of.

Please do! and while you at it, be sure to have them inspect all of YOUR
system also!
And then ask them about all of the illegal radios and amplifiers out
there on 11M.

>
> HOW DARE you idiots lower the ham standards of conduct, and in PUBLIC too!!!

Lower the 'ham' standards of conduct? like ignoring no coders? like
giving the cold shoulder to new operators on the repeators? like pumping
max legal limit to work that "rare" station while they ask for a qrp
station?

For your sake Ted, I hope you are attempting to write your comments with
some humor because it makes you look like a whining jerk.

>
> You need your license and equipment taken, and maybe you need your ass
> kicked too for making the rest of us hams look bad! WE ARE NOT OUTLAW
> OPERATORS! DO YOU UNDERSTAND THAT? So if you want to clean up the
> airwaves, we can start right here, by disciplining our OWN ranks!
>
> Anyone wanna form a physical-discipline committee? I have a razor-strap!
>

Jim, KB6ZOP

850. Re: Egg Beater Antenna (Help)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <5c7tcv$m76@freenet-news.carleton.ca>
Source record: 98253

I think it's RG-62. I think you can get it at active, but I got
mine from VE3XJ, who is a better packrat than I.

Jens Goerke (griffin@jgfl1.allcon.com) writes:
> I don't know the RG-xx number, but it was used in networking.
> ARCnet used 93 Ohm coax.
>
> Hope that helps,
> 73, Jens, DB9LL
>
> Erik Skovgaard (Erik_Skovgaard@bc.sympatico.ca) wrote:
>> Russ,
>
>> Looks interesting, but where d you get 93 Ohm coax???
>
>> 73 de VE7MDL ....Erik.
>
>
>> Russ Renaud <ae517@FreeNet.Carleton.CA> wrote in article
>> <5biqi0$b35@freenet-news.carleton.ca>...
>> >
>> > SWaldrup (swaldrup@aol.com) writes:
>> > > I am looking for plans on how to build the Egg Beater type Antennas for
>> > > VHF and UHF. Any one played with these?
>> >
>> >
>> > Yes, point your browser to:
> http://fly.hiwaay.net/~harperrc/antenna/ant.html
>> >
>> > 73 de va3rr/aa8lu
>> >
> --
> at work: jg@combtx.com, bofh@combtx.com (http://barbara.combtx.com/~jg)
> at home: griffin@jgfl1.allcon.com
> at play: jg@beach, griffin@rpg, db9ll@g-qrp/darc
> "You beeped me for WHAT?"

851. Re: 6m duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan23.180852.15143@ke4zv.atl.ga.us>
Source record: 98254

In article <5c0fmf$bbl@sf18.dseg.ti.com> kc5ng@dlep1.itg.ti.com (Mustang Maniac) writes:
>I've heard of people using shorted and open lengths of hardline in
>place of a duplexer. A local 2m repeater that I occasionally use
>has some tuned hardline stubs in place as a notch filter to kill a
>pager signal that gets into the front end. This is worth a try...
>
>73 de K5DH

If you can get your hands on some 6 1/8 inch rigid airline, used
in broadcast, it'll make fine notch filters. But the smaller hardline
commonly available doesn't have a high enough Q to be useful for a
narrow split duplexer.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

852. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <E4H86J.ys@eskimo.com>
Source record: 98255
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

"James P. Meyer" <jimbob@acpub.duke.edu> writes:

>On Wed, 22 Jan 1997, Steven Swift wrote:

>> > Phase shift of what with respect to what?
>>
>> Compared to a perfect frequency standard. The transmission path contributes
>> a time delay (phase shift). Since ferrite has temp/freq dependent properties,
>> you will measure a shift in the relative phase of your received signal compared
>> to your reference standard.

> There's supposed to be a small cyclical phase shift over a 24 hour
>period due to changes in the path between the transmitter and receiver. Is
>the typical shift due to a ferrite antenna a lot larger than that?

> Jim

Usually a lot smaller (unless you have a problem) but could be "random" with
respect to other sources. Again it isn't a problem unless you are doing
precision work.

--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

853. How works VSWR measuring equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Chiron van der Burgt <chbu@interstroom.nl>
Message-ID: <01bc0963$ea7ffd40$LocalHost@chironbu>
Source record: 98256
Cross-posted to: alt.engineering.electrical,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.basics,sci.electronics.design,sci.electronics.equipment,sci.electronics.misc

Hello,

My name is Chiron and I'm a student at a Dutch school.
There are a lot of VSRW measuring equipment available in electronic shops,
but I can 't find books or other literature about the theoritical working
of those VSWR equipment. The prinsipal of VSWR is not a problem but I want
to know some implementations and how it works.

If you know some good books or publications please send me a mail.

Greetings and thanks in advance

854. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970123222400.RAA18871@ladder01.news.aol.com>
Source record: 98257

In article <Uyv4lCAr175yEwo7@ifwtech.demon.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> writes:

>
>Roy Lewallen wrote:
>>I'm really reluctant to touch this tar baby, but my curiosity has been
>>aroused.
>>
>>Why do VHF parasitics cause band switches to arc?
>>
>>Is a VHF parasitic oscillation the only thing which can? (I assume so,
>>since the presence of arcing bandswitches seems to be presented as
adequate
>>proof of VHF parasitics.)
>
>Two very fair questions, to which I'd like to add:
>
>When the arcs occurred, were the switches actually using the contacts
>that arced, or were they set to another band?
>
>If the arcs really were due to VHF currents flowing in the
>inductor/bandswitch combination, there surely has to be a strong
>spurious VHF resonance somwhere in there. Without a VHF resonance in the
>inductor, how could it develop VHF voltages/currents high enough to
>create an arc? Has anybody detected such a thing with a GDO on/around
>the pi-tank coil?
>
>If there is no detectable VHF resonance, that argues very strongly
>against the arcs having been caused by VHF energy.
>
>>
>>Has anyone ever actually directly detected the presence of VHF
oscillation
>>(with a simple wavemeter, for example) in one of these amplifiers, then
>>confirmed that the condition no longer exists after applying a fix?
>>
>>Is this science or art?
>
>Darn good question.
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
>

My two questions: Why should the presence of spurious
VHF resonances be taken as proof that the amplifier is

being damaged by VHF parasitics? Where is the feedback
path, and are the phase angles such that oscillation are
suppressed or enchanced?

I can understand the plate tuning capacitor breaking down, but
the bandswitch -- even on ten meters -- is downline of the
tank coil and in parallel with the loading capacitor. To my simple
mind, this sure looks like a lowpass filter.... What are
the impedances of these components at the parasitic frequency,
and what will the VHF voltages be at the bandswitch when the
parasitic occurs? Why should the bandswitch arc over before the
breakdown voltage of the tuning capacitor is exceeded? Maybe the
cause might be instead related to high SWR or mistuning?

What is the main component of the "VHF" resonance? Is it
the plate strap combined with the internal plate assembly
within the PA tube?

Why doesn't the parasitic oscillation manifest itself whenever the
amplifier is in use? If it is a very sporadic occurence, how do we
know for sure if any bandaid fixes are in reality curing the problem?
Ie: How do we know the same variables that caused the initial
incident to happen are being duplicated?

How can someone armed only with a grid-dip meter, and a neon lamp --
sans spectrum analyzer, network analyzer, Q-meter, etc. determine
what is the real cause of any amplifier flashovers, and then market
a UNVERSAL fixall?.

Without laboratory measurements and scientific analysis, it
is bad science.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

855. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <Uyv4ICAr175yEwo7@ifwtech.demon.co.uk>
Source record: 98258

Roy Lewallen wrote:
>I'm really reluctant to touch this tar baby, but my curiosity has been
>aroused.
>
>Why do VHF parasitics cause band switches to arc?
>
>Is a VHF parasitic oscillation the only thing which can? (I assume so,
>since the presence of arcing bandswitches seems to be presented as adequate
>proof of VHF parasitics.)

Two very fair questions, to which I'd like to add:

When the arcs occurred, were the switches actually using the contacts
that arced, or were they set to another band?

If the arcs really were due to VHF currents flowing in the
inductor/bandswitch combination, there surely has to be a strong
spurious VHF resonance somwhere in there. Without a VHF resonance in the
inductor, how could it develop VHF voltages/currents high enough to
create an arc? Has anybody detected such a thing with a GDO on/around
the pi-tank coil?

If there is no detectable VHF resonance, that argues very strongly
against the arcs having been caused by VHF energy.

>
>Has anyone ever actually directly detected the presence of VHF oscillation
>(with a simple wavemeter, for example) in one of these amplifiers, then
>confirmed that the condition no longer exists after applying a fix?
>
>Is this science or art?

Darn good question.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

856. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <byW71EAP775yEwoQ@ifwtech.demon.co.uk>
Source record: 98259

Roy Lewallen wrote:
>For a couple of decades now I've used the vinegar-smelling stuff for all
>sorts of electronics purposes, indoors and out, and never seen a trace of
>corrosion. Has anyone else, or have you just heard (as I have) that it
>causes corrosion?

My experience has been exactly the same as Roy's. The acetic acid is absorbed as the material cures, and when the process has finished there's none left over. Chew some - there's absolutely no trace of vinegar taste.

Sure, I've sometimes seen corrosion underneath it, but that also occurs sometimes with solvent-based sealants. I don't think it's directly connected with the sealant itself.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

857. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Ed Hare <ehare@arrl.org>
Message-ID: <5c8cjt$l42@mgate.arrl.org>
Source record: 98260

Ted <teddyb@caprica.com> wrote:

>On Thu, 16 Jan 1997, Jon Bloom wrote:

>> Jon Bloom, KE3Z | jbloom@arrl.org
>> American Radio Relay League |
>> 225 Main St., Newington CT 06111 |

>Oooooh, so your one of THEM! One of that organization that is supposed
>to be representing us, yet plays "See no evil, hear no evil, speak no
>evil" when it comes to the fact that the majority of licensed hams,(many
>of whom are General class & above), want CW testing and CW priviledges
>made OPTIONAL for General Class & above. . .

I have known Jon for over 10 years now. Not once have I seen him become
at all involved with the policy decisions about Morse Code. He has been
too busy doing technical things. :-)

--

73 from ARRL HQ,
Ed Hare, KA1CV
ARRL Laboratory Supervisor

858. Re: Transmit and Receive antennas in close proximity

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Jim Devenport <jdevenport@lanl.gov>
Message-ID: <32E7C63E.2142@lanl.gov>
Source record: 98261
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Eric F. Richards wrote:
>
> Greetings, all...
>
> I have a 50 Watt 2-meter rig in my car. I also have a car stereo system
> in this car, which had been dead for years but I recently had repaired.
Eric, I wouldn't worry about the damage potential. As I recall there
have been "couplers" available for years that allow use of your AM/FM
car radio antenna simultaneously on receive for AM/FM broadcast and 2
meter FM. Looks to me like this would cross-couple more energy than 2
non-resonant antennas 4 feet apart. Plus I've used even closer antenna
spacings over the years running 25 watts on 2 meters and at one time 100
watts, with no apparent damage, and I do quite a lot of stereo listening
too so I'd have noticed if the front end had died.
One way to protect the stereo antenna input (if you insist on worrying
about it) would be to make a small inline box with appropriate car AM
input/output connectors that contains back-to-back 1N914 or 1N4148 or
equivalent diodes connected between the center conductor and the shield
with as short lead lengths as possible. In normal receiver operation
the diodes would not conduct, but if they "see" any RF or other voltage
higher than around .6 volt they will conduct, thus holding down any
voltage spikes your receiver might be forced to deal with. This is
typical protection added to switched preamps and other potentially
high-risk receiver input systems.
--
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |
|My views rarely (if ever) reflect those of my employers|
http://nis-www.lanl.gov/~jdport/

859. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Stan Aughenbaugh <Stan.Aughenbaugh@MCI.COM>
Message-ID: <32E7F921.7F09@MCI.COM>
Source record: 98262

Rob Neff wrote:
>
> "Larry Robison" <robison@amnorth.com> wrote:
> >Well Rob that's your opinion and I think YOU are a bit out of line to
> >attempt to speak for the newsgroup! I subscribe to this newsgroup and
> >sure don't speak for me.

> Oh well. I never was the type of person that liked lines all that
> much.

> >I happen to think that he's right in step with what's going on here and I
> >am pissed off about it too! Have you ever bothered to post the same
> >message of inappropriateness to those who are responsible for the

<sanity snip>

> Some of you guys need to unscrew your heads, and thread them right
> next time you put them back on. These groups are for the expression of
> opinions and ideas, RELATED to the topic intended. It is not within
> your authority to tell people here, what is and is not appropriate for
> a person or group of persons to

<snipped here too>

> Frankly I'm tired of hearing people whine about giving out information
> like this. And therefore I said what I did. But you will seldom see me
> get on a soap box like this. Perhaps you are one of those 'operators'
> that lives near this guy and may feel a little guilty? Who knows. I
> pitty people who feel they are so 'above' this type of behavior, their
> crap doesn't stink. They are probably the ones that tune thier radios
> out of (licensed) band(s), ker-chunk repeaters without IDing, and
> allways run at full power regardless if the station lives accross the
> street or not, and still believe they are within the letter of the
> law.
> Enough slamming allready. Let them be.
> 73
> Rob Neff (N7ORY)

Right on Rob! It irritates the #$%^^& outof me when I see one of these
'Band Nazis' or your word 'info nazis' act like they are the sole
arbiters of who should know what.
I think your comments were great and to the point. Last thing we need on
this group are the thought police. Personally I always try to give an
answer if I have it. The responsibility lies in how the information is
used.
Gad! I sure am glad MArconi and Edison (or Tesla) didn't have to put up

with these types, we'd all still be senfing smoke signals to each other.

73 & Don't let up on the thought police for a minute, else they'll take over,

Stan KF0NC
"90% of all statistics are made up"

860. Re: Opinions Ten Tec 6m Transverter....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: dwentz@accessus.net
Message-ID: <5c88ut$41b@news.accessus.net>
Source record: 98263

I have one, and also built the 220 rig.
I am very happy with it, although the 6 meter is a little under powered.

73's de kb9jja/dale

In article <32E79095.7075@fast.net>, n2mga@fast.net says...
>
>Anyone here ever build one of these kits? Looking for your opinions,
>comments, general thoughts, modifications, performance etc. etc. etc.
>Please reply either by email or to this posting, thanks in advance for
>any and all information you can supply, 73 for now...
>
>Regards,
>Jay Johnson

861. Re: 240V VHF MOSFET PA's?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Don Huff <donh@vcd.hp.com>
Message-ID: <32E7C61E.77C0@vcd.hp.com>
Source record: 98264

Ted wrote:
>
> Is there such a thing yet as a 240 Volt MOSFET Power Amplifier device for
> upto 300 MHz yet? The last I checked there was a line of 240V MOSFET's
> made by the Harris Corperation for upto 3 MHz, 300 Watts Max Output,
> which is what the Harris AM Broadcast Power Amps use as their finals
> now,(most commercial 530-1700 kHz AM Broadcast stations in the world now
> have completely solid-state transmitters upto 100kW).
>
> I've been waiting and waiting for such a device for HF and VHF use... so
> like the old Campbell's commercial used to say... "Is it soup yet?"

Hi (no sig),

Boy, I can just see that 100 KW solid state final now...
that "All" of the broadcast stations worldwide are using....

Don, W6JL

862. Re: Need Info & Comments, Differential-T Tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.ch.intel.com>
Message-ID: <32E81293.38D1@ccm.ch.intel.com>
Source record: 98265
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Paul N. Kelley wrote:
> Ahh, I do love projects that let me combine computer programming with
> ham radio! Paul, N1BUG

Hi Paul, check out my web page for another idea in autotuners. I'm working on one that uses 4 relays and one variable capacitor. The 4 relays are used to switch in 0-15 ft of ladder-line to position the capacitor at the PC-200 point where a Parallel Capacitance will result in a purely resistive 200 ohms for a perfect match to a 4:1 balun and there's no lossy tuner coil anywhere.

73, Cecil, W6RCA, OOTC http://people.delphi.com/cecilmoore

863. VHF private phone patch kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Will White <will.white@asu.edu>
Message-ID: <32E82596.7668@asu.edu>
Source record: 98266

Are there any VHF private phone patch kits on the market? I don't understand why the Yaesu/Kenwood/MFJ models HRO sells for HF are so much more expensive than VHF models. It would seem that a phone patch is a phone patch, given that no RF goes through them, only audio.

--Will

864. Opinions WTD: TenTec 6M Xvtr/Hamtronics 2M Cvtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Paul Knight <pknight@elec.ctl.etn.com>
Message-ID: <32E7E6BF.17EF@elec.ctl.etn.com>
Source record: 98267
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hi! I'm seeking opinions on both the TenTec 6M
Xverter kit and the Hamtronics CA144-28K (10M->2M
rx converter kit). If anyone has built either of
those, I'd appreciate hearing your war stories
before I commit to a purchase.

--
Thanks & 73,

Paul Knight WD8DKY
pknight@elec.ctl.etn.com

-or-

PEKnSLK@aol.com

865. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: David Holtkamp <holtkamp@lanl.gov>
Message-ID: <32E809C9.1239@lanl.gov>
Source record: 98268

w8jitom@aol.com wrote:

> If Dave contacted you privately before the public announcement, why did
> you go ahead announce the arcing was caused by a parasitic? If you
> experienced an arc in your tuner that caused your PA's tank capacitor to
> arc, why didn't you ever indicate or admit an arcing problem could be load
> related?

And,

> You posted that conclusion knowing full well that it could be a load
> problem, you admit you did so **after** Dave indicated in E-mail it was
> an arcing lightning arrestor.

Tom, I don't want to get in the middle of this in the least, but as I recall, I posted Rich privately slightly before I posted it publicly (attempting to be polite to him, since I knew his diagnosis and what I found were not in agreement). I remember reading Rich's last message posted *before* he got my email or the public posting - they had passed by each other in the Internet Ether by some minutes or hours - I don't remember exactly.

Just info to try and set the precise record straight.

Best Wishes es 73s de David (K5KH)

866. Re: Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <32E7EF94.1386@erols.com>
Source record: 98269

Yes, the DX-40 and DX-60 did use screen modulation BUT it was of the controlled carrier variety. That means not only did the audio modulate the screen voltage, that actual DC value of the screen voltage also varied with the level of audio. When no audio was present, the screen voltage was at a very minimal value, hence minimal RF output from the final amp. Increased audio, meant increased screen voltage, thus more RF ouput.

This type of modulation is quite a bit different from straight screen modulation (fixed DC voltage) in operation and audio quality.

S

Ian wrote:
>
> On Thu, 16 Jan 1997 08:01:24 +0100, Dietrich Morgenstern
> <76050.1341@CompuServe.com> wrote:
>
> >Monty Wilson wrote:
> >>
> >> I'm interested in hearing from anyone who has built
> >> a screen grid modulated HF transmitter.
> >>
> >> --
> >> ....Monty N5NVM.
> >> mwilson @ flex.net (with spaces deleted)
> >Monty:
> >I built a screen grid modulated TX way back in 1951. (Actually these
> >designs were very popular then for people who could not afford a big
> >class B Audio amplifier for plate modulation).
> >The transmitter worked very well, I needed only very low audio power to
> >modulate a 813 with approx. 100 watts RF power output. Obviously the
> >disadvantage was that I could not get more RF out of the PA.
> >Apart from that audio quality was quite good.
> >
> >73 Dietrich DJ1VA.
>
> I have a couple of Heathkit transmitters using this type of mod, the
> DX40 and DX60.
>
> Advantages: requires less power to modulate the carrier.
> Disadvantages: Amount of distotion depends on antenna loading, so to
> get best results u need an audio sinewave generator and a scope
> looking at the mod envelope!!! But this way good mod can be achieved -
> providing you don't want to QSY!!! 100 percent mod not usually

> possible.
>
> Even though the DX60 was the successor to the DX40, the mod quality
> fiddly and tune-up for best results were no better! (Although the
> chassis design was MUCH better. Pitty it made no difference on the
> air!)
>
> As u can see, it's not worth the effort unless u are restoring an old
> amateur radio transmitter.
>
> G4JQT
> --
> Ian
> ianls@patrol.i-way.co.uk

867. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: n7ory*@*primenet.com
Message-ID: <32ead317.22901934@news.primenet.com>
Source record: 98270

"Larry Robison" <robison@amnorth.com> wrote:
>Well Rob that's your opinion and I think YOU are a bit out of line to
>attempt to speak for the newsgroup! I subscribe to this newsgroup and you
>sure don't speak for me.

Oh well. I never was the type of person that liked lines all that
much.

>I happen to think that he's right in step with what's going on here and I
>am pissed off about it too! Have you ever bothered to post the same
>message of inappropriateness to those who are responsible for the thread in
>the first place?

Necessity does not warrant it. They have a right to ask these
questions, just as you have a right to either answer the question or
be an info-nazi butt-head. Your choice, and you have made it.

>Does anyone else out there think it is appropriate to post a question
>asking how to jam someone (or post a reply telling him how) and jump on the
>guy who brings the absurdity to light?

Sure.. I'm interested in finding out how others dealt with problems
like these. And I'm sure that the circuits that some may describe
could be modified for "other" uses, other than that intended.
Besides, it's a fun topic. At the least it's slightly humorous. Put a
fuse in line with the nerve that runs to that part of your brain
responsible for your temper; so it blows before you do.

Some of you guys need to unscrew your heads, and thread them right
next time you put them back on. These groups are for the expression of
opinions and ideas, RELATED to the topic intended. It is not within
your authority to tell people here, what is and is not appropriate for
a person or group of persons to tell others in an open discussion if
it IS related to the chartered topic. If you do not want to answer the
question, or add to the discussion, kill the thread and go about your
business. It's that simple.

Frankly I'm tired of hearing people whine about giving out information
like this. And therefore I said what I did. But you will seldom see me
get on a soap box like this. Perhaps you are one of those 'operators'
that lives near this guy and may feel a little guilty? Who knows. I
pitty people who feel they are so 'above' this type of behavior, their
crap doesn't stink. They are probably the ones that tune thier radios
out of (licensed) band(s), ker-chunk repeaters without IDing, and
allways run at full power regardless if the station lives accross the
street or not, and still believe they are within the letter of the

law.

Enough slamming allready. Let them be.

73

Rob Neff (N7ORY)

868. Re: Solid State amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Randy Alexander <alexan@teleport.com>
Message-ID: <32E83588.2E4B@teleport.com>
Source record: 98271

Ray LaRue wrote:
>
> Randy Alexander wrote:
> >
> > I do not find my previous inquiry. So I repeat: I would like to build
> > a legal limit solid state HF amplifier. I would like to hear from
> > anyone who has built one. I am looking for the problems and pitfalls
> > and their solutions. TNX AB7QR
>
> I am currently building a pair of the 600 watt amps listed in the
> Motorola bulletin AN 104. I am combining them for 1 KW. Each amp uses 4
> MRF-150's with 50 VDC supply voltage. This eases the problems with IR
> loses from heavy currents, and gives redundancy in the event of
> transistor failures. I have used the MRF devices in extreme industrial
> applications and have found them to be almost (I said almost)
> industructable. I think out of hundreds of units, in unbelieveable
> conditions, I've seen one failure.
>
> There is a company in Ohio, Communications Concepts, I think, which
> offers kits of parts. But you must provide the packageing.
> (513)426-8600.
>
> Hope this helps.
> 73,
> Ray, W4BYG
Thanks Ray
Do you plan to run this amp on 160 meters? How about filtering the
output? The filters that CCI sell only go up to 300w. Are you going to
build these? What would you suggest for TR relay. Are there any plans
around for pin diode swithes? Or do they not have the current
capacity.
73 Randy, AB7QR

869. Re: 27 mhz jammer - Lighten up you wank.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970123210230.29595M-100000@prog1.caprica.com>
Source record: 98272

On Thu, 23 Jan 1997, J&J Mac wrote:

> Ted, get a life. Anyone reading that thread would know enough to take
> things in jest, except maybe you.

Oh really? I have receive NUMEROUS pats on the back in email both for condemning this thread and for the way I worded my condemnation of this thread.

YOU get a life! Or at least get a live brain!

>
> Ted wrote:
> >
> > I can't believe you guys are acyually encouraging each other, and what's
> > worse, encouraging new hams to STOOP to the same kind of ILLEGAL crap
> > that the CB operators do. If you stoop to an illegal CB'ers level, then
> > that makes YOU nothing but an illegal CB'er yourself and deserve to have
> > your license revoked and all of your ham equipment auctioned.
>
> Sniff.. Whaaaa.. that hurt my feelings.
>
> > What the HELL were you dimwitts THINKING? What the HELL is WRONG with
> > you? How could you even fix your face to suggest that a fellow ham do
> > illegal crap like that. WE are SUPPOSED to be ABOVE that! WE are SUPPOSED
> > to do things LEGALLY! Let ME catch a fellow ham pulling that shit and I
> > won't bother looking for an Official Observer... I'll personally drag his
> > ass to the FCC myself and have him made an example of.
>
> Please do! and while you at it, be sure to have them inspect all of YOUR
> system also!
> And then ask them about all of the illegal radios and amplifiers out
> there on 11M.
>
> >
> > HOW DARE you idiots lower the ham standards of conduct, and in PUBLIC too!!!
>
> Lower the 'ham' standards of conduct? like ignoring no coders? like
> giving the cold shoulder to new operators on the repeators? like pumping
> max legal limit to work that "rare" station while they ask for a qrp
> station?
>
> For your sake Ted, I hope you are attempting to write your comments with
> some humor because it makes you look like a whining jerk.
>

> >
> > You need your license and equipment taken, and maybe you need your ass
> > kicked too for making the rest of us hams look bad! WE ARE NOT OUTLAW
> > OPERATORS! DO YOU UNDERSTAND THAT? So if you want to clean up the
> > airwaves, we can start right here, by disciplining our OWN ranks!
> >
> > Anyone wanna form a physical-discipline committee? I have a razor-strap!
> >
>
>
> Jim, KB6ZOP
>

870. Re: 27 mhz jammer - Lighten up you wank.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970123210617.29595N-100000@prog1.caprica.com>
Source record: 98273

On Thu, 23 Jan 1997, J&J Mac wrote:

> Ted wrote:
> >
> > I can't believe you guys are acyually encouraging each other, and what's
> > worse, encouraging new hams to STOOP to the same kind of ILLEGAL crap
> > that the CB operators do. If you stoop to an illegal CB'ers level, then
> > that makes YOU nothing but an illegal CB'er yourself and deserve to have
> > your license revoked and all of your ham equipment auctioned.
>
> Sniff.. Whaaaa.. that hurt my feelings.

Is that what you think my objective was? To hurt your feelings? If so
then you are neot as smart as I previously thought. My objective was just
what I SAID. To see licenses revoked and ham equipment auctioned off or
donated to poor hams who know how to act in a way that HONORS their
fellow hams!

> > What the HELL were you dimwitts THINKING? What the HELL is WRONG with
> > you? How could you even fix your face to suggest that a fellow ham do
> > illegal crap like that. WE are SUPPOSED to be ABOVE that! WE are SUPPOSED
> > to do things LEGALLY! Let ME catch a fellow ham pulling that shit and I
> > won't bother looking for an Official Observer... I'll personally drag his
> > ass to the FCC myself and have him made an example of.
>
> Please do! and while you at it, be sure to have them inspect all of YOUR
> system also!

MY systems don't include any MALICIOUS INTERFERENCE JAMMING DEVICES!

> And then ask them about all of the illegal radios and amplifiers out
> there on 11M.

Screw 11 meters. I say enforce the laws on them too! But since WE are
SUPPOSED to know better, hams should be punished for jamming worse than
CB'ers! At least CB'ers can honestly claim insanity and stupidity as a
defence! What's YOUR excuse?

> > HOW DARE you idiots lower the ham standards of conduct, and in PUBLIC too!!!
>
> Lower the 'ham' standards of conduct? like ignoring no coders? like
> giving the cold shoulder to new operators on the repeators? like pumping
> max legal limit to work that "rare" station while they ask for a qrp
> station?

What the hell does that have to do with me? I in now way support any of
that! Are you PAYING ATTENTION? Cause if you were you'd have seen me say

that I agree with "Uncle Wayne" W2NSD 100% on those matters! I am an
enemy of the good-ol-boys network! Pay attention and get a clue!

> For your sake Ted, I hope you are attempting to write your comments with
> some humor because it makes you look like a whining jerk.

Up yours pal. You defending conspiracy to maliciously interfere with
other stations and other services doesn't make YOU smell like a rose either!

And to those who actually DO such stuff I STILL say:

> > You need your license and equipment taken, and maybe you need your ass
> > kicked too for making the rest of us hams look bad! WE ARE NOT OUTLAW
> > OPERATORS! DO YOU UNDERSTAND THAT? So if you want to clean up the
> > airwaves, we can start right here, by disciplining our OWN ranks!
> >
> > Anyone wanna form a physical-discipline committee? I have a razor-strap!

871. FS: REPEATER CONTROLLER WITH PHONE PATCH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-23 00:00:00 UTC
From: dwhowell@iamerica.net
Message-ID: <32e7d478.18629791@nntp.iamerica.net>
Source record: 98274
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

For Sale,
Hamtronics Repeater Controller with AP3 Phone Patch. All in good condition. All you need is a simple transmitter and receiver. The controller also has a port for an auxilary receiver, good for linking to another repeater. This controller was factory built, not a kit. Comes complete with owners manual. Price is $200 shipped.

ab5lg@iamerica.net

OMNI J ANTENNA INFORMATION
http://cust.iamerica.net/dwhowell/omnij.htm

872. Re: Sat weather maps the cheap way: questions o plenty...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5caucf$f47@tilde.csc.ti.com>
Source record: 98143
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

>Any suggested lengths???? Got baling wire o plenty...
>(then off to the cable co dumpster for coax.... and away we
>go...)
>
~~~~~~

The APT signal is about 38KHZ wide, so the scanner
won't yield a useable signal until it's modified.
Usually a resistor across a couple of the IF ckts
will lower the Q enough to get by. You might have
to change a filter. Either way, the signal to noise
ratio is degraded by increasing the bandwidth, so
a pre-amp at the antenna will be helpful.

73 Ken K5MBV
~~~~~~

873. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: "Bayard R. Coolidge" <coolidge@zk3.dec.com>
Message-ID: <32E8FEBA.167E@zk3.dec.com>
Source record: 98144

--

Yeah, this is going too far. It's really appalling to see someone
actually advocate building jamming gear for the 27 MHz band. Don't
you realize that if you do build and operate this stuff that you'll
cause a lot of interference to those who are trying to develop and
test their spread-spectrum equipment? It's the only reasonable place
that the SS developers can use to prove the noise immunity and
interference-rejection capabilities. So, please, give them a break...

:-) :-) :-) <--- mega smiley's for the humor-impaired.

Bayard R. Coolidge N1HO DISCLAIMER: The opinions expressed are
Digital Equipment Corp. solely those of the author, and not
Nashua, New Hampshire, USA those of Digital Equipment Corporation
coolidge@zk3.dec.com nor any other entity.
"Brake for Moose - It can save your life" - N.H. Fish & Game Dept.
---

874. W:Scematics info 4CX1500A amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: per olav voje johansen <perolav@axp1.pmddata.no>
Message-ID: <5cb02h$v9d@alpha2.nipnett.no>
Source record: 98145

Having 4 used 4CX1500A tubes (BC pulls), I am looking for info on where to
find scematics, construction article for HF amp using this tube !
All info will be highly appreciated !!

de LA9DAA, Per

perolav@pmddata.no

875. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: nobody@REPLAY.COM
Message-ID: <5cb19m$9qn@basement.replay.com>
Source record: 98146

I believe the difference is that the electronic grade RTV can safely be used to insulate HV without having to know for certain if the material is cured all the way through.

Glacial and conc acetic acid is a poor conductor, but the dilute stuff is a good electrolyte. So add silicone sealant and some moisture and poof!! if you're working with high voltage.

You would probably use it too if you had to insulate the top conductors of a 20uF 5kv oil filter cap for your linear, like I did.

Other than that, I doubt there is much difference once the two types are fully cured. But realize that the word silicone implies a whole range of materials- thats why the ingredients on the back are registered as trade secrets. So there may be other differences.

There was alot of discussion about using GE Silicon II on the Tesla coil mailing list this summer. I've used it an its ok at 250kv when fully cured.

Rob.

876. RE: RS frequency counter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9701241403233319@atdbbs.com>
Source record: 98147

>>Anybody got any comments on the Radio Shack frequency counter?

Just FYI, here's the HOLD Button modification:

How to add a hold function to the Radio Shack RF Frequency Counter:

Ground TP17. In the schematic, TP17 is pin one of U3, connected to
+5V thru a 47k resistor. On the circuit board, TP17 is on the display
side, just right of the lower-right corner of the IC. Grounds are about
1/4 inch below and to the right, the three non-tinned points in the large
area of metal.

I grounded TP17 directly and the display stopped. After lifting the ground,
the counter resumed counting at the beginning of a sampling cycle.

Personally, I would ground TP17 thru a 1k resistor. I haven't performed
the mod to my RS counter, since the pads are VERY small and my fine-tip
iron is at work. I will try the 1k Hold mod on Monday and give a report
(unless somebody beats me to it).

An amplifier mod to increase the sensitivity is in the works, reports to follow

Happy Trails to You,
Galen, KF0YJ

877. Re: Screen grid modulation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <32E969A8.39B3@erols.com>
Source record: 98148

Claude Frantz wrote:
>
> Steve <thebizlk@erols.com> writes:
>
> >Yes, the DX-40 and DX-60 did use screen modulation BUT it was of the
> >controlled carrier variety. That means not only did the audio modulate
> >the screen voltage, that actual DC value of the screen voltage also
> >varied with the level of audio. When no audio was present, the screen
> >voltage was at a very minimal value, hence minimal RF output from the
> >final amp. Increased audio, meant increased screen voltage, thus more RF
> >ouput.
>
> >This type of modulation is quite a bit different from straight screen
> >modulation (fixed DC voltage) in operation and audio quality.
>
> This is probably the best ham-style modulation. It is not Hi-Fi, this
> is not necessary here. The modulator is simple, the result is good
> compared to the simple circuit and to the low price. A typical ham
> circuit !
>
> 73,
> --
> Claude
> (claude@bauv106.bauv.unibw-muenchen.de)
> The opinions expressed above represent those of the writer
> and not necessarily those of her employer.

Different stokes for different folks.

878. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2401971512050001@news.vcnet.com>
Source record: 98149

In article <19970123222400.RAA18871@ladder01.news.aol.com>,
commquart@aol.com wrote:

...snip...
> My two questions: Why should the presence of spurious
> VHF resonances be taken as proof that the amplifier is
> being damaged by VHF parasitics?

Because there are clues that such an event probably took place, Peter.
What else would be likely to destroy a grid-I meter. it's shunt-R, short a
cathode-bias zener diode, cause the parasitic-suppressor R to suddenly
increase in resistance by several times without showing any external sign
of damage, and/or summarily weld a 3-500Z's filament to its grid?
The type of VHF parasitic-oscillation that causes such damage probably
lasts under a millisecondand typically creates a big bang From my
experiences, such an event causes an immediate failure of one or more
amplifier components, so having a long look at one is quite unlikely.
.
> Where is the feedback
> path, ...

The feedback path is between the anode and the input element of the
amplifier tube. In a 3CX1200A7, the feedback C is around 0.8 pF. At the
typical anode-circuit VHF resonance, the Xc is around 2000 ohms between the
anode/output and the cathode/input.. In your opinion, is 2000 ohms of
reactance significant at, say, 4000v?

> ...and are the phase angles such that oscillation are
> suppressed or enchanced?

I don't know.

> I can understand the plate tuning capacitor breaking down, but
> the bandswitch -- even on ten meters -- is downline of the
> tank coil and in parallel with the loading capacitor.

I have never heard a report of a bandswitch L contacts arcing while an
amplifier was being used on 10m. Afterall, on 10m, all of L contacts are
closed. // The typical HF tank-L is hardly a VHF RF-choke. By measuring
the VHF self-resonances in the tank-L with a dipmeter when the bandswitch
is in the 80m and160m positions---and by. measuring the anode-circuit's VHF
resonance at the stud on the DC blocking capacitor, a clue might be
provided. If any of these resonances are sympathetic, an interaction is
seemingly possible.
According to measurements made by Mr. Rauch, VHF self-resonances in the
tune C appear to influence whether or not a parasitic arc is likely to

occur therein.

> To my simple
> mind, this sure looks like a lowpass filter....

>What are
> the impedances of these components at the parasitic frequency,'''

I don't know.

> and what will the VHF voltages be at the bandswitch when the
> parasitic occurs?

The measured breakdown voltage of a TL-922's or a SB-220's or an AL-80's ceramic bandswitch exceeds 5500V. The RF peak voltage in these amplifiers is under 2800v. In the TL-922, the measured breakdown voltage of the tune C is 6100v. I have seen evidense of arcing in all of these components that can not be satisfactorily explained by other means If you want to see some photos of burned bandswitches, see Figure 15 at http://www.vcnet.com/measures/

>Why should the bandswitch arc over before the
> breakdown voltage of the tuning capacitor is exceeded? Maybe the
> cause might be instead related to high SWR or mistuning?

Possibly some are. However, some are probably not. Have you read the report from Rick May, KC0HH?
>
> What is the main component of the "VHF" resonance?

The unchangeable constant is the anode-C.

> Is it the plate strap combined with the internal plate assembly
> within the PA tube?

That is part of the total L. However, every L, between the anode C and the tune C is part of the VHF resonance. Naturally, the total L also includes the chassis-L between the tune C ground and the place where the grid is grounded to the chassis. For instance, in a SB-220, the total L is about 160nH.

> Why doesn't the parasitic oscillation manifest itself whenever the
> amplifier is in use?

Why didn't the Space Shuttle Challenger self-destruct before Mission 25?

> If it is a very sporadic occurence, how do we
> know for sure if any bandaid fixes are in reality curing the problem? ...

I don't believe that there is a 100% sure-cure for VHF parasitic-oscillation. However, I believe I know how to go about making them less likely. IMO, a parasitic suppressor design that exhibits a relatively low VHF-Rp will produce less VHF voltage-amplification, which should be less likely to support regeneration. In practice, this approach seems to work.

...snip...
Since voltage amplification is basicly Mu*Rp, in your opinion, Peter,
would a higher or a lower VHF-Rp be desirable if one were trying to improve
VHF stability?
[see Wes' suppressor measurements at
<http://www.azstarnet.com/~n7ws/suppress.html>]

> How can someone armed only with a grid-dip meter, and a neon lamp --
> sans spectrum analyzer, network analyzer, Q-meter, etc. determine
> what is the real cause of any amplifier flashovers, and then market
> a UNVERSAL fixall?.

Neon tends to glow purple at VHF and glow orange at HF. I would not take a
dipper near an amplifier that was plugged into the electric-mains.
>
> Without laboratory measurements and scientific analysis, it
> is bad science.
>
Is naysaying good science? What happened when Pasteur suggested that it
might be a good idea for doctors to wash their hands before performing
surgery?
One of the naysayers in this debate claimed that in a VHF
parasitic-suppressor whose Rs is 100 ohms, and whose Ls is 85nH, at a
frequency of 160MHz, insignificant current flows in Ls compared to the
current in Rs. In your opinion, Peter, is this good science or bad
science?
---
e-mail copy to Mr. Bertini

--
--Rich-- ag6k, 805-386-3734

879. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2401971516410001@news.vcnet.com>
Source record: 98150

In article <19970119144800.JAA27008@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <5brrbe$1tq6$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe
> Subich) writes:
>
> >The arcing visible in the pictures could just as easily been caused
> >by a mistuned amplifier running into a high VSWR. I'm sure someone
> >will correct me if I get it backward but in and underloaded amplifier
> >driving a high impedence load the voltage across the bandswitch (and
> >tuning capacitor) will soar nearly out of control. Underloading and
> >high feedline impedences are particularly common on 80 and 160 meters
> >as many amplifiers lack sufficient range in their output capacitors to
> >achieve proper loading ... particularly if the load impedence is very
> >capacitive.
>
...snip...
Mr. Subich's reply did not show up on my news server. Thanks for the relay, Mr. Rauch.

Joe: I received the following e-mail message from Rick after he saw your reply regarding his two toasted AL-80 bandswitches:
quoting---
Rich
..."... I can tell you are wasting your time trying to convince these people vhf parasitics exist in form to destroy bandswitches. If they are blaming it on operator error or non-resonant antennas then they are also barking up the wrong tree. Between myself and the phased delta loops I use on 80 meters, my Drake L4-B hasn't had any band switch or output capacitor problems what so ever. All I know is that I put about 20 hours on the AL-80A the past couple of weeks and it hasn't barked one time. This is with the same rig and antenna I have used for the past 7 years. I guarantee that prior to putting the suppressors in, the arcing would have happened. ..."

73' Rick KC0HH

end of quote.

--
--Rich-- ag6k, 805-386-3734

880. Re: Need help making telephone touch tones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32E920D6.277A@idecc.com>
Source record: 98151

ChChristopher McGill wrote:
>
> I need to be able to produce telephone touch tones for a home project
> which I am working on.

Chris: Since your not looking for production qty's why not just pick up an old touch tone telephone. I gotta believe you could buy one for a buck or two at a local flea. Plus you get the keypad wired and ready.

73, Tim, ka8ddz

881. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5cb5it$ajn@hpcvsnz.cv.hp.com>
Source record: 98152

Steven Kerns (skerns@mail.talon.net) wrote:

(in reply to my request for info on designs for low phase
noise VHF VCOs to cover something like the 2 meter band...)

: Your best bet might be to buy a MiniCircuits VCO. They make
: both thru the board and surface mounted units that will tune
: 100-200 mhz with -105 dbc/hz phase noise with all harmonics
: at -25db. Their single lot price is about $15.00 ea

: Try their web site at http://www.minicircuits.com

Thanks to Steve for the reply!

I like the size and cost of these guys, but unfortunately the
phase noise is too high. Their web site pages on oscillators
seem to be "under construction" with only partial info, but the
latest RF Design magazine came bundled with Mini-Circuits' "VCO
Designer's Handbook," with more complete specs. Phase noise is
spec'd as -107dBc/Hz at 10kHz offset; I'm hoping for somewhat
better than this, but don't need the octave tuning range. And
if I could learn something about design for low phase noise
along the way, that would be great. Any other suggestions?
Anyone?

(BTW, I haven't had time to look at it in detail, but it
looks like the "VCO Designer's Handbook" mentioned above
has a lot of good general info about VCOs and their uses and
measurements on them, as well as specs for the Mini-Circuits
parts.)

--
Cheers,
Tom
tomb@lsid.hp.com

882. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32E968BF.5770@wco.com>
Source record: 98153

Stan Aughenbaugh wrote:
>
> Right on Rob! It irritates the #$%^^& outof me when I see one of these
> 'Band Nazis' or your word 'info nazis' act like they are the sole
> arbiters of who should know what.
> I think your comments were great and to the point. Last thing we need on
> this group are the thought police. Personally I always try to give an
> answer if I have it. The responsibility lies in how the information is
> used.
> Gad! I sure am glad MArconi and Edison (or Tesla) didn't have to put up
> with these types, we'd all still be senfing smoke signals to each other.

I dunno! they would probably be in with the EPA whining about how the
smoke
singals are causing 'second-hand-smoke' fatatalities!

Jim..

883. Need Sch. for comp. controllable rotor control

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Allen@mailhub.scf.lmsc.lockheed.com
Message-ID: <5cb4qlean2@lscruz.scf.lmms.lmco.com>
Source record: 98154

I want fix some rotor position indicator problems by building a computer controllable drive and position interface. Are there any schematics out there for such an interface? It would probably have to use the rotor's pot.voltage as a referance. Has there been anything published somewhere?

Thanks, Allen WB6RWU

Allen@cruzio.com

Allen@lmsc.lockheed.com

884. H.V. switching supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: UN93B <UN93B@ford.com>
Message-ID: <32E99787.4B27@ford.com>
Source record: 98155

Has anyone tried to make a 3000vdc 1 amp switching
power supply? Is it practical? Can it be done?

Thanks, Brett

885. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: mohaase@nilenet.com
Message-ID: <mohaase-2401972126180001@slip46.nilenet.com>
Source record: 98156
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

>Scott Coburn wrote:
>
> I have built a WWVB (60kHz) VLF radio receiver. It is the receiver
> designed by Bob Roehrig and described in the article "Most Accurate
> Frequency Standard, Parts 1,2,3", 73, Jan/Feb/Mar 1994. It is a
> Tuned Radio Frequency (TRF) receiver with an active ferrite rod antenna.
>
> I constructed the ferrite rod antenna/preamplifier as described in the
> article and the receiver powers up OK and gets through all of the
> alignment procedures outlined in the article. I have not yet gotten
> the WWVB signal, but I suspect that is more a misfortune of my location
> than a receiver problem.

Just found my catalog from AMIDON Associates..
12033 Otsego Street, North Hollywood, CA 91607.
I read some thing that led me to beleve they may be out of business though.
Anyway... Ferrite rods are available in two materials:
R61 material - 125 permeability (.5 - 30 MHz)
R33 material - 800 permeability (.001 - 1 MHz)
Does this suggest a possible source for your problem?
Amidon sells rods that are .5" x 2", 4", 7.5" and .75" x 12".
for a .5 x 7.5 inch rod:
R61 - Al(mH/1000t) = 49
R33 - Al(mH/1000t) = 89

We have a WWVB receiver at work made by TrueTime Instruments.
It uses a ferrite rod antenna in a plastic pipe about 10 inches long.
The pipe has a one or two transistor pre-amp in it too.
BTW, I am in Longmont CO, just 50 miles from Fort Collins where the
WWVB transmitter is. Sometimes our receiver looses WWVB phaselock!

Marty

--
==========
You've got to be tough
If you're going to be stupid
==========

886. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: "Tom C. Brown, Jr." <tbrown@TECLink.net>
Message-ID: <32E9884F.51EC@TECLink.net>
Source record: 98157
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

Don Wall wrote:
>
> Maybe so, but who besides you and ever heard of a 545B? There
> were very few made, compared to thousands of 545A's.
>
> Don

I've got one!

But, you are right, I think......much lower production than the A model.

Now for REAL low production, how about a 535B??? To the best of my knowledge, there was only ONE ever made..... And to answer your next question....nope, I don't have it, but I know where it is! ;-)

Fun to see conversation about these old scopes. Best built there ever was. Period. My favorites are the 555, 556, 549 and 547. INCREDIBLE displays that make modern stuff look like it's out of focus..... And tunnel diode triggering that leaves TTL in the dust.

73, Tom KJ5IE

887. Newsgroup Wishlist

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970124222832.7605H-100000@prog1.caprica.com>
Source record: 98158
Cross-posted to:
rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,news.admin.hierarchies,news.groups

I wish that I was the one to start these newsgroups. I'd have divided them up in better heirarchies like so:

To reduce the number of heirarchies in a newsgroup name instead of:

rec.radio.amateur.*

I would have made it:

rec.amateur-radio.

This is because discussions about scanners and broadcast radio and the like dont need nearly as many newsgroups as our hobby because our hobby is so much more diverse.

And for the *.antennas, *.equipment, *.homebrew, etc. I'd have made more spectrum-specific newsgroups to reduce the amount of unwanted posts we each have to comb through to find what we are looking for... Like so:

rec.amateur-radio.vlf-mf.*
rec.amateur-radio.hf.*
rec.amateur-radio.vhf.*
rec.amateur-radio.uhf.*
rec.amateur-radio.shf-ehf.*

And only for discussions on subjects such as the ARRL, the FCC, Newsline and all those which transcend all bands, only THEN you cut the NG name down to:

rec.amateur-radio.*

For example:

rec.amateur-radio.newsline

Speaking of which, why DOESN'T Newsline have it's own read-only newsgroup?

I have to go to FidoNet,(aka Fight-o-Nuts), to find Newsline online!
Phooey on Fido!

888. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970124233439.7605I-100000@prog1.caprica.com>
Source record: 98159

Sense of humor my ass!

I'm not so stupid as to believe that the "old war stories" that were posted in this thread were just "jokes". Until I spoke up it was obvious they were accounts of events. To defend it, even if it were a joke, is to show a blatent lack of care or respect for the hobby's image.

Admit it... You dont give a hoot if the general public sees ham radio as a valuable asset to humanity or not.

On 22 Jan 1997, Rob Neff wrote:

>
> Someone kick the soap-box out from under this guy before the wind at
> that altitude carries him off by his over-inflated head.
>
> "We're sorry, the newsgroup you have posted to is not receptive to
> posts of this kind. Please, fix your sense of humor and try your post
> again."
>
> Rob Neff (N7ORY)
>
>

889. Re: 3cx1000A7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <32E95465.5722@imaxx.net>
Source record: 98160

Fred Quarles wrote:
>
> Does anyone have the data sheet for a 3cx1000A7 Tube and would email it
> to me? Thanks...
> --
> 73
> Fred Quarles
> KC5HHN, EM10to

Fred,

I have the data sheets. I have generated a data library
for this tube (8283)for my Triode Ground Grid Program on
my web page at http://www.imaxx.net/~kd9jq The
program is TAP Version 2.0 and is now Freeware. This
is useable up to 2 Meters for RF circuit, higher if you
just need the design parameters.

If you still need the sheets I could scan it in and send it
as an OCR graphic file.

73 Chuck KD9JQ

--

Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net
----

890. Ham Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <32E97E2D.2C56@mailhost.cyberramp.net>
Source record: 98161

http://www.cyberramp.net/~johnf

891. N5KFX PAGE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <32E98161.3204@mailhost.cyberramp.net>
Source record: 98162

http://www.why.net/home/3051

892. Re: Aviation Radios Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: bjnash@connectnet.com
Message-ID: <32e95b41.2688578@news.connectnet.com>
Source record: 98163
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

On Wed, 01 Jan 1997 04:47:55 GMT, bjnash@connectnet.com (BJ Nash)
wrote:

>>Aircraft radios should be a drug on the market because the new regs
>>mean a lot of them do not meet the 30ppm freq tolerance rule. Most
>>are 12 volt units with a freq range of 118.0 to 135.95 mc in tenth mc
>>steps, 5-10 watts output, AM. Transmit with carbon mikes. Some have
>>108.0 to 115.95 additional receivers built in to receive VOR and Loc.
>>stations. If interested, I have a list of some of them for sale. send
>>email to av@pdsig.com for an auto-response list.
>>
>>BJ nash
>>
>>
>>AIRCRAFT REMANUFACTURING
>>1291 E.Vista Way, #150
>>VISTA, CA. 92084 (619) 749 0239 FAX: 749 6384
>>Sales Directory: Infobot@pdsig.com

NARCO MK-12 Series:
These units are AM, 118 thru 135.95 in tenth mc steps, crystal
controled. (uses 1 mc crystals and tenth mc crtystals, not freq
sysyh). PS are transistor, rig is partiallly transistor and tube.

Some avionics are all transistor, freq synth, manuals readily
available....
come-on, here's a challange!

bill

AIRCRAFT REMANUFACTURING
1291 E.Vista Way, #150
VISTA, CA. 92084 (619) 749 0239 FAX: 749 6384
Aviation Parts Sales Directory: Infobot@pdsig.com

893. I need VFO-120 for buy

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: aziz@turnet.NET.TR
Message-ID: <32E858B1.3966@turnet.net.tr>
Source record: 98275

hi dear om,s :
I want to buy VFO-120 for my KENWOOD TS-120
if you interest please send me e-mail with more detail .
73,s de sua TA2AD aziz@turnet.net.tr

894. Motorola Micor Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: "D. F. Cimperman, Jr." <cimperman@tusco.net>
Message-ID: <01bc09a4$065bd760$cd271fce@dcimp>
Source record: 98276

I need a little help on the Motorola Micor radio.

I have heard the 150-162 split Micor will go to the Ham band (146.70 Is what I'm looking for) but some have said it will tune down there, other have said it needs mods to work there? Anyone tell me for sure what I have to do to get it to work there?

On the Low band Micor, will the 47 MHz Split radio go up to 52 MHz?

Are the cables the same between the clam shell, and sys 90 control heads?

Is it the radio, or the sys 90 heads that decide if it can do scan, or the other sys 90 options?

Will the UHF version go to 440 MHz?

Thanks for the help

Dave KB8QHU

Cimperman@tusco.net
--
D. F. Cimperman, Jr.
Pager Central
116 North Broadway
New Philadelphia, Ohio. 44663

895. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: jeffd@coriolis.com
Message-ID: <5c90q7$cns@news.goodnet.com>
Source record: 98277

tomb@lsid.hp.com (Tom Bruhns) wrote:

>For the most
>part, I don't have any reason to use fine-pitch parts in my homebrew
>designs anyway, except for a very few special things (perhaps like the
>latest family of Analog Devices DDS chips).

The other issue is that some other really simple and useful parts
(like Motorolas MC3363 one-chip NBFM receiver) are available ONLY in
the SMD package. I'd use it in a second if I could get it in a DIP,
but an amazing number of really simple parts like audio amps are now
appearing solely as SMD. This bodes ill, guys. That's why I'm
keeping my milk carton of tube sockets.

--73--

--Jeff Duntemann KG7JF
Scottsdale, Arizona

896. Re: Tube info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: jeffd@coriolis.com
Message-ID: <5c90q6$cns@news.goodnet.com>
Source record: 98278

Duck 1 <ducks@earthlink.net> wrote:

>Does anyone know of a good scorce for(or replacement for) 2E26 tubes?
>HEEELLLLPPPPPP!

The 2E26 is by no means scarce. Contact Antique Electronic Supply in
Tempe, AZ. Get their catalog. They have damned near every mainstream
receiving or power tube ever made.

--73--

--Jeff Duntemann KG7JF
Scottsdale AZ

897. Re: QST on CD BEWARE!!!!OS Whining

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Mark Bryant <bryant@sohobusiness.com>
Message-ID: <01bc09b3$15256720$a3d879a8@soho>
Source record: 98279

Joe Babe,

Get a grip. I am not a windows bigot. Since my wife programs for OS/2 applications, and I have been on the beta group since v1.2, it would be hard to be bigoted against it. I just accept the realities of the market place. By the way, its hard to smack of Aryian super race dogma when I'm Scot. So don't lose it when I suggest that OS/2 has lost and is not worth everyone's programming attention for hobby software. By the way I do use a OS/2 machine to run two scanners and my R8 at the same time, something that would choke Win95 but will be switching to NT4 as soon as I finish the program.

In under two years we will be posting about the downfall of MS and the rise of the next wonderful made for everyone OS and blaming gates&co on the same stupid things that we blamed on Akers and now big Lou for the marketing demise of Warp/Merlin.

Take care.

Mark

Joe Subich <subich@ibm.net> wrote in article
<5c6gpeqfa1@news-s01.ny.us.ibm.net>...
> In message <01bc070d$5904fe40$a3d879a8@soho> - "Mark Bryant"
> <bryant@sohobusiness.com> writes:
> :>
> :>If you cannot discern the difference between conveniences for minimal
> :>use operating systems and accommodations for physical handicaps you
> :>cannot be expected to understand my original post.
> :>
>
> .. and you can't accept that to discriminate against users of
> non-windows operating environments is is one of the few remaining legal
> forms of discrimination. Like other windows bigots, if anyone dares
> suggest that your "windows or nothing" stance smacks of Aryian super
> race dogma, you resort to ad hominem and ignore the messanger as one who
> "cannot be expected to understand."
>
>
> --
> ==
> Joe Subich, W8IK ex-AD8I
> <W8IK@IBM.NET>
> <W8IK@AMSAT.ORG>
> <subich@ibm.net>
> <71350.1204@compuserve.com>

> ==========
>
>

898. Re: QST on CD BEWARE!!!!OS Whining

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Mark Bryant <bryant@sohobusiness.com>
Message-ID: <01bc09b3$fcf76940$a3d879a8@soho>
Source record: 98280

Joe,

I think we have pretty much beat this one to death. The jam 27 mHz is much more fun to read. Now if we all can get back to radio (me included).

I was in your neck of the woods last weekend, nice country.

Take care.

Mark

Is this still just a hobby, just a hobby, just a hobby?

899. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970124045501.XAA07348@ladder01.news.aol.com>
Source record: 98281

In article <5c90q7$cns@news.goodnet.com>, jeffd@coriolis.com (Jeff Duntemann) writes:

>The other issue is that some other really simple and useful parts
>(like Motorolas MC3363 one-chip NBFM receiver) are available ONLY in
>the SMD package. I'd use it in a second if I could get it in a DIP,
>but an amazing number of really simple parts like audio amps are now
>appearing solely as SMD. This bodes ill, guys. That's why I'm
>keeping my milk carton of tube sockets.
>
>--73--
>
>--Jeff Duntemann KG7JF
> Scottsdale, Arizona
>
>

And, Plessey has dropped many products in their IC line that was extremely popular with homebrewers. I beleive the only US distributor that would handle onesy twosy orders for Plessey parts was DC Electronics. Motorola has discontinued their plastic RF power transistors. In 1969 you could call MHz Electronics and buy surplus crystal filters for USB, LSB or CW at bargain prices. Not any more. Parts suppliers have dried up and gone away.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

900. Re: Transmitter Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19970124082801.DAA15465@ladder01.news.aol.com>
Source record: 98282

In article <5c82og$rnk@news1.mnsinc.com>, bry@mnsinc.com (Brian Carling, G3XLQ / AF4K) writes:

>WHAT IS a "cookie" ???
>How do I get rid of it?
>
>

Its like the Reeses pieces that the kid used to lure ET out of the shed. I logged on to the site and must agree with the other fellow. I think your first page should give the user a chance to go anywhere immediately.

Carl

901. Re: SSTV with a sound card

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: venterml@telkom30.telkom.co.za
Message-ID: <5c9mo1$gs4@news1.saix.net>
Source record: 98283

Harv Nelson <hnelson@facstaff.wisc.edu> wrote:

>Hi All,

>Can anyone out there suggest a good Shareware/Freeware program for SSTV
>that uses the sound card on my computer. Need FTP/URL info too.

>tnx a bunch
>73
>Harv/KG9GA

Hi, try a look at http://www.geocities.com/SiliconValley/2504
wfax sstv etc demo software with S/B card.

Hope it helps.
Mark - ZR1MLV

902. Re: Wanted 2M Repeater Freq. and Tones for Barstow/Victorvile CA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: ke6zuf@qnet.com
Message-ID: <5c9c15$84a@mandolin.qnet.com>
Source record: 98284

gpsrul@aol.com (GpsRul) wrote:

>need Repeater Frequencys and sub-audible Tones for repeaters up in
>Barstow / Victorvile area in CA. Travel Up that way A lot. Your help would
>be appreciated!

>GpsRul@aol.com

Well;
On 2M, there is always the Table Mountain machine. It covers the entire upper desert area (and down into parts of the LA area). However, there are spots in Barstow that are kind of iffy. Barstow has a few repeaters, but being I never use them, I can't tell you much about them. There is a new repeater on Government Peak (wherever that is, me thinks near Ridgecrest) that does a good job in the desert, and the Bakersfield machines (linked) that do OK in the area you are asking about. I don't remember using any Victorville machines, so no comment. There is a Big Bear machine I use that does OK in the desert. I'm sure there are others, however, I pretty much stay on Table Mountain (member you know ;>)).

Now, for 220 or 440..... Email me (saving bandwith ;>)).....

Table Mountain :
WR6AZN 145.280- PL131.8

Gov Peak:
WA6YBN 145.340- PL100.0

Bakersfield (linked repeaters):
Bird Springs Pass:
WA6UYW 146.085+ NoPL
Bakersfield:
W6LIE 145.150- NoPL

Big Bear:
W6ZJU 147.330+ PL123.0

Hope this is some help, and hope to talk to you on Table on your way through.

Bob, KE6ZUF

903. Re: Opinions Ten Tec 6m Transverter....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc09b5$f76bd0e0$61c56cce@default>
Source record: 98285

Jay,

I built the 1208 (6m to 20m) which I am quite happy with. The RX is quite sensitive and I have not noticed any intermod. The kit is easy to build as long as you follow the instructions. Watch out for the tab on the driver transistor. It is easy to shot it to the coil can near by. I did and it burned a couple of PC board traces. The can now has PVC tape around it.

The transverter is quite robust otherwise. I have regularly pumped 100 watts RF into it (when I forgot to turn the power down after working HF), but the thing still works fine. The 8 watts is fine for sporadic E, but may be too little if you are going to use it for contesting. I have worked several stations across the continent without extra power. I use the AEA Halo antenna.

73 de VE7MDL ....Erik.

Jay Johnson <n2mga@fast.net> wrote in article <32E79095.7075@fast.net>...
> Anyone here ever build one of these kits? Looking for your opinions,
> comments, general thoughts, modifications, performance etc. etc. etc.
> Please reply either by email or to this posting, thanks in advance for
> any and all information you can supply, 73 for now...
>
> Regards,
> Jay Johnson
>

904. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: gsparks@ix.netcom.com
Message-ID: <5calo8$t87@dfw-ixnews12.ix.netcom.com>
Source record: 98286

... snip all

OK, we have heard about the legalities, the reasons and everything else. Some of the realities are sometimes these illegal operators are causing a lot of harm. Let me tell a Story about a CB'er in the mid 70's who called himself EZ lovin.

This guy was running a really dirty station, causing TVI to telephones, business radios, hams, TV, stereo's, he came in everywhere in this small town.

Everyone knew who he was, contacting the FCC got them a pamplet on how to put bypass capacitors on their TV's.

Several times his coax was pinned, cut, power line feed cut etc. He always came back on in a day or two. Finally someone did indead build a jammer close to his location. Problem was solved, for a while he would still transmit, and pretend he was talking with someone, but he wasn't, and finally got tired of that, and gave up. I don't think any other method would have solved the problem, this guy was the spoiled brat son of one of the "city fathers", and was pretty much untouchable by locals.

I have considered the jamming method myself, but so far discussing the problem with the offenders has helped, but keep in mind the sunspot activity is very low right now, and most of the high power rigs are idle right now, just wait about 3 years. The reason I have considered the Jamming is all of my TVI complaints from neighbors have been CB operators, but since I have the big antenna they assume it is me.

I guess I would have to ask the reason the original poster wants to jam, a similar experience, or to get revenge on the neighbor for some possible real or perceived wrong. I suspect from the original post it is the latter, so I would not condone the action.

All in all I enjoyed the different methods, was a bit appauled by the spark gap idea though, and there was some humor. Although the other poster was correct it was supporting illegal activity reguardless of the reason.

I guess this is one of those area's where I don't have a black or white answer, but I do know when faced with someone running lots of power, who will not cooperate, killing their receive is the only way to get them off the air, none of the other tactics work, they just fix it, and start watching their station closely. The FCC won't help, unless they interfer with Police or medical there is not much chance of fixing the problem legally.

my .02 worth

Sparky KI5GY

905. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Don Wall <d.wall@nunet.neu.edu>
Message-ID: <5caejq$m7c@chaos.dac.neu.edu>
Source record: 98287
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

Maybe so, but who besides you and ever heard of a 545B? There
were very few made, compared to thousands of 545A's.

Don

906. Re: Mostec M5106P -help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Don Wines <dwines@e-tex.com>
Message-ID: <32E8DCE9.45B5@e-tex.com>
Source record: 98288

Murray Kelly wrote:
>
> A friend has a signal injector - tracer which has a bad ic in it.
> It is a M5106P from Mostec who have been out of business for some
> time now, it seems. None of my reference books list Mostec equivalents.
>
> Has anyone got the specs. or even able to tell us what the heck
> it is? :-)
>
> Maybe there is a simple of the shelf equivalent?
>
> Thanks for any help.
>
> **********
> * Murray Kelly vk4aok mkelly@faraday.dialix.com.au *
> * 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
> * ph/fax Intl+ 61 7 3379 3307 mobile 018 071 355 *
> **********

NTE Electronics (http://www.nteinc.com/) lists a replacement as NTE1097.
Their QUICKCross x-reference shows it to be a 14-pin IC AF amp.

Hope this helps,

73,
Don, K5DW

907. Re: How works VSWR measuring equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: ccjs@cse.bris.ac.uk
Message-ID: <E4IpDw.6I7@fsa.bris.ac.uk>
Source record: 98289
Cross-posted to: alt.engineering.electrical,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.basics,sci.electronics.design,sci.electronics.equipment,sci.electronics.misc

CB radio books cover VSWR if you are thinking of the additional
wire threaded through a short section of co-ax types. I think the
ARRL Handbooks also covered it.

Chiron van der Burgt (chbu@interstroom.nl) wrote:
: Hello,
:
: My name is Chiron and I'm a student at a Dutch school.
: There are a lot of VSRW measuring equipment available in electronic shops,
: but I can 't find books or other literature about the theoritical working
: of those VSWR equipment. The prinsipal of VSWR is not a problem but I want
: to know some implementations and how it works.
:
: If you know some good books or publications please send me a mail.
:
: Greetings and thanks in advance
:
:
:
:

--

J.G.Simpson@bristol.ac.uk

----

908. Need help making telephone touch tones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Christopher McGill <mcgill@dseg.ti.com>
Message-ID: <32E90E0C.D1C@dseg.ti.com>
Source record: 98290

I need to be able to produce telephone touch tones for a home project which I am working on. Basically, I would like to know if anyone knows of a chip or circuit which could take the row and column lines from a telephone keypad and produce the two analog tones required to transmit a keypress. A long, long time ago (1989!) Radio Shack used to sell a telephone keypad/CMOS chip combination which would do the job. Motorola had a 2-of-8 tone encoder chip (MC14410DW) listed in their 1995 catalog just for this purpose, but nobody (even at Motorola) seems to know where to get this chip today. The current state seems to be entire phone systems on a single chip or chip set to which one supplies only a microprocessor and its associated RAM and ROM. All of this is overkill. I just need a 2-of-7 or 2-of-8 encoding circuit/chip to make touch tones; and, yes, they do have to be telephone system compatible. Any help would be greatly appreciated. Replies can be posted to this newsgroup or emailed to me at the address below.

Thanks,

Chris McGill
mcgill@dseg.ti.com

909. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970124174900.MAA03388@ladder01.news.aol.com>
Source record: 98291

In article <measures-ya02408000R2301970822260001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:
>
>Mr. Rauch---FYI, on the Internet, 'IMO' is an abbreviation for 'in my
>opinion'. Is an opinion the same as a conclusion?

Please show me where your published documents state IMO. I can't find the
disclaimer that it is just an opinion.

>equipment, who, when the mood suits him, emits a rather impressive cloud
of
>conductive mist out of his stern end, that smells quite unlike Chanel
>Number Five®.

Thank you for sharing that important technical information. I don't
believe most normal people allow cats to whiz on their equipment, and then
publicly compare arcing cat urine to prefume.

> Why don't you ask David Holtcamp what I told him before and after he
<snip>
> Curiously, when Marvin made this
>clarification to me on the telephone,
<snip>

Richard, let's suppose your new story is factual or truthful. That being
the case, you posted things before having facts.

You go so far as to say things like "Marvin Born measured the parasitic in
an AL-1500 with a spectrum analyzer" and use that as an accusation against
my abilities or one of the typical Measure's slams on a manufacturer's
product. Yet now you admit you made a mistake, and misrepresented fact.

Rather than admitting you fibbed or intentionally changed data, you want
us to believe you just made a simple mistake and didn't have all the
facts. Same with the TL-922.

If you post conclusions, suggestions, and/or form opinions without having
heard the facts, how can we trust anything you say? Either we can trust
you to be accurate and thorough, or we can't. IMO, if we can't trust
everything a sole source presents, we can't trust anything presented by
that source.

Surely even you can see it makes no difference if your stories are
premature, an incorrect conclusion, or outright pathological lies. The
only thing that matters is the information presented is often wrong, and
you (for what ever reason) can't be trusted to supply accurate data. This
isn't just one or two things Rich, it's many items.

1.) The dissipation of an 8877 grid. It is not 500 watts in the Eimac data tables Rich.

2.) The failures of 8877's. Eimac did have a manufacturing problem in the 80's that you blamed on parasitics. You were caught on that one.

3.) Photons causing arcs. Even you admit QST couldn't be duped into printing that one.

4.) Your claim the peak tank voltage could never exceed the supply rail. You argued that point with Mario and lost.

5.) Your claim about Buzz Miklos' employment, and that Eimac released data to you. You were caught on that one.

6.) Your claim about the variacs and filament controls in BC transmitters. You were caught be several people telling that one.

7.) Your "opinion" about Dave's 922. You were caught on that one.

8.) Your early statements about Marv Born's measurements. You were caught on that one.

It's easy to find eight things that are untrue, claims you argued about and defended. The reason *why* you present false claims over and over doesn't matter. The bottom line is your claims can't be trusted.

73 Tom

910. Re: -FS- Pair of Motorola MRF 247 RF Power Transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-24 00:00:00 UTC
From: Ron Sibbitt <n8lmt@greatlakes.net>
Message-ID: <01bc0a10$d866c6e0$586794ce@ron-s-computer>
Source record: 98292
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

THEY HAVE BEEN SOLD....
TNX,
73,
RON

Ron Sibbitt <n8lmt@usa.net> wrote in article
<01bbf780$de1df380$LocalHost@n8lmt>...
> I have a matched pair of new Motorola
> MRF-247 transistors, I bought these
> from RF Parts a few years ago to repair
> a 160 watt 2m amp....never got around to
> doing the job. I want $40.00 for the
> pair... i'll pay the postage.
>
> 73,
> Ron Sibbitt
> 5885 Galbraith Line Road
> Croswell, MI 48422
> E-Mail - n8lmt@usa.net
>

911. Tubes and Test Equipment for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Kevin Harlan <harlan@deltanet.com>
Message-ID: <01bc0aa3$c3843620$1fcab2cc@Psrklein>
Source record: 98093

Tubes and Test Equipment for Sale:

Old Tubes
Type
26, used, 10 available $4.00 each
27, used, 22 available $2.50 each
45, used, 9 available $11.00 each
80, used, 12 available $3.50 each
45, used, 9 available $11.00 each

227, used. Globe Type, 10 available, $5.00 each

Shipping in the USA 1 to 6 tubes $3.00 $0.07 above $0.50 per tube
---

JAN 6186W, Equal to 6AG5WA, Sharp cut-off, pentodes, 7 pin miniature,
made by Philips in the USA in 1986. =NEW= 10,000 available. $0.08 each
Shipping in the USA 1-199 tubes $3.00, 200 or more tubes shipping free.

Test Equipment (Working , but may need calibration and minor repairs)

(1) Boonton 190-A "Q" Meter---------- $40.00
(1) HP (Harrison) 6200A, Power Supply 0 to 40VDC, 12 Amps-------$100.00
(1) military AN/PRM-10 Grid Dip meter 2 to 400 MHz----------$40.00

For shipping cost, e-mail you full address and we will return e-mail
shipping cost.

Klystrons (New, Never Used)

(1) Varian VA-201B 8.5 to 9.6GHz, .065 Watts CW---------$20.00
(1) Varian VA-97B 32.6 to 34 GHz, 13 mW CW ----------$40.00

Shipping free in the USA

Please contact harlan@deltanet.com for more equipment.

912. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32EAB47D.63DF@wco.com>
Source record: 98094

B2Dude wrote:
>
> This jammer might also interfere with the 27mhz R/C car band! If they are
> running a 60m.p.h. gas car, U could really screw ther day. Be nice and
> don't build it. some cars cost $1000+!!!

Not the one I had.. the unit was modified to a non digital oscillation
at which time no longer worked with my RC.

not to mention, if someone has an RC car worth more than $69.95, they
sure as hell don't use 27 Mhz.

Jim..

913. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32EAB5D9.7CA5@wco.com>
Source record: 98095

Ted wrote:
>
> Sense of humor my ass!
>
> I'm not so stupid as to believe that the "old war stories" that were
> posted in this thread were just "jokes". Until I spoke up it was obvious
> they were accounts of events. To defend it, even if it were a joke, is to
> show a blatent lack of care or respect for the hobby's image.
>
> Admit it... You dont give a hoot if the general public sees ham radio as
> a valuable asset to humanity or not.
>

Look Ted, I can see where you might be coming from but you also must realize that a VERY large number of CB'ers are running illegal amplifiers which are usually not filtered correctly for the frequencies they are used.

by getting just one of this type of CB'er OR HAM for that matter to ease off the key for just one day is worth this little prectical joke.

The device I made had a range or perhaps 100 meters and effected no one but the person who was destroying all modes of receiption in a one mile radius.

Jim.

914. www.dialnet.net/users/kb0nza

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Brad Cunningham <kb0nza@mail.dialnet.net>
Message-ID: <01bc0b35$dd947ec0$2cf941ce@default>
Source record: 98096

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915. www.dialnet.net/users/kb0nza

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Brad Cunningham <kb0nza@mail.dialnet.net>
Message-ID: <01bc0b35$d5e295e0$2cf941ce@default>
Source record: 98097

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916. Re: WTD:Solid Stae 866's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Lee Buller <k0wa@southwind.net>
Message-ID: <32EADE6E.7E1@southwind.net>
Source record: 98098

wayne@h2net.net wrote:
>
> Looking for a pair of soild state replacements for an 866.
>
> e-mail with price
>
> thanks
>
> wayne@h2net.net, WA2KEC
> Wayne Wicks
> WA2KEC
> wayne@h2net.net

Wayne...

Make them using some 1n1004 diodes in a stack. Use the appropriate diodes and 470 Kohn resistors on a vertical stack. Break open an 866 (look out for the Mercury) and then use some perfboard to build the diode stack. That is all the commerical guys to and then they pot it with potting compound. Cheap and easy

Lee
k0wa@southwind.net

917. Re: 3-500z help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Lee Buller <k0wa@southwind.net>
Message-ID: <32EADD69.2F63@southwind.net>
Source record: 98099

Brian Carling wrote:
>
> Hello Gary -
> The ARRL Handbook says that the maximum safe grid current would be
> undefined(!)
> Plate current maximum is 400 mA
> Remember that is an absolute maximum rating. You wouldn't want to run it
> anywhere close to that high if you want good tube life.
>
> Now the grid current is typically run at about 115 mA on a 3-500Z
> and most other tubes in that class seem to have amaximum grid current
> rating of around 120 mA so I sure wouldn't want to push it much beyond that!

All of what you said is true above...but I would like to make some points here. I have the Ameritron AL80A which is one 3-500Z. I talked to the designer of the amp and he says you can use more current through the tube than the 400 MA on SSB. The facts are, that tube life of a thorated tungsten tube is based on filament voltage and emission, not plate current. The saturation point for a 3-500 from plate current is 2-amps!

Yes, watch the grid current, but you can load the thing up more than 400 ma... It is better to do this in SSB...and run 400 MA on CW.

Lee
k0wa@southwind.net

918. www.dialnet.net/users/kb0nza

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Brad Cunningham <kb0nza@mail.dialnet.net>
Message-ID: <01bc0b35$ccc0f060$2cf941ce@default>
Source record: 98100

new web sight!

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919. www.dialnet.net/users/kb0nza

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Brad Cunningham <kb0nza@mail.dialnet.net>
Message-ID: <01bc0b35$e5359ec0$2cf941ce@default>
Source record: 98101

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920. unsubscribe Ham-Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: w8lrm@qtm.NET
Message-ID: <199701260413.XAA05299@garcon.qtm.net>
Source record: 98102

```
unsubscribe Ham-Homebrew
......de....W8LRM.....Al

MI-QRP #41 QRP-L #532 QRP-ARCI #6524
G-QRP #4152 NOR-CAL #246 CQC #289 (EN62RE)
From Southwest Michigans Sunset Coast:
Saint Joseph, Berrien County, Michigan !
```

921. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: ajansen@jkmicro.DIALix.oz.au
Message-ID: <914@jkmicro.DIALix.oz.au>
Source record: 98103
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <32E53D21.1B37ADEA@bnl.gov>, Scott Coburn (scott@bnl.gov) writes:
>Steven Swift wrote:
>>
>> I have a little 'c' program that calculates what you need for loop
>> antennas. Note that there is a "permiability" times "area" term.
>> You can use a rod or large loop to get the same effective height-- which
>> is what you care about. Ferrite will give more phase shift.
>
>Is the permiability of air 1? If it is would your air-loop antenna need
>to have 800 times the area of a ferrite rod antenna (of the same number
>of
>loops)? (I think the permiability of ferrite is about 800...) Would

The effective permeability of a rod is strongly dependent on the
physical size of the rod, rather than the material permeability.
eg for a rod of 200mm length, 10 mm diameter = length/diameter ratio
of 20, will have effective permeablity of roughly 20, regardless of
the material permeablity (until the material permeability gets
down close to 20).

>

--
Regards,

Adrian Jansen ajansen@brisbane.DIALix.oz.au
Design Engineer J & K Micro Systems
Ph (076) 394 676
Microcomputer solutions for industrial control

922. HAM PAGE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <32EB037D.59E0@mailhost.cyberramp.net>
Source record: 98104

http://www.cyberramp.net/~johnf

923. QRP CRYSTALS FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: pbunn624
Message-ID: <5cbngn$bb@news.teleplex.net>
Source record: 98164

I have the following QRP calling frequency xtals for sale. All are HC49 wire lead case and are new.

7040 Khz 10106 Khz 14060 Khz 28060 Khz 3rd OT

22Mhz 3rd OT for 6 Meter RX converter

All are $4.50 each or three for $10 plus $1.50 postage.

Also have some 624 KITS Oner 1/2 watt transmitter kits for $12 including XTAL

Pat Bunn

924. Re: Need help making telephone touch tones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: b2dude@aol.com
Message-ID: <19970125023800.VAA28048@ladder01.news.aol.com>
Source record: 98165

Get a radio shack tone dialer box for about $25. U can use it w/o modification, or reroute the speaker leads to whatever it's going to. This sould work well, and U get a memory feature too.

925. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: b2dude@aol.com
Message-ID: <19970125024301.VAA28320@ladder01.news.aol.com>
Source record: 98166

This jammer might also interfere with the 27mhz R/C car band! If they are running a 60m.p.h. gas car, U could really screw ther day. Be nice and don't build it. some cars cost $1000+!!!

926. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan25.052758.22849@ke4zv.atl.ga.us>
Source record: 98167
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner

In article <32E5B31D.AA1@polarnet.com> wbeam@polarnet.com writes:
>> > On Tue, 21 Jan 1997 14:38:48 GMT, gary@ke4zv.atl.ga.us (Gary
>> Coffman)
>> > wrote:
>> > >Yeah, at least you can get the main screen up if you reboot
>> to DOS mode,
>> > >but when you give it the run command, it crashes and burns.
>
>I also run ATI Mach64 card. (also QEMM)
>My vidio card required the VESA driver.
>This card has some strange behaviour with
>programs that make VESA calls without the
>driver.
>
>Look for 64VBE200.ZIP from ATI. Contained
>in this .ZIP is the driver M64BE.COM which
>is a DOS TSR.

BINGO! Thanks Bill.

Gary

--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

927. QRP CRYSTALS E-MAIL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: avrial@ix.netcom.com
Message-ID: <32e9c19b.4767194@nntp.ix.netcom.com>
Source record: 98168

pat I need your e- mail to send the $.Thanks R Lloyd...KE6ONN

928. Tubes and Test Equipment for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Kevin Harlan <harlan@deltanet.com>
Message-ID: <01bc0a9f$d02b2ea0$1fcab2cc@Psrklein>
Source record: 98169

Tubes and Test Equipment for Sale:

Old Tubes
Type
26, used, 10 available $4.00 each
27, used, 22 available $2.50 each
45, used, 9 available $11.00 each
80, used, 12 available $3.50 each
45, used, 9 available $11.00 each

227, used. Globe Type, 10 available, $5.00 each

Shipping in the USA 1 to 6 tubes $3.00 $0.07 above $0.50 per tube
---

JAN 6186W, Equal to 6AG5WA, Sharp cut-off, pentodes, 7 pin miniature,
made by Philips in the USA in 1986. =NEW= 10,000 available. $0.08 each
Shipping in the USA 1-199 tubes $3.00, 200 or more tubes shipping free.

Test Equipment (Working , but may need calibration and minor repairs)

(1) Boonton 190-A "Q" Meter---------- $40.00
(1) HP (Harrison) 6200A, Power Supply 0 to 40VDC, 12 Amps-------$100.00
(1) military AN/PRM-10 Grid Dip meter 2 to 400 MHz----------$40.00

For shipping cost, e-mail you full address and we will return e-mail
shipping cost.

Klystrons (New, Never Used)

(1) Varian VA-201B 8.5 to 9.6GHz, .065 Watts CW---------$20.00
(1) Varian VA-97B 32.6 to 34 GHz, 13 mW CW ----------$40.00

Shipping free in the USA

Please contact harlan@deltanet.com for more equipment.

929. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Ted <teddyb@caprica.com>
Message-ID: <Pine.BSF.3.91.970124234831.7605J-100000@prog1.caprica.com>
Source record: 98170

Yeah... the least they could have done was to disguse their intent by asking instead how to make a QRP xmitter for a t-hunt. But like I told Rob, they don't CARE how they make other hams look. Sheesh! It's bad enough that Art Bell gets on talk-radio bragging about being a ham now and then while the rest of the time talking about seeing his black triangles! Art's got people thinking we a bunch of UFO kooks! Then there's hacker Kevin Midnick (sp?)

So I have to wonder... What's next? Maybe allegations about the Oklahoma City bombers being hams? Or maybe some idiot will start promoting that white supremacy net on 75M that meets on certain mornings? Maybe cult leaders like Jim Jones and David Koresh were hams too? What was Fidel Castro's callsign again? Sheesh! This hobby needs good PR enough as it is already without these carrot-waxers giving the rest of us a bad image!

On 23 Jan 1997, Larry Robison wrote:

>
> Well Rob that's your opinion and I think YOU are a bit out of line to
> attempt to speak for the newsgroup! I subscribe to this newsgroup and you
> sure don't speak for me.
>
> I happen to think that he's right in step with what's going on here and I
> am pissed off about it too! Have you ever bothered to post the same
> message of inappropriateness to those who are responsible for the thread in
> the first place?
>
> Does anyone else out there think it is appropriate to post a question
> asking how to jam someone (or post a reply telling him how) and jump on the
> guy who brings the absurdity to light?
>
> Larry W9MDX
>
>

930. Wanted: Radio Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: kakykeru <kakykeru@runestone.net>
Message-ID: <5cbpcc$s2q@cronkite.polaristel.net>
Source record: 98171

I am looking for a amateur radio kit or catalog to build my own radio.

Please e-mail me!

THANKS,
Kyle,
kakykeru@runestone.net

931. Transmitter Diagram

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Bart Wenmeckers <bwenmec@es.co.nz>
Message-ID: <32EAC8DC.7889@es.co.nz>
Source record: 98172

Hello all, any one got any curcuit diagrams for a transmitter that will transmit up to say 2km on CW and uses 500Khz-2Mhz
Thanks

932. Re: How works VSWR measuring equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <32ea41b1.92268013@news.erols.com>
Source record: 98173
Cross-posted to: alt.engineering.electrical,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.basics,sci.electronics.design,sci.electronics.equipment,sci.electronics.misc

>Hello,
>
>My name is Chiron and I'm a student at a Dutch school.
>There are a lot of VSRW measuring equipment available in electronic shops,
>but I can 't find books or other literature about the theoritical working
>of those VSWR equipment. The prinsipal of VSWR is not a problem but I want
>to know some implementations and how it works.
>
>If you know some good books or publications please send me a mail.
>
>Greetings and thanks in advance
>

Chiron: Don't feel bad! Most of the modern texts do a terrible job
of explaining how simple VSWR measuring equipment actually works.
These devices are very simple in their construction, but understanding
their function requires some study of the physics involved.

Take a look at the February issue of the American magazine "73 "
There is an article there. Also, see if you can get someone in a
local amateur radio club to provide you with the August 1965 issue of
QST magazine. I know this may be difficult where you are. Let me
know if you need help.

Bill N2CQR

933. Re: Aviation Radios Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Schiwapew Woapalanne <willi6@erols.com>
Message-ID: <32EA5404.793D@erols.com>
Source record: 98174
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

BJ Nash
>
Greetings - I've attempted to stimulate your AUTORESPONSE Robot
for a list of the equipment available, but have never received
any response. Will try again. Cheers! Dave K7HMP

==========
wrote:
>
> On Wed, 01 Jan 1997 04:47:55 GMT, bjnash@connectnet.com (BJ Nash)
> wrote:
>
> >>Aircraft radios should be a drug on the market because the new regs
> >>mean a lot of them do not meet the 30ppm freq tolerance rule. Most
> >>are 12 volt units with a freq range of 118.0 to 135.95 mc in tenth mc
> >>steps, 5-10 watts output, AM. Transmit with carbon mikes. Some have
> >>108.0 to 115.95 additional receivers built in to receive VOR and Loc.
> >>stations. If interested, I have a list of some of them for sale. send
> >>email to av@pdsig.com for an auto-response list.
> >>
> >>BJ nash
> >>
> >>
> >>AIRCRAFT REMANUFACTURING
> >>1291 E.Vista Way, #150
> >>VISTA, CA. 92084 (619) 749 0239 FAX: 749 6384
> >>Sales Directory: Infobot@pdsig.com
>
> NARCO MK-12 Series:
> These units are AM, 118 thru 135.95 in tenth mc steps, crystal
> controled. (uses 1 mc crystals and tenth mc crtystals, not freq
> sysyh). PS are transistor, rig is partiallly transistor and tube.
>
> Some avionics are all transistor, freq synth, manuals readily
> available....
> come-on, here's a challange!
>
> bill
>
> AIRCRAFT REMANUFACTURING
> 1291 E.Vista Way, #150
> VISTA, CA. 92084 (619) 749 0239 FAX: 749 6384
> Aviation Parts Sales Directory: Infobot@pdsig.com

934. Re: Wanted: Radio Kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Schiwapew Woapalanne <willi6@erols.com>
Message-ID: <32EA55EC.320B@erols.com>
Source record: 98175

kakykeru wrote:
>
> I am looking for a amateur radio kit or catalog to build my own radio.
>
> Please e-mail me!
>
> THANKS,
> Kyle,
> kakykeru@runestone.net
==========
Kyle,
I recommend you wander over to the TENTEC web site and use their
E-Mail capability to order a catalog. Browse the site while you
are there. They have a line called T-Kits which includes some
decent receivers and Ham rigs for the beginner. May take a little
intro to electronics and soldering practice before you get started.

http://www.tentec.com

Also, look over the ARRL web site for organizations and clubs near
you that might help you select a good kit to start with.

http://www.arrl.org

Good Luck - - Dave K7HMP

P.S.

There are several other kit companies around, but I've been impressed
by the quality of the TenTec kits and equipment.

935. Re: Transmitter Diagram

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Schiwapew Woapalanne <willi6@erols.com>
Message-ID: <32EA57D7.1A82@erols.com>
Source record: 98176

Bart Wenmeckers wrote:
>
> Hello all, any one got any curcuit diagrams for a transmitter that will
> transmit up to say 2km on CW and uses 500Khz-2Mhz
> Thanks

Bart:
I doubt that you will find a diagram for an "Amateur" transmitter that will cover that complete range of frequencies - and stay in compliance with NZ rules and regulations. It is possible that there might be a military surplus rig that covered the range? For the closest ham band check some of the older (Pre-1970 +/-) ARRL or RSGB handbooks and magazines
for rigs in the 160 M ("Top Band") frequency range 1.8-2.0 MHz. There are also the occasional Part 15 (very low power) rigs for the broadcast band - but they have some additional constraints (ant & power). Search around for Part 15 and or Pirate Radio web sites.

Have Fun / Stay Legal
I've heard terrible things about those Down Under prison colonies ;-}

Cheers es 73 Dave K7HMP

936. Re: QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Bill C <wrc@tir.com>
Message-ID: <32EA2E18.7231@tir.com>
Source record: 98177

Hi gang,

"90% of all statistics are made up"

The rest are skewed (twisted).

What does this have to do with QDT on CD?

What are flames doing in the homebrew NG?

Bill KU8H

937. Re: Newsgroup Wishlist

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32EA5755.1598@idecc.com>
Source record: 98178
Cross-posted to:
rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,news.admin.hierarchies,news.groups

Ted wrote:
>
> I wish that I was the one to start these newsgroups. I'd have divided them
> up in better heirarchies like so:
> To reduce the number of heirarchies in a newsgroup name instead of:
> rec.radio.amateur.*
> I would have made it:
> rec.amateur-radio.
> This is because discussions about scanners and broadcast radio and the
> like dont need nearly as many newsgroups as our hobby because our hobby
> is so much more diverse.

--snip-- more blah blah blah

Hi Ted:

Normally I'd not waste NG space but since you forbid me to send e-mail
to your address.
Ted, your nothing more than a troll, I see you've spammed this garbage
post to all the ham groups.

What is it that you want Ted? Someone to agree with you? Someone to
argue with? Your last post requesting info on a yagi antenna was a real
treat. You chewed out everone who responded! Take your little troll
posts and head on over to alt.flame your sure to find lots of
interesting people like yourself there.

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

938. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32EA5EB6.FB7@idecc.com>
Source record: 98179

Ted wrote:

> So I have to wonder... What's next? Maybe allegations about the Oklahoma
> City bombers being hams? Or maybe some idiot will start promoting that
> white supremacy net on 75M that meets on certain mornings? Maybe cult
> leaders like Jim Jones and David Koresh were hams too? What was Fidel
> Castro's callsign again? Sheesh! This hobby needs good PR enough as it is
> already without these carrot-waxers giving the rest of us a bad image!

Jim Jones was not, but he did make regular 20m transmissions from the
camp via an amateur in his group. I worked him and recieved a QSL card,
it had several pictures of the campsite on the front. The amateur took
his life along with the others about 5 months later.

Speaking of PR Ted, what image do you leave with newcommers reading your
posts? Someone offers to help you with an antenna problem and you pitch
a fit because they didn't do it the way you wanted. I'm sure YOURE
responces made the newcommers want to jump right in.

While YOU'VE been bitching about the rest of us what have YOU done to
promote the hobby in positive manner? I really love the part where you
keep your anonymity, if your going to make a statement Teddy, right or
wrong, sign your name to it. It doesn't mean much without it.

Tim, ka8ddz

939. Q: Use pkt connections for autopatch?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: cobra295@ix.netcom.com
Message-ID: <5cdena$dek@sjx-ixn2.ix.netcom.com>
Source record: 98180
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Soon I'm going to be installing an audiopatch on my mobile radio in the house. Rather than use the 8-pin connector on front, it'd be much more convenient to use the 2 jacks in the back intended for packet. The main question is, are the audio in/out & ptt connections in back equivalent to the front conncetor and the external speaker jack? The instruction book says "The PTT control through the rear jack is solely for packet use only, and may not exhibit the same characteristics as the microphone PTT".... To me it seems like it would work the same... any input? Please email replies back to me. Thanks in advance.

940. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Dave Hills <dhills@onramp.net>
Message-ID: <32EA3CBE.4EE0@onramp.net>
Source record: 98181
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Marty Haase wrote:
>
> >Scott Coburn wrote:
> >
> > I have built a WWVB (60kHz) VLF radio receiver. It is the receiver
> > designed by Bob Roehrig and described in the article "Most Accurate
> > Frequency Standard, Parts 1,2,3", 73, Jan/Feb/Mar 1994. It is a
> > Tuned Radio Frequency (TRF) receiver with an active ferrite rod antenna.
> >
> > I constructed the ferrite rod antenna/preamplifier as described in the
> > article and the receiver powers up OK and gets through all of the
> > alignment procedures outlined in the article. I have not yet gotten
> > the WWVB signal, but I suspect that is more a misfortune of my location
> > than a receiver problem.
>
> Just found my catalog from AMIDON Associates..
> 12033 Otsego Street, North Hollywood, CA 91607.
> I read some thing that led me to beleve they may be out of business though.
> Anyway... Ferrite rods are available in two materials:
> R61 material - 125 permeability (.5 - 30 MHz)
> R33 material - 800 permeability (.001 - 1 MHz)
> Does this suggest a possible source for your problem?
> Amidon sells rods that are .5" x 2", 4", 7.5" and .75" x 12".
> for a .5 x 7.5 inch rod:
> R61 - Al(mH/1000t) = 49
> R33 - Al(mH/1000t) = 89
>
snip

Amidon is alive and well at
http://websites.earthlink.net/~sold/amidon/. Thier web page is designed
by a company called "SoLD", which may have caused some confusion.

--
Dave Hills
DH AssociatesPower Supply Engineering, Design, & Consulting
dhills@onramp.net

941. Re: H.V. switching supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5cdg4sss1@news3.microserve.net>
Source record: 98182

In article <32E99787.4B27@ford.com>, UN93B@ford.com says...
>
>Has anyone tried to make a 3000vdc 1 amp switching
>power supply? Is it practical? Can it be done?
>
>Thanks, Brett

Yes Brett, it has been done.

There was a excellent article written a few years back in
"QEX". The project utilized power FETs and toroid transformers.
The power supply operated off 220V and gave in the area of 3KV
at 1 amp to power a 3-500Z. Let me know if you find the exact
month and year of this article, I would also like to ge a reprint!

73 Steve N3FTI

942. Re: How works VSWR measuring equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: "Marcos A. Gallego" <mgallego@uninet.com.br>
Message-ID: <32EA4543.1386@uninet.com.br>
Source record: 98183
Cross-posted to: alt.engineering.electrical,nl.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,sci.electronics.basics,sci.electronics.design,sci.electronics.equipment,sci.electronics.misc

Hello Chiron,

A good book that you can find information about it is "The Radio
Amateur's Handbook" that there is a chapter that tells everything about
"Test Equipament". I think that you can find a schematics to build your
own VSWR!
Regards
Marcos

Chiron van der Burgt wrote:
>
> Hello,
>
> My name is Chiron and I'm a student at a Dutch school.
> There are a lot of VSRW measuring equipment available in electronic shops,
> but I can 't find books or other literature about the theoritical working
> of those VSWR equipment. The prinsipal of VSWR is not a problem but I want
> to know some implementations and how it works.
>
> If you know some good books or publications please send me a mail.
>
> Greetings and thanks in advance

943. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32EA6781.2336@idecc.com>
Source record: 98184

Ted wrote:
>
> Sense of humor my ass!
>
> I'm not so stupid as to believe that the "old war stories" that were
> posted in this thread were just "jokes".

Uhh, yes Ted, you are that stupid.

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

944. F.S. - Tubes and many other items...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970125195700.OAA10639@ladder01.news.aol.com>
Source record: 98185

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #110-T.

945. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: orion@capital.net**
Message-ID: <32ea6a8d.10928815@news.capital.net>
Source record: 98186

gsparks@ix.netcom.com(Glenn Sparks) wrote:

<snip>
>I guess this is one of those area's where I don't have a black or white
>answer, but I do know when faced with someone running lots of power,
>who will not cooperate, killing their receive is the only way to get
>them off the air, none of the other tactics work, they just fix it, and
>start watching their station closely. The FCC won't help, unless they
>interfer with Police or medical there is not much chance of fixing the
>problem legally.

Well said, Glenn. Sometimes when all else fails, it's the only way.

--
73,
Butch N2YMJ
(To send mail, delete the
two stars at the end of my address.)

946. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: orion@capital.net**
Message-ID: <32ea6b62.11141312@news.capital.net>
Source record: 98187

b2dude@aol.com (B2Dude) wrote:

>This jammer might also interfere with the 27mhz R/C car band! If they are
>running a 60m.p.h. gas car, U could really screw ther day. Be nice and
>don't build it. some cars cost $1000+!!!

Anybody who is foolish enough to operate a radio-control car
anywhere near 27 Mhz is asking for a crash anyway.

--
73,
Butch N2YMJ
(To send mail, delete the
two stars at the end of my address.)

947. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: a.p.vanderwel@student.utwente.nl
Message-ID: <5cdqnu$dvv@dinkel.civ.utwente.nl>
Source record: 98188
Cross-posted to:
sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew

>Now for REAL low production, how about a 535B??? To the best of my
>knowledge, there was only ONE ever made..... And to answer your next
>question....nope, I don't have it, but I know where it is! ;-)
>
>Fun to see conversation about these old scopes. Best built there ever
>was. Period. My favorites are the 555, 556, 549 and 547. INCREDIBLE
>displays that make modern stuff look like it's out of focus..... And
>tunnel diode triggering that leaves TTL in the dust.
>

For anyone else out there interested in these old scopes, may I welcome you to have a look at my website, which can be found at:

http://cal003109.student.utwente.nl/~wel/tek.htm

P.S. I still need pictures + info on the 535B!

Regards,

Arnoud.

948. Re: H.V. switching supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970125132535.1457G-100000@oso.slonet.org>
Source record: 98189

The article containing the switching KW power supply is in the Feb 1991
issue of QEX. It was written by W9QQ and was for 2000 volts at 1.5 amp.
Cliff Buttschardt K7RR

On 25 Jan 1997, Steven Kerns wrote:

> In article <32E99787.4B27@ford.com>, UN93B@ford.com says...
> >
> >Has anyone tried to make a 3000vdc 1 amp switching
> >power supply? Is it practical? Can it be done?
> >
> >Thanks, Brett
>
> Yes Brett, it has been done.
>
> There was a excellent article written a few years back in
> "QEX". The project utilized power FETs and toroid transformers.
> The power supply operated off 220V and gave in the area of 3KV
> at 1 amp to power a 3-500Z. Let me know if you find the exact
> month and year of this article, I would also like to ge a reprint!
>
>
> 73 Steve N3FTI
>
>
>
>

949. Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: moore@vnet.net
Message-ID: <5ce12h$gbe@ralph.vnet.net>
Source record: 98190
Cross-posted to: rec.crafts.brewing,rec.radio.amateur.homebrew

I am asking this question for my husband who has just completed making his first batch from a kit we bought in the wireless catalog for Christmas. He is hooked!

He would like to know if you can use a 7.5 gallon carboy to rack off 2 gallons of beer? The kit has all of the equipment (except a place to rack off) for 2 gallons. He knows that he would like to expand soon to making 5 gallons at a time and he does not want to invest in two different size carboys.

Any help would be appreciated!

Diane Moore
moore@vnet.net

950. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2501971414410001@news.vcnet.com>
Source record: 98191

In article <19970124174900.MAA03388@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <measures-ya02408000R2301970822260001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
> >
...snip...

Mr. Rauch:
We need to discuss Wes Stewart's measurements of the parallel-equivalent resistance (Rp) for different types of VHF parasitic-oscillation suppressors. .

--
--Rich-- ag6k, 805-386-3734

951. WTD:Solid Stae 866's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-25 00:00:00 UTC
From: wayne@h2net.net
Message-ID: <32ea8e2c.1556095@freedom.interealm.com>
Source record: 98192

Looking for a pair of soild state replacements for an 866.

e-mail with price

thanks

wayne@h2net.net, WA2KEC
Wayne Wicks
WA2KEC
wayne@h2net.net

952. 486DX50 wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: pdrunen@aol.com
Message-ID: <19970126212000.QAA19068@ladder01.news.aol.com>
Source record: 98043

I am looking for a 486DX50 50 Mhz processor. Please email to pdrunen@aol.com or KJ4UO@AOL.com

Thanks!

953. FS: Collins Crystal Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Jerry and Gail <jerryandgail@earthlink.net>
Message-ID: <01bc0bb7$ad892be0$38eb2399@newmicronpc>
Source record: 98044

For Sale: Collins Crystal Filter, Part No. 526-7752-001, Model No.
XIM00B100.
Serial no. 00001. Used.

I believe that this is 1.0 Mhz center frequency, 100Hz bandwidth, but am
not sure. It may be a special one-off unit made for a particular customer
for development purposes.

Asking $75.

Jerry AI6L (415) 854-2509 jerryandgail@earthlink.net

954. Re: QRP CRYSTALS FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: rflukes@silver.cs.umanitoba.ca
Message-ID: <5cfq0jqfp1@canopus.cc.umanitoba.ca>
Source record: 98045

In article <5cbngn$bb@news.teleplex.net> pbunn624 (Pat Bunn) writes:
>I have the following QRP calling frequency xtals for sale. All are
>HC49 wire lead case and are new.
>
>7040 Khz 10106 Khz 14060 Khz 28060 Khz 3rd OT
>
>22Mhz 3rd OT for 6 Meter RX converter
>
>All are $4.50 each or three for $10 plus $1.50 postage.
>
>Also have some 624 KITS Oner 1/2 watt transmitter kits for $12 including
>XTAL
>
>Pat Bunn
>
Pat,

Could you please post your email address. I, and probably many others,
would like to purchase some of your crystals.

Thanks,
--Richard, VE4AIV
--
Richard F. Lukes rflukes@cs.umanitoba.ca
55 Vista Avenue
Winnipeg, Manitoba R2M 4Z1 HOME: (204)-257-6701
Canada

955. Re: Apologies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32EC3E62.72CF@idecc.com>
Source record: 98046

Diane Moore wrote:
>
> My sincere apologies to all of you that I upset so terribly by posting
> a beer related question on this board.
>
> It was an honest mistake and I would have appreciated a polite warning
> rather than an email attack!
>
> Unwanted Intruder
> Diane Moore
> moore@vnet.net

Yea, we get a few beer brewers through here from time to time. Too bad
you got chewed out, I always get a kick out of it. Got any Nut Brown Ale
you need help getting rid of?
--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

956. 30m DC RX, want AM for WWV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32EC42C6.446D@idecc.com>
Source record: 98047

After building a couple simple DC and superhet receivers I am wondering what must be done for AM reception? Someone said increase the gain of the LO going to the mixer, is that correct?

Would someone kindly explain the difference in the audio portion of the reciever.

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

957. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Paul Larson <plarson@xmission.com>
Message-ID: <32EC2D31.4FE@xmission.com>
Source record: 98048
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Steve - KF2TI (Landing, NJ) wrote:
>
> In article <5bvm3c$qdr@boursy.news.erols.com>, holstein@erols.com says...
> > Does anyone know of a mod to make the Realistic HTX-212 transmit out
> > of band??? I want to be able to use this radio on my boat on the
> > marine band instead of buying another radio.
> >
> > Thanx for any help.
> > David, N3NGB@KE3GP.MD.USA.NOAM
> > holstein@erols.com
> > dholstein@comcastpc.com
> >
> >
> From past posts, it can't be done, despite what you'll read to the
> contrary
> --
> Steve KF2TI
> ARRL LIFE Member
>
> If you push something hard enough, it will fall over
> Fudd's 1st law
>
> if it goes in, it must go out
> Testlicurs deviate to Fudd's law

"it goes in and out like anything!"

958. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970126221835.12355E-100000@keystone.intergate.net>
Source record: 98049

when i first got into cb, we used to run remolt plains on there back in the early 60's so take care.

959. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970126220655.12355A-100000@keystone.intergate.net>
Source record: 98050

hi there, c-b isn't made for testing equipment anyway.

960. Re: Newsgroup Wishlist

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970126221123.12355B-100000@keystone.intergate.net>
Source record: 98051
Cross-posted to:
rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,news.admin.hierarchies,news.groups

hi there, i aggree with you, i am blind, and have to listen to the voice synthesyzer, and i wish they wouldn't post pictures on web sights. the fellow that invented netscape should have his but kicked, because it don't do the blind any good. so take care all from n4pge in griffin, georgia.

961. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970126221642.12355D-100000@keystone.intergate.net>
Source record: 98052

hi there, he sounds like a nut for sure, i have been a ham for years, and haven't seen some act like that. .73's from n4pge in griffin, georgia.

962. Re: Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970126223047.12355I-100000@keystone.intergate.net>
Source record: 98053
Cross-posted to: rec.crafts.brewing,rec.radio.amateur.homebrew

what does that have to do with ham radio? i am n4pge in griffin, georgia.x

963. Re: Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970126222417.12355G-100000@keystone.intergate.net>
Source record: 98054
Cross-posted to: rec.crafts.brewing,rec.radio.amateur.homebrew

she sounds like a nut to me also.

964. Re: (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970126223212.12355J-100000@keystone.intergate.net>
Source record: 98055

well type somthing, don't do that again.

On 26 Jan 1997, aziz sua tortu wrote:

> DELETE ham-homebrew
>
>
>

965. Re: Q: Use pkt connections for autopatch?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "Christopher (Chris) W. Boone (WB5ITT)" <cboone@earthlink.net>
Message-ID: <32EC364A.3352@earthlink.net>
Source record: 98056
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Sean wrote:
>
> Soon I'm going to be installing an audiopatch on my mobile radio in
> the house. Rather than use the 8-pin connector on front, it'd be
> much more convenient to use the 2 jacks in the back intended for

Use of an autopatch on a home station falls into the same rules as a rptr autopatch...you MUST have remote control of the station (either wireline OR RF ABOVE 222.15 Mhz), it MUST ID properly at 10 min intervals when in use, and a control op MUST be present at the control point when it is in use....
> packet. The main question is, are the audio in/out & ptt connections
> in back equivalent to the front conncetor and the external speaker
> jack? The instruction book says "The PTT control through the rear
> jack is solely for packet use only, and may not exhibit the same
> characteristics as the microphone PTT".... To me it seems like it
> would work the same... any input? Please email replies back to me.
> Thanks in advance.

The packet PTT may have a short timeout timer built into it.....I doubt it but it seems the manual seems to indicate this...what rig is it and what is your callsign??

Chris
WB5ITT

966. Re: How works VSWR measuring equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.ch.intel.com>
Message-ID: <32EC275A.7E8B@ccm.ch.intel.com>
Source record: 98057
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Roy Lewallen wrote:
> (Well, Cecil still does, but he's the only one I know of.)

Hi Roy, actually I take the ratio of Imax to Imin to obtain the SWR on my ladder-line. However, I think I understand how the average SWR meter works. With a capacitive divider across the conductors, it yields a voltage proportional to the T-line voltage. With a conductor running through a toroidal pickup it yields a voltage proportional to the T-line current. Since by definition, the forward voltage is in phase with the forward current and the reflected voltage is 180 degrees out of phase with the reflected current, then the forward power is V*I*Cos(theta) and the reflected power is V*-I*cos(theta) assuming the SWR meter has been calibrated such that the voltage proportional to the voltage and the voltage proportional to the current are equal for a characteristic impedance of Z0 and load of Z0 ohms.

This is easy to do for unbalanced lines. However, for balanced lines, one cannot assume that the currents in the lines are the same because of common mode currents. (Same problem can exist in unbalanced lines with braid currents).

Why in the heck can't I buy a 300 ohm or 450 ohm balanced SWR meter?

73, Cecil, W6RCA, OOTC

967. Re: VHF/UHF NF optimization

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com.DELETE-FOR-EMAIL>
Message-ID: <32EC2A6F.478C733@primenet.com.DELETE-FOR-EMAIL>
Source record: 98058

Gary Coffman wrote:
>
> N7WS wrote:
> >In article <1997Jan12.163113.18881@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman)
writes:
> >[snip]
> >
> >> As I noted above, at VHF+, internal noise determines the floor of
> >>the receiver, so as much signal power as possible must be coupled to
> >>the first amp to overcome that.
> >
> >No, there is an optimum source impedance which the active device wants to see
> >to deliver the lowest noise figure. More often than not, the input match is
> >very poor. I have seen VSWRs of >6:1 on some LNAs. This is a terrible match,
> >but delivers the best noise figure.
>
> You're right. Even at VHF+ a power match isn't always desirable.
>

{snip}

Ya but...

I think you can always match the impedance that the device wants to
"see"
for optimum NF to 50 ohms and get a 1:1 VSWR. The cruddy VSWR is not
necessity for low noise. The problem is that the GaAsFETS that are
used for this purpose are frequently unstable when matched in this
configuration. Hence a little bit of the noise figure is traded for
a good bit of stability by mismatching the device.

BTW, there are other methods of enhancing stability without causing
a poor match to the source and load.

Bob
WA3TGF

968. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <32EC4B4E.670C@wenzel.com>
Source record: 98059

I have such a receiver in our technical library at www.wenzel.com. I had a lot of fun with such receivers when I was younger - until I discovered the superregenerative detector!

969. Re: READ ME NOW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <32EC4BB2.520F@wenzel.com>
Source record: 98060

I have a few in the technical library at www.wenzel.com :)

Stop picking on the poor boy wrote:
>
> I am looking for a wed site that has a lot of projects on can build.
> Schematics and such. Thanks!

970. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970126223632.12355M-100000@keystone.intergate.net>
Source record: 98061

i aggree with 100 percent.

971. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: aziz@turnet.NET.TR
Message-ID: <32EB19A8.733D@turnet.net.tr>
Source record: 98105

```
DELETE ham-homebrew
```

972. Re: Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: au@ix.netcom.com
Message-ID: <5ce86k$bc8@dfw-ixnews5.ix.netcom.com>
Source record: 98106
Cross-posted to: rec.crafts.brewing,rec.radio.amateur.homebrew

>He would like to know if you can use a 7.5 gallon carboy to rack off 2
>gallons of beer? The kit has all of the equipment (except a place to
>rack off) for 2 gallons. He knows that he would like to expand soon
>to making 5 gallons at a time and he does not want to invest in two
>different size carboys.
>

Doggone it! She found out the real purpose of this newsgroup!

973. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <E4LC14.Iqq@eskimo.com>
Source record: 98107
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

mohaase@nilenet.com (Marty Haase) writes:

>Just found my catalog from AMIDON Associates..
>12033 Otsego Street, North Hollywood, CA 91607.
>I read some thing that led me to beleve they may be out of business though.
>Anyway... Ferrite rods are available in two materials:
>R61 material - 125 permeability (.5 - 30 MHz)
>R33 material - 800 permeability (.001 - 1 MHz)

The effective perm drops depending on length. I used R61 with 200T (wound
bifilar. BTW, Amidon got these rod from Fair Rite Inc.

>Does this suggest a possible source for your problem?
>Amidon sells rods that are .5" x 2", 4", 7.5" and .75" x 12".
>for a .5 x 7.5 inch rod:
>R61 - Al(mH/1000t) = 49
>R33 - Al(mH/1000t) = 89

>We have a WWVB receiver at work made by TrueTime Instruments.
>It uses a ferrite rod antenna in a plastic pipe about 10 inches long.

Is the rod 10" or the pipe 10"?

>The pipe has a one or two transistor pre-amp in it too.
>BTW, I am in Longmont CO, just 50 miles from Fort Collins where the
>WWVB transmitter is. Sometimes our receiver looses WWVB phaselock!

See www.boulder.nist.gov/timefreq/wwvstatus.htm for upgrade status
of WWVB (13kW to 40kW by September).

>Marty

>--
>==
>You've got to be tough
>If you're going to be stupid
>==
--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

974. Re: Tektronix O'scope Power Connector Info Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <E4LC8u.Iyu@eskimo.com>
Source record: 98108
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

"Tom C. Brown, Jr." <tbrown@TECLink.net> writes:

>Don Wall wrote:
>>
>> Maybe so, but who besides you and ever heard of a 545B? There
>> were very few made, compared to thousands of 545A's.
>>
>> Don

>I've got one!

>Fun to see conversation about these old scopes. Best built there ever
>was. Period. My favorites are the 555, 556, 549 and 547. INCREDIBLE
>displays that make modern stuff look like it's out of focus..... And
>tunnel diode triggering that leaves TTL in the dust.

My favorite screen of all time was the 647A. Great tube-- 100MHz.
But newer features and better triggering make it a dinosaur.
I still keep a 561A around for LF work (plug-ins are really cheap and
pretty easy to find).

>73, Tom KJ5IE

--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

975. 47 MHz Henry amplifier conversion to 6M?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: jaanstad@aol.com
Message-ID: <19970126031600.WAA02493@ladder01.news.aol.com>
Source record: 98109

Does anyone know if a 47MHz Henry amplifier could be converted to work on 6M? This is quesrtioned as there is an advertisement for the sale of an amp. The seller does not convert. Should I buy and have someone convert?

976. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "Michael St. Angelo"
Message-ID: <5cekiq$3ea@mtinsc03.worldnet.att.net>
Source record: 98110

It is true most parts suppliers are gone but there are still
some around.

MHZ Electronics is still in business with those surplus
filters. Their number is 800 528-0180.

Check out Dan's Small Parts: www.fix.net/dans.html

Michael St. Angelo N2MS email:mstangelo@worldnet.att.net

977. VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: henryt@perth.DIALix.oz.au
Message-ID: <5cemoadnl1@perth.DIALix.oz.au>
Source record: 98111

Hi,
Hass anyone had any experience with making crystal sets using
germanium diodes for VHF bands? I am interested in knowing if it is
possible to use a germanium diode crystal radio to pickup airband signals.
I have very vague memories of a kid at school owning a pen sized
airband receiver.
If it is possible can I just use the standard crystal radio design but
alter the LC circuit to the frequencies of choice?

Best Wishes,
Henry Titchen.
VK6HJT

978. FS: REPEATER CONTROLLER WITH PHONE PATCH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: dwhowell@iamerica.net
Message-ID: <32ead955.3406228@nntp.iamerica.net>
Source record: 98112
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

For Sale,
Hamtronics Repeater Controller with AP3 Phone Patch. All in good condition. All you need is a simple transmitter and receiver. The controller also has a port for an auxilary receiver, good for linking to another repeater. This controller was factory built, not a kit. Comes complete with owners manual. Price is $200 shipped.

ab5lg@iamerica.net

OMNI J ANTENNA INFORMATION
http://cust.iamerica.net/dwhowell/omnij.htm

979. Re: Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: JohnBoy <Bong141@ix.netcom.com>
Message-ID: <01bc0b4b$282cab00$519d20cc@#bong141>
Source record: 98113
Cross-posted to: rec.crafts.brewing,rec.radio.amateur.homebrew

NO!

That is way too much airspace above the beer. It will oxidize in no
time. Use the proper carboy for the proper amount of beer.......
just spend the money in getting the correct size carboy, or you
can waste your money on oxided beer.

my 2 cents

JohnBoy

au <au@ix.netcom.com> wrote in article
<5ce86k$bc8@dfw-ixnews5.ix.netcom.com>...
:
: >He would like to know if you can use a 7.5 gallon carboy to rack off 2
: >gallons of beer? The kit has all of the equipment (except a place to
: >rack off) for 2 gallons. He knows that he would like to expand soon
: >to making 5 gallons at a time and he does not want to invest in two
: >different size carboys.
: >
:
: Doggone it! She found out the real purpose of this newsgroup!
:
:
:

980. Rejuvenating NiCad Battery Packs (HOW TO)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: bjnash@connectnet.com
Message-ID: <32ec0005.8739336@news.connectnet.com>
Source record: 98114
Cross-posted to: misc.forsale.computers.pc-specific.portables,comp.sys.laptops,alt.cellular,alt.cellular.motorola,alt.cellular.gsm,rec.aviation.misc,rec.radio.amateur.homebrew

Do it yourself and save!
Find out how to rejuvenate NiCads by getting the info file by
auto-responder. Send email to nicads@pdsig.com Fix/Make your own
packs or just find out where to get them repaired/replaced!
(No obligation, no salesmen will call).
BJ
AIRCRAFT REMANUFACTURING
1291 E.Vista Way, #150
VISTA, CA. 92084 (619) 749 0239 FAX: 749 6384
Aviation Parts Sales Directory: Infobot@pdsig.com

981. Ham Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <32EB224B.6A08@cyberramp.net>
Source record: 98115

http://www.cyberramp.net/~rnewland

982. Re: 3-500z help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2601970030500001@news.vcnet.com>
Source record: 98116

In article <32EADD69.2F63@southwind.net>, Lee Buller <k0wa@southwind.net> wrote:

> Brian Carling wrote:
> >
> > Hello Gary -
> > The ARRL Handbook says that the maximum safe grid current would be
> > undefined(!)
> > Plate current maximum is 400 mA
> > Remember that is an absolute maximum rating. You wouldn't want to run it
> > anywhere close to that high if you want good tube life.
> >
> > Now the grid current is typically run at about 115 mA on a 3-500Z
> > and most other tubes in that class seem to have amaximum grid current
> > rating of around 120 mA so I sure wouldn't want to push it much beyond that!
>
> All of what you said is true above...but I would like to make some
> points here. I have the Ameritron AL80A which is one 3-500Z. I talked
> to the designer of the amp and he says you can use more current through
> the tube than the 400 MA on SSB.

Not according to Eimac. Are you more inclined to believe the designer of
the tube---or to believe a person who refered to himself as a recognized
'amplifier expert' in a letter to QST magazine [9/94, p.71]?

>The facts are, that tube life of a
> thorated tungsten tube is based on filament voltage and emission, not
> plate current.

It is true that the issue is not tube life. The issues are rotten splatter
and rotten advice from a self-recognized 'expert'.

> The saturation point for a 3-500 from plate current is
> 2-amps!

According to Eimac's characteristic curves for the 3-500Z, above a peak
anode/'plate' current of about 1.3 amps, the 3-500Z becomes progressively
less and less linear. 1.3 peak amps corresponds to an anode current of
about 400mA.

> Yes, watch the grid current, but you can load the thing up more than 400
> ma... It is better to do this in SSB...and run 400 MA on CW.
>
.............not if you want to run a clean signal on SSB.

--
--Rich-- ag6k, 805-386-3734

983. Re: Transmit and Receive antennas in close proximity

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5cf7j0$3ci$1@nadine.teleport.com>
Source record: 98117
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <5c7vaf$18e$1@csnews.cs.colorado.edu>,
efricha@alumni.cs.Colorado.EDU (Eric F. Richards) wrote:

>The antennas (antennae?) are only 4 feet apart. Is my concern valid?

Don't know the answer to your real question, but antennae is plural for the
things bugs have. Antennas is plural for the things hams have.

Roy Lewallen, W7EL

984. Re: How works VSWR measuring equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5cf8fv$3ci$3@nadine.teleport.com>
Source record: 98118
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

>My name is Chiron and I'm a student at a Dutch school.
>There are a lot of VSRW measuring equipment available in electronic shops,
>but I can 't find books or other literature about the theoritical working
>of those VSWR equipment. The prinsipal of VSWR is not a problem but I want
>to know some implementations and how it works.
>If you know some good books or publications please send me a mail.
>Greetings and thanks in advance

As Wes Hayward pointed out to me just the other day, we seldom actually measure VSWR directly any more. (Well, Cecil still does, but he's the only one I know of.) Slotted lines are no longer in general use. More often we measure reflection coefficient and calculate VSWR or return loss from it. So you might look in textbooks for the topics "return loss" or "reflection coefficient". Two books I can recommend are _Introduction to Radio Frequency Design_ by Wes Hayward, now being reprinted by the ARRL; and _Solid State Design for the Radio Amateur_ by Wes Hayward and Doug DeMaw. It's also an ARRL publication (still in print, I hope).

Roy Lewallen, W7EL

985. Re: Opinions WTD: TenTec 6M Xvtr/Hamtronics 2M Cvtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc0b49$dab45220$6dc56cce@default>
Source record: 98119
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Paul,

I have built both. In my opinion, the Ten-Tec is *much* better. The Hamtronics kit was not great on the RX side. The sensitivity was poor and it had a tendency to oscillate.

The Ten-Tec kit has a decent receiver and furthermore, it has a built-in TX/TX switch. Using 20 as the IF, on the other hand, has the disadvantage that you are only able to work on a limited part of the band. The advantage is that you can now use another transverter (say 144 or 222 MHz) at the same time.

73 de VE7MDL ....Erik.

Paul Knight <pknight@elec.ctl.etn.com> wrote in article
<32E7E6BF.17EF@elec.ctl.etn.com>...
> Hi! I'm seeking opinions on both the TenTec 6M
> Xverter kit and the Hamtronics CA144-28K (10M->2M
> rx converter kit). If anyone has built either of
> those, I'd appreciate hearing your war stories
> before I commit to a purchase.
>
> --
> Thanks & 73,
>
> Paul Knight WD8DKY
> pknight@elec.ctl.etn.com
>
> -or-
>
> PEKnSLK@aol.com
>

986. SSB filter / IF amp using opamps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: maroof@cybersys.net
Message-ID: <5ceuqmfgh1@post.servtech.com>
Source record: 98120
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Has anyone tried to build IF amp NB filters with general purpose / high frq opamps (like TL071, CA3130)?

I tried making a narrowband active SSB filter with TL071. used a 455KHz ceramic resonator int the noninv amp feed back loop, (replaced the feedback bypass cpacitor with the resonator). The result was, a very high Q filter around 455KHz (certainly many times higher than the resonator) with about 28dB gain. Don't have a frq counter, so can't find actual cutoff frq. Do you think this would work well in Tx/Rx IF system?

Trying to eliminate complex tuning / coupling networks in IF systems with easy to build & couple blocks. (like the good old SL6xx chips). Anyone interested? Please help.

Thanks for reading.

Maroof
<maroof@triton.kaifnet.com>

Maroof H. Choudhury
maroof@triton.kaifnet.com

987. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <MLqu7DAwty6yEwga@ifwtech.demon.co.uk>
Source record: 98121

Jeff Duntemann wrote:
>tomb@lsid.hp.com (Tom Bruhns) wrote:
>
>>For the most
>>part, I don't have any reason to use fine-pitch parts in my homebrew
>>designs anyway, except for a very few special things (perhaps like the
>>latest family of Analog Devices DDS chips).
>
>The other issue is that some other really simple and useful parts
>(like Motorolas MC3363 one-chip NBFM receiver) are available ONLY in
>the SMD package. I'd use it in a second if I could get it in a DIP,
>but an amazing number of really simple parts like audio amps are now
>appearing solely as SMD. This bodes ill, guys.

Don't forget that you can buy "spreaders" to mount SMD chips on a 0.1in
DIL pin header. For UK readers they're in the Farnell catalogue; could
somebody please re-post details of a US distributor?

Unfortunately they're expensive for such small and simple items.
It would be a real public service if somebody could offer the
electronics homebrew community a board containing a selection of say 20
pre-etched SMD spreaders in different sizes, etched but un-drilled, so
we could cut out just the ones we need.

>That's why I'm
>keeping my milk carton of tube sockets.
>
...along with various other irreplaceable trasures that are older than
the owner.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

988. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan26.144104.29369@ke4zv.atl.ga.us>
Source record: 98122

In article <32E8A99B.17B4@li.icl.se> janax@li.icl.se writes:
>Jeff Duntemann wrote:
>> tomb@lsid.hp.com (Tom Bruhns) wrote:
>> >For the most
>> >part, I don't have any reason to use fine-pitch parts in my homebrew
>> >designs anyway, except for a very few special things (perhaps like the
>> >latest family of Analog Devices DDS chips).
>>
>> The other issue is that some other really simple and useful parts
>> (like Motorolas MC3363 one-chip NBFM receiver) are available ONLY in
>> the SMD package. I'd use it in a second if I could get it in a DIP,
>> but an amazing number of really simple parts like audio amps are now
>> appearing solely as SMD. This bodes ill, guys. That's why I'm
>> keeping my milk carton of tube sockets.
>
>IMHO it's not that bad. I've always hated the board drilling process so
>I've used SMD technology the last 20 years, long before SMD was common.
>Just bending the legs on normal components.
>
>Now with the modern fine pitched SMD IC's I use a midget soldring iron
>with a very fine tip and fine gague solder wire. IC's with 50 mil pitch
>and resistors/capacitors of size 1206 are easy to solder. A good pair of
>tweezers are handy. Below 50 mil will require a good stereo microscope.

With a static hot air source and solder paste, SMD is easier
than DIP. The Weller Pyropen Jr makes an excellent static hot air
source which is inexpensive and cordless. It is simply amazing to
watch the tiny parts align themselves when you give them a shot of
hot air. The surface tension of the melted solder paste on the pads
literally pulls the part into perfect alignment. No muss, no fuss.

The very fine soldering iron tips can be a problem. They don't have
enough mass for good heat flow, so it takes too long to make a joint.
That allows time for heat to migrate up into the chip. If you solder
the pins one immediately after the other, you can exceed the chip's
temperature limits before you're done. With the static hot air, one
quick shot gets all the pins at once, and heat doesn't have time to
migrate inside the chip.

The pitch of the pins is also pretty much irrelevant when using the
static hot air source. Solder bridging is controlled by the amount
of solder paste you apply to each pad. With a little practice, you
learn how much is enough, and how much is too much. I use a sharp
wooden toothpick to apply the paste. This is the most tedious part
of the procedure, and I use an 8x jeweler's loupe to make sure I

put the paste squarely on the pad. Then you just set the part roughly in place with a pair of tweezers and hit it with the hot air. It will self-align perfectly due to the surface tension of the melted solder.

The only problem I've had is getting solder paste at a reasonable price. Only one local vendor carries it in stock, and he wants an arm and a leg for a small syringe of it. I've had to order it in bulk from an industrial supplier to get a decent price. The stuff has to be refrigerated if you're going to store it for a long time. (I assume that's to keep the lead/tin alloy from settling out of suspension by keeping the flux binder stiff.)

I don't know how solder paste is made. I assume it is lead/tin alloy powder in a water based flux suspension. I wonder if we could mix up our own in an old blender. Anybody know how this stuff is made?

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

989. Re: VHF/UHF NF optimization

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan26.144442.29446@ke4zv.atl.ga.us>
Source record: 98123

N7WS wrote:
>In article <1997Jan12.163113.18881@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman)
writes:
>[snip]
>
>> As I noted above, at VHF+, internal noise determines the floor of
>>the receiver, so as much signal power as possible must be coupled to
>>the first amp to overcome that.
>
>No, there is an optimum source impedance which the active device wants to see
>to deliver the lowest noise figure. More often than not, the input match is
>very poor. I have seen VSWRs of >6:1 on some LNAs. This is a terrible match,
>but delivers the best noise figure.

You're right. Even at VHF+ a power match isn't always desirable.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

990. Apologies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: moore@vnet.net
Message-ID: <5cfsje$sjb@ralph.vnet.net>
Source record: 98124

My sincere apologies to all of you that I upset so terribly by posting a beer related question on this board.

It was an honest mistake and I would have appreciated a polite warning rather than an email attack!

Unwanted Intruder
Diane Moore
moore@vnet.net

991. Re: SSB filter / IF amp using opamps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "James P. Meyer" <jimbob@acpub.duke.edu>
Message-ID: <Pine.SOL.3.91.970126102950.4389A-100000@godzilla2.acpub.duke.edu>
Source record: 98125
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Sun, 26 Jan 1997, Maroof H. Choudhury wrote:

> I tried making a narrowband active SSB filter with TL071. used a 455KHz
> ceramic resonator int the noninv amp feed back loop, (replaced the feedback
> bypass cpacitor with the resonator). The result was, a very high Q filter
> around 455KHz (certainly many times higher than the resonator) with about 28dB
> gain.

Very high Q doesn't always mean you have a bandwidth that will do
you any good or that the bandwidth is flat across the top.

You need to build a simple signal generator so you can look at
the bandwidth in detail. If you had a 'scope, you could build a simple
"sweeper" to make the job even easier.

Jim

992. READ ME NOW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Stop picking on the poor boy <Tim_Raffety@Oxy.com>
Message-ID: <32EB7C1C.7A8C@Oxy.com>
Source record: 98126

I am looking for a wed site that has a lot of projects on can build.
Schematics and such. Thanks!

993. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "R.A. Currell" <lg82@dial.pipex.com>
Message-ID: <32EB86FA.2FFB@dial.pipex.com>
Source record: 98127

From Bob Currell G4EIK
I hope you find what you want Steve, but have you realised that you are expecting near crystal oscillator level performance from a VCO.

It would need a very tight filter bandwidth to get very much better than -107dBc at 10kHz although it is possible.

If you do find it you will have to pay well for the result, unless you design it yourself of-course.

Good luck with the search.

Bob.

994. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "R.A. Currell" <lg82@dial.pipex.com>
Message-ID: <32EB86E7.3907@dial.pipex.com>
Source record: 98128

From Bob Currell G4EIK
I hope you find what you want Steve, but have you realised that you are expecting near crystal oscillator level performance from a VCO.

It would need a very tight filter bandwidth to get very much better than -107dBc at 10kHz although it is possible.

If you do find it you will have to pay well for the result, unless you design it yourself of-course.

Good luck with the search.

Bob.

995. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "R.A. Currell" <lg82@dial.pipex.com>
Message-ID: <32EB8D8B.7CE4@dial.pipex.com>
Source record: 98129
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Scott Coburn wrote:
>
> I have built a WWVB (60kHz) VLF radio receiver. It is the receiver
> designed by Bob Roehrig and described in the article "Most Accurate
> Frequency Standard, Parts 1,2,3", 73, Jan/Feb/Mar 1994. It is a
> Tuned Radio Frequency (TRF) receiver with an active ferrite rod antenna.
>

From Bob G4EIK
A better way is to try connecting up your loopstick antenna with its capacitor etc connected and try to find the resonance with a gate dip oscillator if you have one as this avoids any chance of loading errors from your measuring bridge as the circuit is quite a high impedance.

Your idea of using your signal generator is quite a good one. If you don't have a gate dipper, make a small coil of wire linked between the inner and outer of your sig-gen output and hold this a few inches from your antenna, the signal should easily be heard. If you then try tack soldering extra capacitors across the resonating capacitor it should be possible to find the resonant point of the system, if your original measurement was right try with lower values.

Most standard ferrites for domestic radio antennas should be ok at 60kHz

I am sorry if the above is obvious to you and you have already done it. I hope you get it to work. I built a 60kHz rx years ago and use it regularly with some software written by G4MSV to decode MSF in the UK, it then puts the PC clock right.

Don't hack down the trees, at 60kHz They are unlikely to be a problem

73 de Bob G4EIK

996. Re: 2n1304, 2n1305 xsistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "R.A. Currell" <lg82@dial.pipex.com>
Message-ID: <32EB8FA5.50EB@dial.pipex.com>
Source record: 98130

Jeffrey Herman wrote:
>
> While dumpster diving, I came across dozens of boards containing
> 2N1304 and 2N1305 transistors. Are these good for RF applications?
> What's the maximum freq'y at which they'd still be useful?
>
> KH2PZ, Hawaii Dumpster Divers' Association

from Bob G4EIK.
Leave them in the skip! Ok at 2MHz if your lucky? Ft=4MHz.

73 de Bob.

997. Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Mel Robinson <mello@bconnex.net>
Message-ID: <01bc2407$3b77a8c0$b6c9bdcd@mello.bconnex.net>
Source record: 98131
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

If I buy a digital spred spectrum phone, and I phone someone who takes the call on either a cell phone or a 46-49 mhz cordless, will the conversation be picked up by a scanner, eventhough I am sending a digital signal?
If so, there is no such thing as a private conversation, until someone invents a pre-scanning device incorporated in the phone, that like call display tells you what type of phone you just connected too. There probably is a big market for such a device....If anyone markets such a device after to-day's date be prepared to share Revenues with me.
Bye

Mel Robinson

998. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Bill Newkirk <wnewkirk@iu.net>
Message-ID: <32EB8AC9.270@iu.net>
Source record: 98132

Ted wrote:
> Admit it... You dont give a hoot if the general public sees ham radio as
> a valuable asset to humanity or not.

and so what's your plan to tell the general public about how ham radio
is a
valuable asset to humanity?

--
Bill Newkirk WB9IVR The Space Coast Amateur Technical
Group
Melbourne, FL duty now for the future of amateur
radio
Lombardi's 1st Law of Business:
Companies succeed in spite of their best effort. If they succeed at
all.

999. Re: Newsgroup Wishlist

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Bill Newkirk <wnewkirk@iu.net>
Message-ID: <32EB8BE4.5957@iu.net>
Source record: 98133

Ted wrote:

teddy, teddy, teddy....you working for the induhvidual award or
something?

> I wish that I was the one to start these newsgroups. I'd have divided them
> up in better heirarchies like so:

well, go read up on how newsgroups get started..if you can get everyone
to
agree with your ideas, they could come to pass. There's been at least 1
Great Renaming already.

> Speaking of which, why DOESN'T Newsline have it's own read-only newsgroup?

because 1 time a week transcripts probably don't really rate a
newsgroup.
transcripts are posted in rec.radio.info.

> I have to go to FidoNet,(aka Fight-o-Nuts), to find Newsline online!
> Phooey on Fido!

only because you haven't asked how to get it from other sources.

--
Bill Newkirk WB9IVR The Space Coast Amateur Technical
Group
Melbourne, FL duty now for the future of amateur
radio
Lombardi's 1st Law of Business:
Companies succeed in spite of their best effort. If they succeed at
all.

1000. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: mwaldron@ohio.net
Message-ID: <5cg483$i78$2@news3.microserve.net>
Source record: 98134
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

In article <01bc2407$3b77a8c0$b6c9bdcd@mello.bconnex.net>, mello@bconnex.net says...
>
>If I buy a digital spred spectrum phone, and I phone someone who takes the
>call on either a cell phone or a 46-49 mhz cordless, will the conversation
>be picked up by a scanner, eventhough I am sending a digital signal?
>If so, there is no such thing as a private conversation, until someone
>invents a pre-scanning device incorporated in the phone, that like call
>display tells you what type of phone you just connected too. There
>probably is a big market for such a device....If anyone markets such a
>device after to-day's date be prepared to share Revenues with me.
>Bye
>
>Mel Robinson

If it transmits It's not secure. Both ends should use Wired phones (from which the security isues can be debated at a later time.)

1001. Re: SSB filter / IF amp using opamps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970126181800.NAA09113@ladder01.news.aol.com>
Source record: 98135

In article
<Pine.SOL.3.91.970126102950.4389A-100000@godzilla2.acpub.duke.edu>, "James
P. Meyer" <jimbob@acpub.duke.edu> writes:

>
>> I tried making a narrowband active SSB filter with TL071. used a 455KHz

>> ceramic resonator int the noninv amp feed back loop, (replaced the
feedback
>
>> bypass cpacitor with the resonator). The result was, a very high Q
filter
>> around 455KHz (certainly many times higher than the resonator) with
about
>28dB
>> gain.
>
> Very high Q doesn't always mean you have a bandwidth that will do
>you any good or that the bandwidth is flat across the top.
>
> You need to build a simple signal generator so you can look at
>the bandwidth in detail. If you had a 'scope, you could build a simple
>"sweeper" to make the job even easier.
>
> Jim

I would suspect unless you control the feedback level, the dynamic
range will be severely limited precluding its usefulness on SSB
signals.

Peter

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1002. Rejuvenating NiCad Battery Packs (HOW TO)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: bjnash@connectnet.com
Message-ID: <32eeb645.1032864@news.connectnet.com>
Source record: 98136
Cross-posted to: misc.forsale.computers.pc-specific.portables,comp.sys.laptops,alt.cellular,alt.cellular.motorola,alt.cellular.gsm,rec.aviation.misc,rec.radio.amateur.homebrew

Do it yourself and save!
Find out how to rejuvenate NiCads by getting the info file by
auto-responder. Send email to nicads@pdsig.com Fix/Make your own
packs or just find out where to get them repaired/replaced!
(No obligation, no salesmen will call). Remember, send to above email
address, not to me!
BJ
Tel Pay Clearings, Inc
(619) 749 7049
E-mail info: telpay@pdsig.com

1003. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: Leo Potjewijd <pe1rhx@worldonline.nl>
Message-ID: <5cfpcg$6es@neptune.worldonline.nl>
Source record: 98137

Jan Axing <janax@li.icl.se> wrote:
....snip snip ....
>I've soldered some 208 pin IC's with 20 mil pitch at work. Not easy!
I can agree!! I am nearsighted, so all I have to do is take off my
glasses. :^)

>Ball grid array packages are coming which are almost impossible for
>a hobbyist to handle.
Except, of coarse, when you use the all new ball-grid sockets. Read about
it in one of the professional mags (they DO exist), but have no clues
where to get them. Anyone?

>
>--
>Jan, SM5GNN
>Linkoeping, Sweden
>janax@algonet.se
>janax@li.icl.se

Keep the irons (whatever size) hot and build away!

73 de pe1rhx

1004. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5cg9mf$g62@hpscit.sc.hp.com>
Source record: 98138

In article <32EB86FA.2FFB@dial.pipex.com>,
R.A. Currell <lg82@dial.pipex.com> wrote:
>From Bob Currell G4EIK
>I hope you find what you want Steve, but have you realised that you are
>expecting near crystal oscillator level performance from a VCO.

I don't think so. A mediocre crystal oscillator will do -140
and a state of the art one with do -180.

>It would need a very tight filter bandwidth to get very much better than
>-107dBc at 10kHz although it is possible.

As I said, we did considerably better than that at Konel 20 years
ago by 1) tapping way down on the tank so the amplifier didn't
de-Q the tank and 2) keeping the gain down which raises the
signal to noise ratio at the input of the transistor. The Konel
KR-78 didn't have a very high Q tank, just a low impedance one.
Knowing what I know now, I could probably get another 10 dB.
without doing anything heroic. Just go thru Leeson's or Edson's
equations, and do what optimizes phase noise: high loaded Q and
high drive level to the input of the transistor. If you go to a
really high Q tank like the HP 8640, then you're looking at -130
to -140 at 10 kHz., and that was designed 25 years ago.

Rick Karlquist, N6RK
rkarlqu@scd.hp.com

1005. Re: Rejuvenating NiCad Battery Packs (HOW TO)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "Tim D. Strong" <strongtd@engin.umich.edu>
Message-ID: <32EBB474.1AEA@forgetit.com>
Source record: 98139
Cross-posted to: misc.forsale.computers.pc-specific.portables,comp.sys.laptops,alt.cellular,alt.cellular.motorola,alt.cellular.gsm,rec.aviation.misc,rec.radio.amateur.homebrew

BJ Nash wrote:
>
> Do it yourself and save!
> Find out how to rejuvenate NiCads by getting the info file by
> auto-responder. Send email to nicads@pdsig.com Fix/Make your own
> packs or just find out where to get them repaired/replaced!
> (No obligation, no salesmen will call). Remember, send to above email
> address, not to me!
> BJ
> Tel Pay Clearings, Inc
> (619) 749 7049
> E-mail info: telpay@pdsig.com

In a day when such info is easily placed on the web one has to assume
that replying to this message is going to get you on ALL KINDS of SPAM
lists.....

NO THANKS

1006. Re: 6m duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: kc6ovd@aol.com
Message-ID: <19970126202901.PAA16395@ladder01.news.aol.com>
Source record: 98140

A fine set of duplexers can be made for about 50.00 bucks! Or even less if you have a well stocked junk box. All you need are a bunch of coffee cans! some copper pipe aluminum plate ans a 150pf air tunnable cap. you will need to make 4 of these. The coffe cans will make a nice set of cans. I have a set on a repeter now each can has about 22db of notch with .5db pass loss.

Do not be fooled building cavities is fun and very simple. Once you become familiar with how they work. I have made a set with 8" aluminum irigation pipe and all the same hardware as with the coffee cans and have 35 db notch with them. I have not put any drawings together but I will try to get something done up in the future to send out to all. If you are near the Bakersfield area of Ca. I would be more than happy to show you how I have built the ones I have and show you working models of them.

Remember Ham Radio was founded on building and experimentation. So please try your hand at it.

Kevin H. King

1007. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc0bc7$cdf64ec0$add7e1ce@cstevens.usr.com>
Source record: 98141
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

Mel Robinson <mello@bconnex.net> wrote in article
<01bc2407$3b77a8c0$b6c9bdcd@mello.bconnex.net>...
> If I buy a digital spred spectrum phone, and I phone someone who takes
the
> call on either a cell phone or a 46-49 mhz cordless, will the
conversation
> be picked up by a scanner, eventhough I am sending a digital signal?

The converation could be monitored by a scanner in the area of the 46-49
phone,
assuming that the 46-40 phone has no scrambler or that the snooper is
sophistocated enough to unscramble the scrambled signal.

The digital spread spectrum phone is nominally *harder* to snoop on than
the
46-60 phone, but "spread spectrum" does NOT equal "secure" ... there is a
difference between PN codes used for spreading and "cryptographic" codes
which are used to provide security, however, many people seem to
erroneously
equate the two.

> If so, there is no such thing as a private conversation, until someone
> invents a pre-scanning device incorporated in the phone, that like call
> display tells you what type of phone you just connected too.

Short of systems which would employ true, powerful cryptographic data
security
techniques, there is no such thing as a (guaranteed) private phone call,
even on
a wired phone ...

>There
> probably is a big market for such a device....If anyone markets such a
> device after to-day's date be prepared to share Revenues with me.

On what basis? Surely you jest in implying that you've conceived of
something
novel here????

Carl - wa6vse
carl@ais.net

1008. WWVB VLF calibration rcvr info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-26 00:00:00 UTC
From: parnass@marconi.ih.lucent.com
Message-ID: <5cgef3$9jd@ssbunews.ih.lucent.com>
Source record: 98142

You can contact Bob Roehrig, K9EUI, author of the
WWVB receiver articles in 73 Magazine at this address:

E-mail: broehrig@admin.aurora.edu
CIS: Data / Telecom Aurora University, Aurora, IL
voice 630-844-4898, Fax 630-844-5530

Bob doesn't have access to usenet and asked me to post his address.
--
==========
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Locate & identify transmitters in your area with RadioMap(tm)

1009. ACARS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: William Vynck <William.Vynck@ping.be>
Message-ID: <32ED1F84.3A6B@ping.be>
Source record: 97993
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Who would help me ?

I'm intrested in everything about ACARS
I have found a schematic to build a ACARS interface. I can't test the interface because i don't have the program to decode them.

Who would like to send me decoder software via email ? (something like LOWE)

I'ts above my budget to buy a LOWE interface with the software, if i could test my interface i could affort it.

So to all spotters, radio amateurs... who send me software to decode ACARS (maybe there is schareware to decode them ?)

If you have any other suggestions to help me and it's about the ACAR system, be free to email them.

THANKS VERY MUCH !!!!

73
William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

1010. ++++WTB: CHANNEL ELEMENTS FOR MX-320++++

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19970127195200.OAA14918@ladder01.news.aol.com>
Source record: 97994

Hi,

I am need of several crystals. I need for the MX320, Tx and RX on 155.280, and PL 203.5. I need for the 340 TX and RX on 160.280, 160.200, 160. 215 and PL 167.9. I also need TX 160.935 and 153.965, and RX 159.885 and 155.955, with PL110.3 and DPL 074. I need some others. Any on ewho can help me out, please E-Mail me.

Thanx in advance
Mike

HQ54@Aol.Com

1011. Re: How works VSWR measuring equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ciuhn$fq7$2@nadine.teleport.com>
Source record: 97995
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <32EC275A.7E8B@ccm.ch.intel.com>,
Cecil Moore <Cecil_A_Moore@ccm.ch.intel.com> wrote:

>Hi Roy, actually I take the ratio of Imax to Imin to obtain the SWR on my
>ladder-line.

This is direct measurement and calculation of ISWR, which is numerically
the same as VSWR, commonly referred to as SWR. (I know you know this, but
some readers might not.)

>. . .

>Why in the heck can't I buy a 300 ohm or 450 ohm balanced SWR meter?

Maybe because people use 300 or 450 ohm line so they won't have to care
what the SWR is?

Seriously, if people could measure the SWR on these lines, it would take on
the same importance now given to SWR on coax. And for the same reason
-- because they could measure it. Just think of all those people spending
hours and hours getting the SWR down to 1:1 on their ladder lines so they
could get out better, like they do now with coax. An SWR meter for ladder
line sounds like a great opportunity for someone who wants to make a lot of
money and who has a cynical streak. Hmmm. . .

Roy Lewallen, W7EL

1012. Re: Any info on Homebrew repeater controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: akent@bga.com
Message-ID: <5cjem8$jfe@news3.realtime.net>
Source record: 97996

Be sure to check out the February issue of QST. They have a repeater
controller with a voice synthesizer, remote programmability, CW ID,
and more for about $60 bucks, if you build it.

Kent - de KC5WPW

Rodney S Baker <rsbaker@dove.net.au> wrote:

>DYee944658 wrote:
>>
>> Anyone have any info on homebrewing a repeater controller?
>> Only need basic features: CW ID, time out timer, courtesy tone and
>> squelch tail.
>>
>> Please contact me if you can share some info.
>>
>> Thanks

>VK5EX (Andrew McDade) here in Adelaide has a very good controller based
>on the 68HC11 micro. It does what you need and he has done a PC board
>for it. I don't think he's currently on internet but if you want I can
>pass messages to him. He can be contacted on AX.25 packet to
>VK5EX@VK5TTY.#ADL.#SA.AUS.OC - I'm sure he wouldn't mind a packet
>message from you.

>Cheers,

>--
>Rodney S Baker VK5ZTV@VK5TTY.#ADL.#SA.AUS.OC
>rsbaker@dove.net.au
>"All wiyht...rho sritched mg kegtops awound???!!!

1013. Schematics for PCL82 small tx

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Cesare.Lavazza@nemo.it
Message-ID: <32ed170f.3371955@news.interbusiness.it>
Source record: 97997

Where to find a schematic for a small AM tx with one or two PCL82 or
ECL82 or similar triode-pentode tubes?
Thanks.
Saluti.

E-mail: Cesare.Lavazza@nemo.it
WWW: http:\\radionostalgia.net\Users\Lavazza
http:\\www.geocities.com\CapeCanaveral\4573

1014. Re: Tube info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5cifub$di1@news1.mnsinc.com>
Source record: 97998

jeffd@coriolis.com (Jeff Duntemann) whistled a happy tune like:

|>Duck 1 <ducks@earthlink.net> wrote:

|>>Does anyone know of a good scorce for(or replacement for) 2E26 tubes?
|>>HEEELLLLPPPPPP!

|>The 2E26 is by no means scarce. Contact Antique Electronic Supply in
|>Tempe, AZ. Get their catalog. They have damned near every mainstream
|>receiving or power tube ever made.

|>--73--

|>--Jeff Duntemann KG7JF
|> Scottsdale AZ

ALSO guys, I have HUNDREDS of sources of tubes listed at my web site.

I am SURE that a large number of these guys and these companies have 2E26 tubes galore!

Look at TUBES.TXT - or click on the TUBES button
in the HAM RADIO RESOURCES section at the URL below!

ENJOY!

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1015. Marconi test equipment for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Rick Cruickshank <rick@keepntouch.com>
Message-ID: <32ED2C00.693C@keepntouch.com>
Source record: 97999

Marconi cellular test equipment for sale

Radio communications test set 2955 w/
Celluar radio test system 2957

The unit is in good condition but needs calibration and some
minor repairs. Marconi has a flat rate test/tune/repair fee of $890
on this unit. They sell the 2955b for $10,500 I am asking $4,000
as/is or $5,500 repaired. All reasonable offers considered.
--
" The immense importance of a pint of ale
to a common person should not be overlooked. "
Cannon of St Paul's Cathedral
18th Century

1016. NEED PHONE # FOR BOWMAR CRYSTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19970127195100.OAA14852@ladder01.news.aol.com>
Source record: 98000

Hi, I f any body has the number for Bowmar crystals, I would really appreciate it. E-Mail me

Thanx
Mike

HQ54@Aol.Com

1017. Re: ACARS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Mike Agner <ka3jjz@erols.com>
Message-ID: <32EDA096.109@erols.com>
Source record: 98001
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

William Vynck wrote:
>
> Who would help me ?
>
> I'm intrested in everything about ACARS
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> interface because i don't have the program to decode them.
>
> Who would like to send me decoder software via email ? (something like
> LOWE)
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> I'ts above my budget to buy a LOWE interface with the software, if i
> could test my interface i could affort it.
>
> So to all spotters, radio amateurs... who send me software to decode
> ACARS (maybe there is schareware to decode them ?)
>
> If you have any other suggestions to help me and it's about the ACAR
> system, be free to email them.
>
> THANKS VERY MUCH !!!!
>
> 73
> William
>
> --
> Visit my Homepage http://www.ping.be/RACO
> E-mail RACO@ping.be and/or William.Vynck@ping.be
> Fidonet 2:291/1800.15
> Radio Amateur ONL4021
> QSL via bureau UBA Belgium Hi Bill- much as I wish I didn't have to dash such a worthy
project to
date there is no shareware out there that handles ACARS. In addition, I
am told there are some (rather illegal) pirated copies of some of the
commercial software floating around...I am sorry to have to say
that...73s Mike (co-listowner ACARS listserver)

1018. Re: SSB filter / IF amp using opamps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com.DELETE-FOR-EMAIL>
Message-ID: <32ED6001.52540ED1@primenet.com.DELETE-FOR-EMAIL>
Source record: 98002
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Maroof H. Choudhury wrote:
>
> In article <Pine.SOL.3.91.970126102950.4389A-100000@godzilla2.acpub.duke.edu>,
> "James P. Meyer" <jimbob@acpub.duke.edu> wrote:
> >On Sun, 26 Jan 1997, Maroof H. Choudhury wrote:
> >
> >> I tried making a narrowband active SSB filter with TL071. used a 455KHz
> >> ceramic resonator int the noninv amp feed back loop, (replaced the feedback
> >> bypass cpacitor with the resonator). The result was, a very high Q filter
> >> around 455KHz (certainly many times higher than the resonator) with about
> > 28dB
> >> gain.
> >

Sounds regenerative...

{snip]

> I'm interrested to know about Q multipliers, what's the general configuration
> & how does it work. Can the ckt described above be working like a Q
> multiplier?

A Q multiplier relies on the fact that an amplifier that is regenerative
and
is on the verge of oscillation appears to have a higher Q than the same
circuit
that is not near oscillation. The Q increase is a direct result of the
positive feedback. If I remember, the amplifiers had a 'quench' knob
that allowed the
feedback to be varied. Too much feedback caused the amplifier to
oscillate.
Neat idea, but definiately was a high usage adjustment.

> Since the filter is intended for IF applications, is there anything special to
> be taken into consideration? Most IF amps (in IC form) are simple differential
> amps. Whay aren't opamps popular as IF amps, any specific disadvantage of
> opamps in this application?

The AD603 and brothers for Analog Devices are examples and have
linear-dB
gain control. Even better for for IF amplifiers.

> Thanks for reading the mail. Looking forward to your advice.

{snip]

Bob Doyle
WA3TGF

1019. Re: NEED PHONE # FOR BOWMAR CRYSTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: rbrandon@crl.com
Message-ID: <5cjv0g$jhi@crl2.crl.com>
Source record: 98003

After all the many hundreds if not thousands of dollars I spent with
Bomar, they instituted a minimum order policy a few years ago, and I
started to specify HY-Q Crystals, and am glad I did. Their quality is
great, price reasonable and NO MINIMUM.
HY-Q International Erlanger, KY tel. 1-606-283-0883 FAX 606-283-5000
73, W6MTF

HQ54 (hq54@aol.com) wrote:
: Hi, I f any body has the number for Bowmar crystals, I would really
: appreciate it. E-Mail me

: Thanx
: Mike

: HQ54@Aol.Com

1020. Re: Tubes and Test Equipment for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Don Huff <donh@vcd.hp.com>
Message-ID: <32ED12F2.5D74@vcd.hp.com>
Source record: 98004

Kevin Harlan wrote:
>
> Tubes and Test Equipment for Sale:
>
> Old Tubes
> Type
> 26, used, 10 available $4.00 each
> 27, used, 22 available $2.50 each
> 45, used, 9 available $11.00 each
> 80, used, 12 available $3.50 each
> 45, used, 9 available $11.00 each
>
> 227, used. Globe Type, 10 available, $5.00 each
>
> Shipping in the USA 1 to 6 tubes $3.00 $0.07 above $0.50 per tube
> ---
> --------------------
> JAN 6186W, Equal to 6AG5WA, Sharp cut-off, pentodes, 7 pin miniature,
> made by Philips in the USA in 1986. =NEW= 10,000 available. $0.08 each
> Shipping in the USA 1-199 tubes $3.00, 200 or more tubes shipping free.
> ---
> --------------------
> Test Equipment (Working , but may need calibration and minor repairs)
>
> (1) Boonton 190-A "Q" Meter-------------- $40.00
> (1) HP (Harrison) 6200A, Power Supply 0 to 40VDC, 12 Amps-------$100.00
> (1) military AN/PRM-10 Grid Dip meter 2 to 400 MHz------------------$40.00
>
> For shipping cost, e-mail you full address and we will return e-mail
> shipping cost.
> ---
> --------------------
> Klystrons (New, Never Used)
>
> (1) Varian VA-201B 8.5 to 9.6GHz, .065 Watts CW---------$20.00
> (1) Varian VA-97B 32.6 to 34 GHz, 13 mW CW -------------$40.00
>
> Shipping free in the USA
>
> Please contact harlan@deltanet.com for more equipment.
Harlan,

Have you sold your Boonton Q Meter yet?
I am interested..

Don Huff W6JL @hp.com

1021. Re: 2n1304, 2n1305 xsistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: rbrandon@crl.com
Message-ID: <5cjv9s$jkv@crl2.crl.com>
Source record: 98005

Jeffrey Herman (jherman@Hawaii.Edu) wrote:
: While dumpster diving, I came across dozens of boards containing
: 2N1304 and 2N1305 transistors. Are these good for RF applications?
: What's the maximum freq'y at which they'd still be useful?

: KH2PZ, Hawaii Dumpster Divers' Association

These are Germanium devices, as I remember good up to 50 MHz if your lucky.
Only merit they have is that they operate well at very low voltages.
Thermally they are not good for anything much, Silicon took favor long
since. 73 W6MTF

1022. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: n7ory*@*primenet.com
Message-ID: <32ee1470.20443022@news.primenet.com>
Source record: 98006

Ted <teddyb@caprica.com> wrote:
>
>Sense of humor my ass!

If that's where your funny bone is.

>I'm not so stupid as to believe that the "old war stories" that were
>posted in this thread were just "jokes". Until I spoke up it was obvious
>they were accounts of events. To defend it, even if it were a joke, is to
>show a blatent lack of care or respect for the hobby's image.

Well you know what? Life wasn't supposed to be a comedy, but it sure
can make you laugh your butt off at times. Stand on your head for a
few minutes, and get a different perspective on things. It might just
do you some good.

>
>Admit it... You dont give a hoot if the general public sees ham radio as
>a valuable asset to humanity or not.
>

No. What's killing Amateur Radio are tight fisted info-nazis that have
such a tight grip on the 'way things were' and should be, that they
are choking the life out of it. And no, I don't give a hoot how YOU
perceive Amateur Radio.

Rob Neff (N7ORY)

1023. Need info on military radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Rus <VUDeath@msn.com>
Message-ID: <01bc0c8b$07931b40$f9922299@taz.spiel.com>
Source record: 98007

I need info or a source of info on a french military radio set.
I beleive made in the US, looks similar to a american AN/PRC-104.
Probably manufactured in the 1980's. VHF FM? SSB? Data modes?
Approx: 28 lbs, 8 x 10 x 3
Freq's: 33 to 47
Markings as follos:
STTA
EMETTEUR-RECIPTEUR-ER79A
MARCHE No74/83006

STTA
CASE CY 744 A/PRC
CSF.79 Bd HAUSSMANN PARIS

Any information would be appreciated.

--

Kirk Rufus Olins,
Traders, Gmbh
E-mail: kirk32767@mindspring.com

1024. wanted vfo-120

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: aziz sua tortu <aziz@turnet.net.tr>
Message-ID: <32EDA8DF.3705@turnet.net.tr>
Source record: 98008

aziz sua tortu wrote:
>
> hi dear om
> I want to buy VFO-120 for my TS-120 if you interest
> please know me email . aziz@turnet.net.tr
> 73,s de sua tortu TA2AD zonguldak, TURKEY

1025. Re: H.V. switching supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: tbaca@boi.hp.com
Message-ID: <5cj8rt$fff2@hpbs1500.boi.hp.com>
Source record: 98009

I did a quick search on the QEX Home page and found:
Switching Power Supplies for High Voltage (Hulick): 3, Feb 91
Switching Power Supplies for High Voltage (Hulick, Feb 91):
21, Aug 91; 15 Nov 91

If these are the right articles, I would be interested in re-prints also.

WV7I

_____
/ony Baca Hewlett Packard Co. Boise, Idaho tbaca@boi.hp.com

Steven Kerns (skerns@mail.talon.net) wrote:
: In article <32E99787.4B27@ford.com>, UN93B@ford.com says...
: >
: >Has anyone tried to make a 3000vdc 1 amp switching
: >power supply? Is it practical? Can it be done?
: >
: >Thanks, Brett

: Yes Brett, it has been done.

: There was a excellent article written a few years back in
: "QEX". The project utilized power FETs and toroid transformers.
: The power supply operated off 220V and gave in the area of 3KV
: at 1 amp to power a 3-500Z. Let me know if you find the exact
: month and year of this article, I would also like to ge a reprint!

: 73 Steve N3FTI

1026. Re: SSB filter / IF amp using opamps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: akent@bga.com
Message-ID: <5cje8u$jfe@news3.realtime.net>
Source record: 98010
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello Jim:
I have built systems up to 25mhz using opamps for filter/amps. These were SSB and AM systems. You should look into the Linear Tech LT1259 and LT1260 video opamps. These things are incredible. Some are incredibly linear, and fast (1600v/us slew, if I remember right) up to over 100mhz. They are current feedback, and can be used as a filter/amplifier combo. Since most active filter programs limit the frequencies to audio, I wrote my own to cover higher RF. The formulas work at these high frequencies!

In short, opamps used in active filter/amplifiers work great!

Check out the surplus stores around for used test equipment. If you are playing in RF with this stuff, you need a spectrum analyzer, signal generator, and scope, at least. You can get older equipment pretty inexpensively this way.

Kent - de KC5WPW

"James P. Meyer" <jimbob@acpub.duke.edu> wrote:

>On Sun, 26 Jan 1997, Maroof H. Choudhury wrote:

>> I tried making a narrowband active SSB filter with TL071. used a 455KHz
>> ceramic resonator int the noninv amp feed back loop, (replaced the feedback
>> bypass cpacitor with the resonator). The result was, a very high Q filter
>> around 455KHz (certainly many times higher than the resonator) with about 28dB
>> gain.

> Very high Q doesn't always mean you have a bandwidth that will do
>you any good or that the bandwidth is flat across the top.

> You need to build a simple signal generator so you can look at
>the bandwidth in detail. If you had a 'scope, you could build a simple
>"sweeper" to make the job even easier.

> Jim

1027. Re: Solid State amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Jim Conrad <jconrad@boi.hp.com>
Message-ID: <01bc0cac$5c6a9b90$4d413e0f@hpb14374>
Source record: 98011

Randy,

Take a look at Motorola's Appllication Note for their 600 W FET Amp using four paralleled devices (MRF150). Their 3rd order IMD performance wasn't all that outstanding. Does anyone have more recent results? BTW, the MRF150s cost more than 811As, although I agree that the solid state design has advantages in the power supply.

High power bipolar seemingly requires either a lot of combiners to sum up the output (one can't easily parallel bipolar devices) or low power gain. The
higher power devices in my literature seem limited to about 10 dB; an amplifier constructed from these would deliver less than 10 dB of gain after
input/output/filter losses: a 100W transceiver wouldn't drive a single stage
to capacity.

The hi-mu triodes (887X and 3CX*) still look attractive!

JimC
KQ7B

Randy Alexander <alexan@teleport.com> wrote in article
<32E29735.3FA9@teleport.com>...
> I am interested in building a legal limit solid state amp. On perusal
> of a few catologs the max I see is 1kw. I do have reference material
> from Motorola. I also have kit information from a couple of houses. It
> concerns me that I don't find any commercial units. I would like to
> hear from anyone out there who has done this. What kind of problems
> came up. The obvious ones that I see are the high currents in the
> filters transformers and relays. How were those handled? TNX AB7QR
>

1028. Need contact information for "73" magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Scott Coburn <scott@bnl.gov>
Message-ID: <32ECE7D5.C6DC9D8@bnl.gov>
Source record: 98012

Could someone please post some information about how to contact "73"
magazine? Address, phone number, etc. Do they have a web site?

I would like to contact them to get some back issues.

Thanks,

Scott

--
scott coburn brookhaven national laboratory
mailto:scott@bnl.gov upton, ny, usa
http://gorzarg5.phy.bnl.gov/~scott (on long island)

1029. Re: 706 USA to EURO.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: "Philippe Givet, F1IYJ" <phil@Hamradios.com>
Message-ID: <32ECCDC0.3D9B@Hamradios.com>
Source record: 98013

Freeman Cheong wrote:
>
> I have a Icom IC-706. It is USA version. Does anyone can tell me
> how to change USA version to Europe version?
> Many thanks,XX9ER(Macau)en dessous du haut parleur vous avez un connecteur ou est branche un
cable en nappe orange, au dessus du filtre SSB. A sa gauche vous avez
une serie de diodes CMS
La combinaison *europe* est de la gauche vers la droite:
rien-diode-diode-rien-diode
Utilisez un fer a 280 C et attention aus pistes (CMS) !
Sorry, it is french !!!! (in europe)--
73 de Phil

Operating-system : Unix . Is there anyone else ?

1030. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Bill Crocker <billc@rust.net>
Message-ID: <01bc0bee$3bec5fc0$7750c7cd@default>
Source record: 98062
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

Mel:

The base frequency of the 46-49 MHz phone on the other end of your call will transmit both sides of your conversation! As I've told others before you, if you don't want someone to hear it...don't say it!

Bill Crocker

Mel Robinson <mello@bconnex.net> wrote in article <01bc2407$3b77a8c0$b6c9bdcd@mello.bconnex.net>...
> If I buy a digital spred spectrum phone, and I phone someone who takes the
> call on either a cell phone or a 46-49 mhz cordless, will the conversation
> be picked up by a scanner, eventhough I am sending a digital signal?
> If so, there is no such thing as a private conversation, until someone
> invents a pre-scanning device incorporated in the phone, that like call
> display tells you what type of phone you just connected too. There
> probably is a big market for such a device....If anyone markets such a
> device after to-day's date be prepared to share Revenues with me.

1031. Re: Aviation Radios Available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc0bf2$7cec8dc0$3a102399@peter-s>
Source record: 98063
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

BJ Nash <bjnash@connectnet.com> wrote in article
<32e95b41.2688578@news.connectnet.com>...
> Some avionics are all transistor, freq synth, manuals readily
> available....
> come-on, here's a challange!

I got the list, but I have no idea what all the things are.

I would like a nav/com (tx does not need to work) with excellent rx.

Also I would like a fully functional VOR setup with indicator. May
be add-on to above.

I prefer transistor, but I could deal with some tubes as the setup
would be line powered.

Obviously synthesized is better.

What do you have?

1032. Autek Research IC ACTIVE FILTER-QF1 - Schematic or block

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: n1lah@aol.com
Message-ID: <19970127014101.UAA02552@ladder01.news.aol.com>
Source record: 98064

After sparks, a blown circuit breaker in the house and some smoke wisping out of the case, my audio filter doesn't work any more. Before I even open the case I want to know what I'm looking at and for. Any help will be appreciated.

I'm good in any recent call book or send me e-mail, N1LAH@AOL.COM. I'll pay for postage and copying.

Thanks for the help.

Ralph, N1LAH

1033. Re: Apologies<--- Nice going guys. More public goodwill?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: au@ix.netcom.com
Message-ID: <5ch4jt$gq1@dfw-ixnews10.ix.netcom.com>
Source record: 98065

In <5cfsje$sjb@ralph.vnet.net> moore@vnet.net (Diane Moore) writes:
>
>My sincere apologies to all of you that I upset so terribly by posting
>a beer related question on this board.
>
>It was an honest mistake and I would have appreciated a polite warning
>rather than an email attack!
>
>Unwanted Intruder
>Diane Moore
>moore@vnet.net

Very nice response to a simple mistake! Seems like a lot of amateurs are out for blood. I hope that the net surfing public doesn't look at this post or the crap on rec.radio.amateur.misc. Certainly doesn't leave a good impression. Maybe some of the people who flamed this person should go spend some more time behind their radio's instead of their keyboards.

George
N7BUI

1034. SX42 crystal filter query....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970127034000.WAA08605@ladder01.news.aol.com>
Source record: 98066

My crystal filter in my SX-42 is inoperative. Does anyone know of
the correct characteristics for the 455-kc crystal used in the this
(Cohn?) design? I am tempted to use a 455-KHz HC-6 crystal from
my junkbox to replace it -- but I am not sure what the crystal frequency
is supposed to be, or if it is operating in series or parallel mode in
this
circuit.

Any old timers out there who can give me some advice?

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1035. Rejuvenating NiCad Battery Packs (HOW TO)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: bjnash@connectnet.com
Message-ID: <32ef32fc.637898@news.connectnet.com>
Source record: 98067
Cross-posted to: comp.sys.laptops,alt.cellular,alt.cellular.motorola,alt.cellular.gsm,rec.aviation.misc,rec.radio.amateur.homebrew

Do it yourself and save!
Find out how to rejuvenate NiCads by getting the info file by
auto-responder. Send email to nicads@pdsig.com Fix/Make your own
packs or just find out where to get them repaired/replaced!
(No obligation, no salesmen will call). Remember, send to above email
address, not to me!
BJ
Tel Pay Clearings, Inc
(619) 749 7049
E-mail info: telpay@pdsig.com

1036. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Nick Ciarallo <nick@vlsi.polymtl.ca>
Message-ID: <32EC3991.1A0B@vlsi.polymtl.ca>
Source record: 98068

Tom Bruhns wrote:
>
> Steven Kerns (skerns@mail.talon.net) wrote:
>
> (in reply to my request for info on designs for low phase
> noise VHF VCOs to cover something like the 2 meter band...)

...stuff deleted...

If you want a pretty good VCO for low phase noise check out ZCOMM
at http://www.zcomm.com. They make VCOs from 50 MHz to 3.5 GHz in
0.5" square packages that work very well. I have been using them
for microwave synthesizers for the last few years. I recently designed
a 1-1.1 GHz synth that steps in 250 KHz increments that produced better
than 105 dBc phase noise at 10 KHz. This is plenty clean for our
digital radios.

--
Nick Ciarallo tel: 514-335-1210
SR Telecom Inc., Microwave Group, fax: 514-334-7783
8150 Trans Canada Hwy internet: nick@vlsi.polymtl.ca
St. Laurent, Quebec, Canada H4S-1M5 hamradio: ve2hot@ve2fkb.pq.can.na

1037. stuff for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: k6ls@amsat.ORG
Message-ID: <32EC6FD1.6DDC@amsat.org>
Source record: 98069

here is another list of stuff I am selling to focus on qrp and weak sig. work (home brewin' kinda stuff :-) every thing is complete, and most have original boxes,ect... Please reply direct for more info...tnx

MFJ-1270CQ (tnc- 300,1200 and 9600b)
MFJ-1278B w/9600b board (multimode controller- packet rtty pactor amtor wefax, ect....)
ICOM 281H (mobile 2m FM transciever w/440 rx, expanded rx, 9600b capable)
PacComm PSK-1T (PSK modem w/1200b tnc built in, for sats or weak sig)
A&A engineering Wefax demod. w/tuning aid (get wx sat photos from the sats or hf stations)
P.C. Electronics TVC4G (watch ATV !! takes 430mhz atv tx down to TV ch 2,3,4)

every thing must go!! tell your friends and pass the word.. trades considered.

tnx 73 de Phil K6LS CM97 merced county ca (k6ls@amsat.org)

1038. WWVB RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19970127082300.DAA20285@ladder01.news.aol.com>
Source record: 98070

I too am building the K9UEI receiver.
HAs anyone tied using the wire antenna or
anything other than the Ferrite rod type?

Carl
N9EFJ

1039. A regulated 13.8 vdc 12 amp P.S. for $26 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: "Roger H. Smith" <goldwing@iquest.net>
Message-ID: <01bc0c2c$8dc00fc0$5daaf6ce@goldwing.iquest.net>
Source record: 98071
Cross-posted to: fido.ham-sale,in.ham-radio,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.equipment,sci.electronics.misc

It LOOKS like somebody is going to get a Regency Electronics 13.8 VDC 12 amp. communications quality power supply for $26 !! If you would like to BID on this please go to : "http://www.ebay.com/aw/item.cgi?item=gcx4041" THE BIDDING IS CLOSED ON 1/27/97 at 2340 PST !!!!

Registration to bid is free and instant. Just follow the above link "back" to the registration area of the Auction Net.

Thanks for your attention & 73's ..... Roger N9PMC

1040. Re: SSB filter / IF amp using opamps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: maroof@cybersys.net
Message-ID: <5chnhl$cl7$1@post.servtech.com>
Source record: 98072
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <Pine.SOL.3.91.970126102950.4389A-100000@godzilla2.acpub.duke.edu>,
"James P. Meyer" <jimbob@acpub.duke.edu> wrote:
>On Sun, 26 Jan 1997, Maroof H. Choudhury wrote:
>
>> I tried making a narrowband active SSB filter with TL071. used a 455KHz
>> ceramic resonator int the noninv amp feed back loop, (replaced the feedback
>> bypass cpacitor with the resonator). The result was, a very high Q filter
>> around 455KHz (certainly many times higher than the resonator) with about
> 28dB
>> gain.
>

> Very high Q doesn't always mean you have a bandwidth that will do
>you any good or that the bandwidth is flat across the top.

That's what I'm trying to find out. I can't find the shape factor without a
freq counter. If anyone tried anything similar then I could maybe use the
information for further mods.

> You need to build a simple signal generator so you can look at
>the bandwidth in detail. If you had a 'scope, you could build a simple
>"sweeper" to make the job even easier.

Thanks for the advice.
I used an RF signal generator and a dual trace oscilloscpe to find the
response chareceristics of the filter. I 'swept' the frequency alright but the
filter passband was so narrow that I couldn't measure the frequency difference
at -3dB, using the scope. I need a freq counter to measure the smalll change
in freq.

I'm interrested to know about Q multipliers, what's the general configuration
& how does it work. Can the ckt described above be working like a Q
multiplier?
Since the filter is intended for IF applications, is there anything special to
be taken into consideration? Most IF amps (in IC form) are simple differential
amps. Whay aren't opamps popular as IF amps, any specific disadvantage of
opamps in this application?

Thanks for reading the mail. Looking forward to your advice.

Maroof

Maroof H. Choudhury
maroof@triton.kaifnet.com

1041. Re: Rejuvenating NiCad Battery Packs (HOW TO)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Colin Song <colins@pc.jaring.my>
Message-ID: <32EC71A5.5D8@pc.jaring.my>
Source record: 98073
Cross-posted to: misc.forsale.computers.pc-specific.portables,comp.sys.laptops,alt.cellular,alt.cellular.motorola,alt.cellular.gsm,rec.aviation.misc,rec.radio.amateur.homebrew

Hi everyone,
Just like to how which news server has the alt.cellular.motorola
newsgroup, mine doesn't have one...Please e-mail me. Thank you.

1042. Re: Any info on Homebrew repeater controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Rodney S Baker <rsbaker@dove.net.au>
Message-ID: <32ECAC0C.16D4@dove.net.au>
Source record: 98074

DYee944658 wrote:
>
> Anyone have any info on homebrewing a repeater controller?
> Only need basic features: CW ID, time out timer, courtesy tone and
> squelch tail.
>
> Please contact me if you can share some info.
>
> Thanks

VK5EX (Andrew McDade) here in Adelaide has a very good controller based on the 68HC11 micro. It does what you need and he has done a PC board for it. I don't think he's currently on internet but if you want I can pass messages to him. He can be contacted on AX.25 packet to VK5EX@VK5TTY.#ADL.#SA.AUS.OC - I'm sure he wouldn't mind a packet message from you.

Cheers,

--
Rodney S Baker VK5ZTV@VK5TTY.#ADL.#SA.AUS.OC
rsbaker@dove.net.au
"All wiyht...rho sritched mg kegtops awound???!!!

1043. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <LMcfaCAvqF7yEw5X@ifwtech.demon.co.uk>
Source record: 98075

Rob the Anonymous wrote:
>
>I believe the difference is that the electronic grade RTV can safely be
>used to insulate HV without having to know for certain if the material is
>cured all the way through.
>
Do the solvent-based products have a specification for the insulating
properties before they're fully cured?

>
>There was alot of discussion about using GE Silicon II on the Tesla coil
>mailing list this summer. I've used it an its ok at 250kv when fully
>cured.

For the benefit of people outside the USA, please can you confirm which
kind of formulation "GE Silicon II" is?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)
Professionally:
IFW Technical Services Clear technical English - world-wide.

1044. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <32ECA088.5836@staffnet.com>
Source record: 98076
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

Mel Robinson wrote:
>
> If I buy a digital spred spectrum phone, and I phone someone who takes the
> call on either a cell phone or a 46-49 mhz cordless, will the conversation
> be picked up by a scanner, eventhough I am sending a digital signal?
> If so, there is no such thing as a private conversation, until someone
> invents a pre-scanning device incorporated in the phone, that like call
> display tells you what type of phone you just connected too. There
> probably is a big market for such a device....If anyone markets such a
> device after to-day's date be prepared to share Revenues with me.
> Bye
>
> Mel Robinson

Hard-wired phones arn't secure either. It just takes a little more
effort!

1045. TWT Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: "Paul C. Barnes" <cribbage@ix.netcom.com>
Message-ID: <5cif84$9fp@dfw-ixnews10.ix.netcom.com>
Source record: 98077

I have a ham friend who is trying to build a TWT power supply. He has it with 12 volt d.c. in and 110 V 400hz a.c. out. He says that the supply he built work o.k. at .5 amps, but when he tries to draw 5 amps it drops down drastically in voltage. I suggested he needed to feed back from the output to the oscillator that was doing the chopping and increase the duty cycle. I don't know how he is doing it, but I told him I would ask here and see if anyone had any ideas, schematics for good power supplies or the such.

Thanks, Paul W4YRL

1046. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970127145401.JAA01136@ladder01.news.aol.com>
Source record: 98078

In article <measures-ya02408000R2401971516410001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>..."... I can tell you are wasting your time trying to convince these
>people vhf parasitics exist in form to destroy bandswitches. If they are
>blaming it on operator error or non-resonant antennas then they are also
>barking up the wrong tree. Between myself and the phased delta loops I
>use on 80 meters, my Drake L4-B hasn't had any band switch or output
>capacitor problems what so ever. All I know is that I put about 20 hours
>on the AL-80A the past couple of weeks and it hasn't barked one time.
>This is with the same rig and antenna I have used for the past 7 years. I
>guarantee that prior to putting the suppressors in, the arcing would have
>happened. ..."
>
>
>73' Rick KC0HH

How can we believe anything you say?

1047. WIPE OUT DEBT!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: angelique1@aol.com
Message-ID: <19970127150500.KAA01600@ladder01.news.aol.com>
Source record: 98079

Money? Try this...
****
***
This is the $1.00 concept explained without the hype and silly numbers!
This is an honest and legitimate way of making money on a regular
basis. Read the following carefully and you could be joining the many
thousands of Internet users who are currently earning quite large sums
of money with a few hours work using their computers via the Internet!
****
***

This posting has been appearing for quite some time and has now
literally got thousands of people actively involved. No doubt like me,
you may have seen it before and become a little confused by the way it's
been explained. However, I personally have never believed in a so
called "Free Lunch" and have always worked hard to support my family.
But this idea is so simple involving a modest $5.00 investment that I
simply had to try it. With so many people involved I became convinced
that I too could benefit. And, as I found out, this system really does
work!

After about two weeks in, I'm beginning to get a reasonable and
realistic return with a further understanding of just how big this
concept really is. Money is coming in from all over the world!

If you're interested there are three basic steps, all of which are
pretty simple.

THE FIRST STEP (1).

Take five sheets of paper. Write your name and address on each piece
along with the words: "Please place me on your mailing list". Take each
piece of paper, put them in an envelope along with a one dollar bill
inside and mail them to the five names listed below. *NOTE: By asking
to be placed on each person's mailing list you are in fact paying for a
service that consists of using the Internet to advertise a business
dealing with assembling a mailing list of people who are interested in
working from home using their computers to generate an income.

Mail to:

1. T. Graff, 105 Del Villa Dr. N.E., Salem, OR 97302 USA

2. C. T. Todd 2866 Lexington Trace, Marietta, Ga. 30062-4345, U.S.A

3. B.A. P.O. Box 5482, St. Augustine, FL 32085-5482, USA

4. B.M. Day 6215 South Shore Drive, Leo, IN 46765, USA

5. A.K. Panhorst, 90 Pond St., Cabot AR 72023, USA

When you have mailed your message and one dollar bill **(Please don't send checks or money orders)** to the above people go to the second step:

SECOND STEP (2).

Remove the top name and address from the above list and insert your own in the number 5 position. This can be done simply by amending the address section with no other alterations and posting as described later, or you can retype the whole document adding information you feel may be important.

HERE IS WHY THE SYSTEM IS SO SUCCESSFUL!!!

As you probably are aware, the Internet is growing daily at a phenomenal rate, doubling every year. With literally millions and millions of people surfing the Net there is the potential for tremendous exposure. With nearly 20,000 Newsgroups to post to and hundreds of thousands of people dialing in to them every day, if done correctly this program can't help but be successful.

THIRD STEP (3).

Post this message with your name in the number 5 slot to at least 250 newsgroups. There are at least 17000 newsgroups at any given moment in time. Out of every block of 200 posts I made, I got back 5 responses. Yes, thats right,only 5. You make $5.00 in cash, not checks or money orders, but real cash with your name at #5. Not a large sum...but wait...

Each additional person who sent you $1.00 now also makes 200 additional postings with your name at #4, 1000 postings. On average then, 50 people will send you $1.00 with your name at #4,....$50.00 in your pocket!

Now these 50 new people will make 200 postings each with your name at #3 or 10,000 postings. Average return, 500 people= $500. They make 200 postings each with your name at #2= 100,000 postings=5000 returns at $1.00 each=$5,000.00 in cash!

Finally, 5,000 people make 200 postings each with your name at #1 and you get a return of $50,000 before your name drops off the list.And that's only if everyone down the line makes only 200 postings each! Your total income before your name drops off the list is $55,000.

From time to time when you see your name is no longer on the list, you take the latest posting you can find and start all over again. For a better return post to more than 250 newsgroups initially.

The end result depends on you. You must follow through and repost this article everywhere you can think of.

GENERAL STEPS ON AUTOMATING THE PROCESS:

Make any necessary changes to this article as explained in step (2) and when you're done save it to your word processor. Then click on Copy.

Next, locate the newsgroups you intend to post to (Netscape 3.0 is terrific for this because you can highlight dozens of newsgroups all at once, enabling you to distribute your message to 1,000s of locations in less than an hour or two). Highlight all the newsgroups you want to post to, which is done by holding down CTRL while clicking your left mouse button. This way you can select multiple newsgroups in one go. Then after highlighting the newsgroups, click on "To News". Place a sensible title in the "Subject" location, click on the text section, go to the Edit menu and click "paste" Click on send...and that's it.

Repeat the process over and over again be selecting further newsgroups in multiples of 10s, but try to be selective with the groups by posting to high volume locations, and don't choose a subject that appears too flashy, as this will only put people off.

1048. FS: HP DC to 4GHz coax relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: George Keller <gakeller@worldnet.att.net>
Message-ID: <32ECC49F.4C68@worldnet.att.net>
Source record: 98080

I have one slightly used Hewlett Packard Model 3331A coaxial switch.
Frequency range DC to 4GHz very low loss. Coil 15V (works on 13.8)
Data sheet included.

Price: $55 includes shipping.

George W3SAP
gakeller@worldnet.att.net

1049. Motorola Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: cpierce@usit.net
Message-ID: <cpierce-2701970911290001@col-max92.dynamic.usit.net>
Source record: 98081
Cross-posted to: rec.ham-radio,rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I am in need of a IC for a Motorola Moxy 150 Mhz radio. I have contacted the Motorola service rep. in my area and I keep getting the runaround each time I speak to them. I have been trying since May of last year to get this IC and usually I hear that "I'm sorry we forgot to order it for you" or "I lost the numbers you gave me". If someone has the ability to order this for me please let me know.

It is the desc. IC with the following numbers on it "M2078" and "274 H 8436". I have tried to cross this to another number but have had no sucess.

Please do not take me wrong I am not bashing Motorola, just tried of not geting the part that I needed.

1050. Re: Ham-Homebrew Digest V97 #59

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: kb2vgh@juno.COM
Message-ID: <19970127.104142.6887.0.Kb2vgh@juno.com>
Source record: 98082

>Date: 27 Jan 97 09:05:21 GMT
>From: k6ls@amsat.ORG (Phil, K6LS)
>Subject: stuff for sale
>
>here is another list of stuff I am selling to focus on qrp and >weak sig. work (home brewin' kinda stuff :-) every thing is >complete, and most have original boxes,ect... Please reply direct >for more info...tnx

>MFJ-1270CQ (tnc- 300,1200 and 9600b)
>MFJ-1278B w/9600b board (multimode controller- packet rtty pactor >amtor wefax, ect....) ICOM 281H (mobile 2m FM transciever w/440 >rx, expanded rx, 9600b capable)
>PacComm PSK-1T (PSK modem w/1200b tnc built in, for sats or weak >sig)
>A&A engineering Wefax demod. w/tuning aid (get wx sat photos from >the sats or hf stations)
>P.C. Electronics TVC4G (watch ATV !! takes 430mhz atv tx down to >TV ch 2,3,4)

>every thing must go!! tell your friends and pass the word.. >trades considered.
>tnx 73 de Phil K6LS CM97 merced county ca (k6ls@amsat.org)

would you consider a qrp 70cm FM rig. will trade

73 DE KB2VGH KB2VGH@AMSAT.ORG
Jeffrey Luce KB2VGH@Juno.com
38 Favara Circle GRID: FN13fe
Rochester NY 14609-1951
...-.- ...-.- ...-.- ...-.- ...-.- ...-.- ...-.- ...-.- ...-.-

1051. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2701970846550001@news.vcnet.com>
Source record: 98083

In article <19970127145401.JAA01136@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <measures-ya02408000R2401971516410001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
> >..."... I can tell you are wasting your time trying to convince these
> >people vhf parasitics exist in form to destroy bandswitches. If they are
> >blaming it on operator error or non-resonant antennas then they are also
> >barking up the wrong tree. Between myself and the phased delta loops I
> >use on 80 meters, my Drake L4-B hasn't had any band switch or output
> >capacitor problems what so ever. All I know is that I put about 20 hours
> >on the AL-80A the past couple of weeks and it hasn't barked one time.
> >This is with the same rig and antenna I have used for the past 7 years. I
> >guarantee that prior to putting the suppressors in, the arcing would have
> >happened. ..."
> >
> >
> >73' Rick KC0HH
>
> How can we believe anything you say?

HELLO

--
--Rich-- ag6k, 805-386-3734

1052. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970127181000.NAA10091@ladder01.news.aol.com>
Source record: 98084

In article <measures-ya02408000R2501971414410001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>Mr. Rauch:
>We need to discuss Wes Stewart's measurements of the parallel-equivalent
>resistance (Rp) for different types of VHF parasitic-oscillation
>suppressors. .
>
>

Discuss or argue? Will you agree to remain factual or will you throw in
all sorts of unrelated and unconfirmable data?

If you agree to stay with the facts at hand, I'd be happy to. If this is
just another platform for slamming a manufacturer or person, or if it is
filled with hearsay we can't confirm, then I decline.

73 Tom

1053. Pse help w/SNELGROVE filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: yo3ctk@alltrom.ro
Message-ID: <01BC0C85.7CD8D4E0@mihai.alltrom>
Source record: 98085

Hi everybody !

I would like to enlist your help in finding specifications for a crystal =
filter manufactured by SNELGROVE Co. Ltd in Don Mills, Ontario. Model =
number is:
F 1500-1L
It seems to be a LSB filter with 1.500 MHz carrier frequency but I am =
unable to find proper termination impedances or other characteristics as =
insertion loss, bandwidth, stop band attenuation and in-band ripple. My =
attempts to locate this company proved fruitless, as it seems that they =
are out of business. Apparently, there is a company with this name in =
Don Mills, but is involved in real estate (!) business.

Any help ? Thank you all.

73 de Mike, YO3CTK

1054. Re: Kenwood TS-520 for $125

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Don Huff <donh@vcd.hp.com>
Message-ID: <32ED08CD.6EE6@vcd.hp.com>
Source record: 98086
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Walter S. Szachara wrote:
>
> Bryan,
>
> What kind of shape is it in otherwise? What does it include: PS? Mike?
> Etc.?
>
> Thanks,
>
> Walt
> szachara@gulftel.com
>
> Bryan Edwards <w5kft@nts-online.net> wrote in article
> <5c3cva$3j7@news.nts-online.net>...
> >
> > I have a Kenwood TS-520 transciever that has started blowing fuses
> > when it is turned on. I don't want to mess with fixing it, will sell
> > it as is for $125 plus shipping. This will make somebody a good cheap
> >
> > fixer supper.
> >
> > Bryan
> >
> >
Bryan,

If you have to ask if it has a mic, at that price, don't bother, HI!
TS520/820/830 all have built-in AC supplies and pi-network output.
EXCELLENT rigs. My guess is a blown diode in the p.s. A Bargain!

73, Don W6JL
Very satisfied (17 years and still counting) TS820 user

1055. Re: Solid State amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Steve Simpson <Steve@chubs.demon.co.uk>
Message-ID: <6LeF7UA3EO7yEwPq@chubs.demon.co.uk>
Source record: 98087

In article <32E4EFCD.C31@gte.net>, Ray LaRue <raylarue@gte.net> writes
>
>I am currently building a pair of the 600 watt amps listed in the
>Motorola bulletin AN 104. I am combining them for 1 KW. Each amp uses 4
>MRF-150's with 50 VDC supply voltage. This eases the problems with IR

Hi Ray,
Just out of curiousity(sp), how do you combine amplifiers? Do you sue
them push pull, inverting one input or have I got the wrong end of the
stick?

Also what does a MRF150 cost to buy retail?

Thanks in advance.
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
Visit Radio World -
HTTP://www.chubs.demon.co.uk

1056. ground connections

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: David Jameson Mccreery Jr <hisdjm@panther.Gsu.EDU>
Message-ID: <Pine.GSO.3.95.970127101129.1050B-100000@panther.Gsu.EDU>
Source record: 98088

How long can a ground lead be to still be electrically
effective at RF frequencies. My understanding is up to 1/8th wave length.
Any comments? Dave, Atlanta

1057. Re: Apology

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: rmote@rain.org
Message-ID: <5cipu1$a3j$1@news.rain.org>
Source record: 98089

The email attacks on Diane Moore for her beer question were unwarranted and reveal some pretty ugly character flaws on the part of the originators. Unless you can enforce a single meaning worldwide for the word "homebrew", you'd better be prepared for similar intrusions of your precious group in the future. After the treatment she received here, I pity the next ham who wants to put up a tower in *her* neighborhood!

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

1058. Re: 27 mhz jammer - Lighten up you wank.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: CHRISTOPHER MCCALL <s004cnm@discover.wright.edu>
Message-ID: <Pine.GSO.3.93.970127145537.14074D-100000@paladin.wright.edu>
Source record: 98090

One word RELAX! all of you are on the fast track to the grave. My
opinion is look for the positive.(Nothing positive about jamming) quit
bashing the No Codes, help them out with code, maybe if it wasn't shoved
down their mouthes, everyone fair better. Be an Elmer, make someone's day.
I'm sure everyone of us has something positive to share. I was ready to
give up my ticket, never get the code, and toss my radios in the trash.
Until field day, now I have the HF itch. Someone else showed me QRP, let
me tell you. The fever is alive and feeding the code, aleast for me.
Practice good form on the air, 1st timers are looking for a role model.
With the exception of part 97 everthing else is a "gentleman's agreement"
no gentlemen, no agreement. No offense to the YL/XYLs intended.
Think of something you can do to make a positive change. ie. I didn't
know Q-codes are not used on FM uhf/vhf until I was elmered.
73
Chris McCall KB8YPO
Dayton Oh.

1059. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ciuv0$fq7$3@nadine.teleport.com>
Source record: 98091

In article <LMcfaCAvqF7yEw5X@ifwtech.demon.co.uk>,
"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:

>For the benefit of people outside the USA, please can you confirm which
>kind of formulation "GE Silicon II" is?

It doesn't give off the acetic acid (vinegar) smell when it cures. It's the
first of this type I'm aware of which has become available as a consumer
item here in the US.

Roy Lewallen, W7EL

1060. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-27 00:00:00 UTC
From: Brooke <brooke@pacific.net>
Message-ID: <32ED19C3.4DB8@pacific.net>
Source record: 98092
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Adrian Jansen wrote:
>
>
> In article <32E53D21.1B37ADEA@bnl.gov>, Scott Coburn (scott@bnl.gov) writes:
> >Steven Swift wrote:
> >>
> >> I have a little 'c' program that calculates what you need for loop
> >> antennas. .....

I missed the origional post. I am building a WWVB receiver and would
very much
like information on how to design a ferrite loop antenna that will give
me the
best S/N at 60 kHz. I have some of the 1/2" X 7.5" high permeablity
Amidon rods.

Thanks in advance,

Brooke Clarke
N6GCE

1061. 13 pin plug for IC706

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: faunt@netcom7.netcom.com
Message-ID: <FAUNT.97Jan28084344@netcom7.netcom.com>
Source record: 97893
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Does anyone know where these are available, without an attached cable?
I'd like to make a nice cable for my KAM to my 706.
73, doug

1062. RE: Johnson Match-Box for WARCs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: cjsterl@ix.netcom.com
Message-ID: <5claug$o6@dfw-ixnews12.ix.netcom.com>
Source record: 97894

Greetings,

Does anyone have any experience with the small version of the Johnson Match-Box for WARC Band coverage? If so, what was the modification and does it reduce the units efficiency.

Thanks for the help,
Craig, AA3MD

1063. Yaesu FRG 100 for Trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: billp@gramercy.ios.com
Message-ID: <32ee5bfa.121843935@news.idt.net>
Source record: 97895

I would like to trade for an AOR8000

Yaesu FRG 100 General Converage Shortwave receiver 50khz to 30 mhz
with FIF CAT RS232c Computer interface. Comes with manuals and cable
for computer interface. Original Boxes.

Bill Pennola
billp@gramercy.ios.com
S.C.A.N.A., Ltd. (Scanning Channels Across North America)

1064. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Bob <_pmw5_@cornell.edu>
Message-ID: <32EE5D35.1224@cornell.edu>
Source record: 97896

Steven Kerns wrote:
>
> Tom,
>
> Your best bet might be to buy a MiniCircuits VCO. They make
> both thru the board and surface mounted units that will tune
> 100-200 mhz with -105 dbc/hz phase noise with all harmonics
> at -25db. Their single lot price is about $15.00 ea
>
> Try their web site at http://www.minicircuits.com
>
> 73 Steve N3FTI
> In article <5c0f10$l93@hpcvsnz.cv.hp.com>, tomb@lsid.hp.com says...
> >
> >I'd appreciate pointers to designs of low phase noise VCOs
> >in the 150MHz range, with a control range of 5MHz or so.
> >Lower control range (down to 1MHz or so) with band selection
> >thru diodes would also be OK. Would especially like pointers
> >to articles that discuss the designs in some detail, not just
> >say, "build it like this and it will be fine." Practical as
> >well as theoretical info would be helpful: things like,
> >"this series of varicap diode is especially good," as well
> >as, "the varicap diode should have these characteristics
> >for optimal performance."
> >
> >--
> >Cheers,
> >Tom
> >tomb@lsid.hp.com

There's alot of things I'd like to buy from minicircuits, but YOU CAN'T.
They won't sell small quantities of anything. They don't send the
catalog, and they've got no distributors that will sell small quantities.
--
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.2

mQBtAzK9lTgAAAEDALNAegQHu6xJ7isCW1c57zKpN2N97N14FO6OcHQ1JLQNpbsB
bXmt2KaZMu4+4qLKiaM3S94CANtQlMc/VrQ6fZJNmu2Abg68PrP5RM9PkrKasLiU
8OJ86NbesAZWzN0PFQAFEbQ+Um9iZXJ0IFdleWJyZWNodCwgSlIgLSBOMlFFVyAt
IHBtdzVAY29ybmVsbC5lZHUgLSA2MDctNzU3LTk0MzQ=
=Df2X
-----END PGP PUBLIC KEY BLOCK-----

1065. Kenwood TM733A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: fpate@vnet.ibm.com
Message-ID: <5cle71$3o0@hil-news-svc-4.compuserve.com>
Source record: 97897

I am looking for info on the Kenwood TM733A dual bander mobil. Does anybody have one that can give me some feedback, Likes dislikes?

Thanks

1066. SCHEMATIC CB-PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: "R. van Dijk" <cashcorp@bart.nl>
Message-ID: <32EEF60A.1A85@bart.nl>
Source record: 97898

Hi,
i am looking for schematics for cb-poweramps.
Please mail me .
Thanks ....

1067. QEX articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: UN93B <UN93B@ford.com>
Message-ID: <32EEAC1E.5F3@ford.com>
Source record: 97899

Does anyone know how I can get an old article from
QEX? Their FTP site only goes back to about 1993.
The article I'm looking for is from 1990-1992, I think.
The article shows how to build a switching power supply
that will deliver 2000 VDC at 1 amp or so.

Thanks, Brett

1068. Q:Minicircuit VCO as Crystall replacement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Gabe Nemeth <gabe@bnr.ca>
Message-ID: <32EE3DA3.79BA@bnr.ca>
Source record: 97900

Hi and thanks for reading.
I have a quesion for any designers out there.
Can a mini-circuit VCO (or any low cost VCO) be used in place of a
crystal in HAM Radio Transceivers?

'73 de VE3SLJ, Gabe.

1069. Re: 30m DC RX, want AM for WWV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: richardh@iinet.net.au
Message-ID: <5cluj6$g2l@opera.iinet.net.au>
Source record: 97901

tim_hynde <tim_hynde@idecc.com> wrote:

>After building a couple simple DC and superhet receivers I am wondering
>what must be done for AM reception? Someone said increase the gain of
>the LO going to the mixer, is that correct?

>Would someone kindly explain the difference in the audio portion of the
>reciever.
>--
> Tim Hynde \,`/ /
> KA8DDZ _).. `_
> tim_hynde@idecc.com (__ -\
>
Gday Tim

A direct conversion receiver has a problem with AM reception in that
the carrier of the AM signal and the local oscillator must be
"exactly" synchronized or a beat note will result. Also the audio of
the AM carrier will be frequency shifted by any error, one sideband up
and the other down. This gives more difference products and the result
is a mess. One possible answer is a synchronous detector where the
receiver local oscillator is phase locked to the AM cariier but this
results in added complexity.

Richard
VK6BRO
richardh@iinet.net.au
http://www.iinet.net.au/~richardh

1070. tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <5clh4p$pha@flood.weeg.uiowa.edu>
Source record: 97902

Has abyone got info on a JAN 6293 tube. I need to know if it is about
the same or can replace a JAN 6146? Email or here is ok. Thanks

WA0VYZ

john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

1071. WTB: AT-250 antenna tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: aziz sua tortu <aziz@turnet.net.tr>
Message-ID: <32EF0106.6066@turnet.net.tr>
Source record: 97903

Hi dear om,s
I want to buy used AT-250 KENWOOD
if you have the above item for the TS-140S for sale,
please advise by sending email offer to < aziz@turnet.net.tr >
A.Sua Tortu
TA2AD
Zonguldak, TURKEY

1072. Re: Any info on Homebrew repeater controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: slmzc@cc.usu.edu
Message-ID: <1997Jan28.172256.92807@cc.usu.edu>
Source record: 97904

In article <32ECAC0C.16D4@dove.net.au>, Rodney S Baker <rsbaker@dove.net.au> writes:
> DYee944658 wrote:
>>
>> Anyone have any info on homebrewing a repeater controller?
>> Only need basic features: CW ID, time out timer, courtesy tone and
>> squelch tail.
>>
>> Please contact me if you can share some info.
>>
>> Thanks
>
> VK5EX (Andrew McDade) here in Adelaide has a very good controller based
> on the 68HC11 micro. It does what you need and he has done a PC board
> for it. I don't think he's currently on internet but if you want I can
> pass messages to him. He can be contacted on AX.25 packet to
> VK5EX@VK5TTY.#ADL.#SA.AUS.OC - I'm sure he wouldn't mind a packet
> message from you.
>
> Cheers,
>
> --
> Rodney S Baker VK5ZTV@VK5TTY.#ADL.#SA.AUS.OC
> rsbaker@dove.net.au
> "All wiyht...rho sritched mg kegtops awound???!!!

You might check out the latest QST... there was an article in there on
someone's homebrew controller. Seemed to have some pretty decent features,
and was based on one of the PIC microcontrollers. Source code was available
on the net, as is the manual, etc. for it. A partial kit was available for
$30 + ship, and included the u-processor and a couple of odd IC's. All
other parts were available from Digikey, I believe.
Anyway, I've ordered one, but haven't got it yet. If you're interested, I
do have the designer's e-mail address (I'd post it, but I don't know it
off the top o' my head :-)) or I can let you know how it goes together
when I get it. Hope it helps!

73,
Paul Cowley, KB7VML
slmzc@cc.usu.edu

1073. F.S- MICROWAVE RADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: kb8gun@juno.COM
Message-ID: <19970128.010343.8159.1.kb8gun@juno.com>
Source record: 97905

I have for sale or trade a 6ghz hot standby microwave radio. Its a
Farinon ss 6000 that was in service until replaced with spread spectrum
unit. tx freq 6665 rx freq 6785.
Make offer, U ship. send replies to: Ray Webb KB8GUN@JUNO.COM
330 Vine St.
Logan Ohio
43138

Phone - 614-774-7195 days
614-385-3413 nights

1074. Ham Radio Resource Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <32eec0a1.16283904@news.primenet.com>
Source record: 97906

Check out the latest additions and updates
to DXER.COM. 30+ indexes - 500+ links, plus
an interactive BBS, Unique E-mail addresses,
Web Page Hosting. Get your Comet antenna catalog
from our sponsors page.. Coming soon a Product
Review Page.. Check back often.......

"http://www.dxer.com"

BBS
Email Addresses
Email Help
Guestbook
Our Sponsor (NEW)
Callbooks
Contest Calendars
Contest Clubs
CW (NEW)
DX Clubs
DX Clusters
DX Newsletters (UPDATED)
EME/Weak Signal (UPDATED)
Fun Stuff
Current GMT
Ham Radio Clubs (UPDATED)
Ham Radio Info (UPDATED)
HF Information
HF Nets
Logging Programs
Manufacturers (UPDATED)
MARS Information
Maritime HF Info
Morse Code (NEW)
OnLine Magazines
Packet Radio
Propagation
QRP
Radio Mods
Satellites (UPDATED)
Shortwave Listening
Six Meters
SoCal Ham Repeaters
VHF/UHF Scanning (NEW)

1075. Re: RE: Johnson Match-Box for WARCs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Dave Redfearn <n4elm@ipass.net>
Message-ID: <5cm069$4gs@news.ipass.net>
Source record: 97907

cjsterl@ix.netcom.com(Craig J. Sterling) wrote:
>Greetings,
>
>Does anyone have any experience with the small version of the Johnson
>Match-Box for WARC Band coverage? If so, what was the modification and
>does it reduce the units efficiency.
>
>Thanks for the help,
>Craig, AA3MD

My 250 Watt Johnson Matchbox works fine on the WARC bands with no mods.
My antenna is a 102 ft. dipole fed with 400 ohm slotted line.

WARC band - tuner bandswitch
30M - 40
17M - 20
12M - 15

I had to trim my feedline for best match between 40M and 30M.
However, the Matchbox will not tune 160M.

Your mileage may vary.

73 - Dave, N4ELM.

1076. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Mel Robinson <mello@bconnex.net>
Message-ID: <01bc25c6$faa80940$78c9bdcd@mello.bconnex.net>
Source record: 97908
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

Considering your comment to a my question Kyler I really doubt your going
to get to much air time.

Mel Robinson

Kyler Laird <laird@pier.ecn.purdue.edu> wrote in article
<5cl5bh$s0a@mozo.cc.purdue.edu>...
> >>If I buy a digital spred spectrum phone, and I phone someone who takes
the

> Similarly, if I am using landline ISDN phone to call a
> local radio station, will everyone in the whole damn
> county be able to hear me when the station decides to
> put me "on the air"?
>
> Duh...
>
> --kyler
>

1077. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <E4qHzy.KoG@eskimo.com>
Source record: 97909
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Gary Tennyson <gary.j.tennyson@bridge.bst.bls.com> writes:

>As Steve's post mentioned (and which I didn't know), the voltage
>available (at a given field strength) from a loop antenna is multiplied
>by the effective permeability of the coil. While the measurements
>couldn't approximate the predicted results when ignoring the
>permeability, I also couldn't approximate the predicted results assuming
>a value of 850 (#33 ferrite core).

>I measured the inductance of the ferrite rod loop antenna last night. I
>measure 9.98 mH (call it 10). The coil consists of 400 turns on a 1/2"
>diameter #33 ferrite core. The coil is single layer and about 4.5
>inches in length. If I did the math properly, I get an effective
>permeability of only 45 or so.

I am planning on checking out the exact formula, but a short coil on
a long rod gives a higher effective permeability than a long coil. The
curves I have seen give the effective perm as a function of
(coil length)/(rod length). You can get an intuitive feel that for
a really short coill on a really long rod, the effective perm wouild
get closer the material perm.

>Using this value, the predicted and actual values of available voltage
>are very close.

Excellent follow-up. Thanks.

>Gary Tennyson
>gary.j.tennyson@bridge.bst.bls.com
--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

1078. PC Device Control Applications Note

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Todd Peterson <elab@netins.net>
Message-ID: <32EEC2D8.6A21@netins.net>
Source record: 97910
Cross-posted to: comp.sys.ibm.pc.hardware.chips,comp.benchmarks,sci.engr.television.advanced,rec.radio.amateur.homebrew

DEVICE CONTROL APPLICATION NOTE

We are pleased to announce that our new application note,
'Device Control via the PC' is finally available.

This application note covers such topics as PC control of lamps and motors
using solid state and mechanical relays, device control using both
BJT and power MOSFET transistors, stepper motor control using a transistor
array IC, as well as PWM motor control using the L293 H-Bridge. Connection
to the PC is made via our inexpensive EDE300 PC Interface IC. Code examples
are also provided.

Feel free to download a copy today; it is available at
http://www.netins.net/showcase/elab in the 'Integrated Circuits' section
under 'EDE300'.

Todd Peterson
E-Lab Digital Engineering, Inc.

P.S. - While you're there, visit our Electronics Resource Directory,
a freely useable directory containing over 500 categorized hot-links of
value to the electronics community.

1079. Re: rx/tx with 807, who knows something ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <32EF01C5.1865@erols.com>
Source record: 97911

Bart Mudde wrote:
>
> I have collected for some years several items to build a tube rx and or
> tx. I am not looking for a big radio, some 50 or less watts is good.
> I have some new 807 tubes with sockets, so I hope some one knows a good
> circuit to build something with the 807. I only operate in CW.
> Any costs will be payed off course.
> 73 de Bart PA3GGM.
>
> address:
> W.B. Mudde
> Ds. Schoutenlaan 3
> 4797 CC Willemstad
> The Netherlands
> In the beginning there was nothing, therefor I'm satisfied now

Tons of transmitter schematics with one or two 807s. Let me know what ya
want. Never saw one used in a receiver.

1080. Re: Apology

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: edbu@sepia.wv.tek.com
Message-ID: <5cmiquINN1u2@sepia.wv.tek.com>
Source record: 97912

In article <5cipu1$a3j$1@news.rain.org> rmote@rain.org (Ray L. Mote) writes:
>The email attacks on Diane Moore for her beer question were unwarranted
>and reveal some pretty ugly character flaws on the part of the
>originators. Unless you can enforce a single meaning worldwide for the
>word "homebrew", you'd better be prepared for similar intrusions of your
>precious group in the future. After the treatment she received here, I
>pity the next ham who wants to put up a tower in *her* neighborhood!

Point well taken Ray. We were all new users once, and I don't ever
remember being treated that way in the old days for making a simple
mistake while posting. We need to all remember that as a Hams, we
represent our community on the air and off. Truth be known, I spend
about as much time making crystal malt ales as I do crystal filters.
I didn't find her posting offensive, and am sorry if others came down
on her hard. It's not the way it otta be.
Ed Burress
KC7GFX

1081. Re: WIN 95 - O/S, or SHELL??? Was ->QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Bob <_pmw5_@cornell.edu>
Message-ID: <32EE5F7D.7E46@cornell.edu>
Source record: 97913

R. L. Measures wrote:
>
> In article <measures-1301970048330001@port3.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) wrote:
> snip...
> > Since Windows is basicly ancient MS-DOS, ...snip...
>
> I caught some flak on this statement, so I did some research. What
> follows is an explanation of the DOS/Windows-kinship written by a more
> knowledgeable person than yours truly....Huge Snip...
Well, try this, and figure out what to call it...
Turn on computer with WIN 95 loaded. As soon as machine starts to boot,
press F8. Select command line mode. Welcome to DOS (7?, WIN 95 DOS??).
Acts alot like DOS 7. Now type WIN. WIN 95 comes up, acts the same as
always.
--
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.2

mQBtAzK9lTgAAAEDALNAegQHu6xJ7isCW1c57zKpN2N97N14FO6OcHQ1JLQNpbsB
bXmt2KaZMu4+4qLKiaM3S94CANtQlMc/VrQ6fZJNmu2Abg68PrP5RM9PkrKasLiU
8OJ86NbesAZWzN0PFQAFEbQ+Um9iZXJ0IFdleWJyZWNodCwgSlIgLSBOMlFFVyAt
IHBtdzVAY29ybmVsbC5lZHUgLSA2MDctNzU3LTk0MzQ=
=Df2X
-----END PGP PUBLIC KEY BLOCK-----

1082. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970128233833.3645A-100000@Stratus.CAM.ORG>
Source record: 97914

You might check the Winter 1996 issue of Communications Quarterly. On page 29, there's an article by Ulrich Rohde and Chao-Ren Chang entitled "Osicllators with Low Phase Noise and Power Consumption". Apparently it's a reprint from RF Design. It might be a starting point.

Michael VE2BVW

On 20 Jan 1997, Tom Bruhns wrote:

> I'd appreciate pointers to designs of low phase noise VCOs
> in the 150MHz range, with a control range of 5MHz or so.
> Lower control range (down to 1MHz or so) with band selection
> thru diodes would also be OK. Would especially like pointers
> to articles that discuss the designs in some detail, not just
> say, "build it like this and it will be fine." Practical as
> well as theoretical info would be helpful: things like,
> "this series of varicap diode is especially good," as well
> as, "the varicap diode should have these characteristics
> for optimal performance."
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com
>
>

1083. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Scott Coburn <scott@bnl.gov>
Message-ID: <32EE79DF.6B535908@bnl.gov>
Source record: 97915

Roy Lewallen wrote:
>
> If you were to wind the coil on a ferrite toroid, whose magnetic path is
> entirely in the ferrite, you would find the effective permeability to be
> essentially the same as the core's permeability. But of course it would
> make a lousy antenna. The whole idea of the antenna is to couple to the
> field going by in the air. The rod does this because part of its field is
> also in the air.

Wow, neat information. Is there a gogd book that explains all of this
stuff and more about ferrite/loop antennas?

Scott

--
scott coburn brookhaven national laboratory
mailto:scott@bnl.gov upton, ny, usa
http://gorzarg5.phy.bnl.gov/~scott (on long island)

1084. Re: Q:Minicircuit VCO as Crystall replacement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Jim <jstrohm@texas.net>
Message-ID: <5clrhs$h9u@newsgate.sps.mot.com>
Source record: 97916

It's not that simple. You can't just drop a VCO into
the crystal socket. However, from a functional standpoint,
you can use a VCO (with accompanying PLL, control, and
buffer amp circuitry) to replace a crystal-controlled frequency
source or a VFO (variable frequency oscillator) used for
frequency control.

Mini-Circuits has a short publication called "VCO Designer's Handbook"
that is the best FREE description of VCOs I've seen.

Mini-Circuits
P.O. Box 350166
Brooklyn NY 11235-0003
(718) 934-4500
http://www.minicircuits.com

Mini-Circuits North American Distribution Center
P.O. Box 7128
Branson MO 65615
lb@minicircuits.com

Small-Order Accounts (Dept. F)
(800) 214-6428 ext. 606

Ottawa CAN:
(613) 820-2606
102707.464@compuserve.com

1085. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: "Harry H. Brown" <hbrown@vf.lmms.lmco.com>
Message-ID: <32EE404F.167EB0E7@vf.lmms.lmco.com>
Source record: 97917

I just talked to the local Newark Electronics rep this morning and they are sending out the latest copies of both catalogs. Mine were a year old.

Keep trying and ask and they should send it. I beleive that a new Farnell catalog is coming soon. The rep said that Farnell bought Newark and they plan on keeping both catalogs.

73, Harry, W3IIT

Doug Faunt N6TQS +1-510-655-8604 wrote:
>
> Unfortunatly, Farnell in the US and Newark seem to have merged, and if
> you call the number that was given for Farnell, you get Newark, and if
> you request a catalog, you get a Newark catalog. Not an altogether
> useless thing, but I'd like to see one of these really neat Farnell
> catalogs.
>
> 73, doug
>
> From: hbrown@voicenet.com (Harry Brown)
> Newsgroups: rec.radio.amateur.homebrew
> Date: Tue, 28 Jan 1997 11:22:33 GMT
>
> "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
>
>
> beat me to it.
>
> 73, Harry, W3IIT

1086. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: "Harry H. Brown" <hbrown@vf.lmms.lmco.com>
Message-ID: <32EDFBAF.41C67EA6@vf.lmms.lmco.com>
Source record: 97918

Farnell is located in West Columbia, South Carolina. Their phone number
for sales is 800-718-1997 and fax is 800-718-1998. Their number for
administrative stuff is 803-796-7958. They clain 38,000 items in stock
in South Carolina.

Their catalog does have sockets for surface mount parts.

Their minimum order for credit cards and cash is $25.00.

Hope this helps.

73, Harry, W3IIT
==========

Harry Brown wrote:
>
> "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
>
> >Don't forget that you can buy "spreaders" to mount SMD chips on a 0.1in
> >DIL pin header. For UK readers they're in the Farnell catalogue; could
> >somebody please re-post details of a US distributor?
>
> Farnell now distributes in the US. They have a terrific catalog. They
> are located in South Carolina. I don't have their catalog at home.
> Will get the info at work today and post it here if someone does not
> beat me to it.
>
> 73, Harry, W3IIT

1087. unsubscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: ermira@pl.jaring.MY
Message-ID: <3.0.16.19970128080616.294f3b2a@pop2.jaring.my>
Source record: 98014

can anybody tell me how to unsubscribe from this reflector.
advanve thank....
regards

1088. FS: BOONTON 250-A RX Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <5cjq8j$v99@news1.hlc.net>
Source record: 98015
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

This meter is in working condition and cosmetically good. Manual is
available separately. I'll take the best offer over $75 from bidders
within the 48 states. Buyer to pay Mail Box Center packing and
shipping fees from ZIP 20170. E-Mail for any questions.
Thank you,
Dale

1089. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: hbrown@voicenet.com
Message-ID: <5cjud9$pk8@news1.voicenet.com>
Source record: 98016

I just ran across this discussion and have no expertice on the subject. However it occured to me that the reason for the arcing occuring was because the switch was thrown. The impedances could really be momentarily messed up during this short time and cause conditions to occur that bring about oscillations. Very high rf current flow when the contacts break contact could be the source.

If I'm completely off base let me know kindly please.

73, Harry, W3IIT

1090. Alignment help or manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: bdavis5992@earthlink.net
Message-ID: <5cjtn9$9r@nicaragua.earthlink.net>
Source record: 98017

========
Newsgroups: rec.radio.amateur.equipment
Subject: Service Manual/alignment help
From: Robert Davis <bdavis5992@earthlink.net>
Date: Mon, 27 Jan 1997 19:06:08 -0800

Help, ICOM says they can't get me a manual for a ICOM IC505 6 meter
transceiver. The carrier osc. needs to be put back on frequency, but
I am having trouble. I need either a source for the manual or some
direction in regards to which is adjusted first on this radio, the cw,
the USB or LSB frequency. There is interaction between the three
coils and am a bit lost right now. When I have CW on, I lose either
USB or LSB (I can't remember right now) I have a schematic but I am
not doing too good.
Thanks in advance
Bob bdavis5992@earthlink.net

1091. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: eplatt@127.0.0.1
Message-ID: <32f78eb6.13718857@news.wco.com>
Source record: 98018
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

If someone is standing next to them with a scanner for ither 46 or
cellular, yes, they will hear the entire conversation.

"Mel Robinson" <mello@bconnex.net> wrote:

>If I buy a digital spred spectrum phone, and I phone someone who takes the
>call on either a cell phone or a 46-49 mhz cordless, will the conversation
>be picked up by a scanner, eventhough I am sending a digital signal?
>If so, there is no such thing as a private conversation, until someone
>invents a pre-scanning device incorporated in the phone, that like call
>display tells you what type of phone you just connected too. There
>probably is a big market for such a device....If anyone markets such a
>device after to-day's date be prepared to share Revenues with me.
==========
To reply vie e-mail, reply to eplatt@wco.com.
Sorry for the inconvience, but spammers will pull your name without
your permission from postings, sending unsolicited e-mail!

1092. F.S. Digital Multi-Tester (New)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: "Roger H. Smith" <goldwing@iquest.net>
Message-ID: <01bc0cf7$a42e89a0$4eaaf6ce@goldwing.iquest.net>
Source record: 98019
Cross-posted to: fido.ham-sale,in.ham-radio,misc.forsale.non-computer,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

BRAND NEW & UN-USED : Digital Multi-Tester : Huge 3& 1/2 " display, Fuse protected, U.L. listed, Diode check, Transistor check (hFE) (NPN & PNP types), 5 DC ranges (200m-2-20-200-1000), 2 AC ranges (0-200 & 200-750), 5 DC Amperage ranges (200uA-2mA-20mA-200mA - 12Amp), 6 Resistance ranges (200-2K-20K-200K-2M-20M), Comes with 9v battery, test leads, & manual. Has a pop-out stand & low battery indicator. Physical size : 5 & 3/4" X 3" X 1 & 1/2". Even has re-calibration instructions ! ..... This is a NICE little D.M.M. ..... I have 7 to sell ..... $20.00 plus actual shipping costs (unit is very small & light)

E-Mail to: "goldwing@iquest.net"

Thanks & 73's ..... Roger N9PMC

1093. Re: 2n1304, 2n1305 xsistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ckeea$e9e$1@nadine.teleport.com>
Source record: 98020

In article <5cjv9s$jkv@crl2.crl.com>,
rbrandon@crl.com (Reid Brandon) wrote:
>Jeffrey Herman (jherman@Hawaii.Edu) wrote:
>: While dumpster diving, I came across dozens of boards containing
>: 2N1304 and 2N1305 transistors. Are these good for RF applications?
>: What's the maximum freq'y at which they'd still be useful?
>
>: KH2PZ, Hawaii Dumpster Divers' Association
>
>These are Germanium devices, as I remember good up to 50 MHz if your
lucky.
>Only merit they have is that they operate well at very low voltages.
>Thermally they are not good for anything much, Silicon took favor long
>since. 73 W6MTF

They are germanium, but ft is around 5, not 50 MHz. They were widely used
as switches in digital circuits. You probably have the remains of an early
digital computer. (If they had had 2N404's, it would have been a really
early one. . .)

Roy Lewallen, W7EL

1094. Re: Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Brian Gibbs <brian@brimar.demon.co.uk>
Message-ID: <606167382wnr@brimar.demon.co.uk>
Source record: 98021

Posted to rec.radio.amateur.homebrew

In article: <5ce12h$gbe@ralph.vnet.net> moore@vnet.net (Diane Moore) writes:
>
> I am asking this question for my husband who has just completed making
> his first batch from a kit we bought in the wireless catalog for
> Christmas. He is hooked! `````````
>
>
> He would like to know if you can use a 7.5 gallon carboy to rack off 2
> gallons of beer? The kit has all of the equipment (except a place to
> rack off) for 2 gallons. He knows that he would like to expand soon
> to making 5 gallons at a time and he does not want to invest in two
> different size carboys.
>
> Any help would be appreciated!
>
> Diane Moore
> moore@vnet.net
>
>
>

Diane, I have been a radio ham for over 35 years. It seems I have
been missing this exciting facet of the hobby!

Hope someone will come up with an answer.....best regards
--

| Brian Gibbs EMail brian@brimar.demon.co.uk
| Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU

1095. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: bone@accessnv.com
Message-ID: <5ckg8n$3cs@usenet78.supernews.com>
Source record: 98022
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I missed the original post, so can someone tell me where to find this shareware program?

Bob Morris bone@accessnv.com
Las Vegas, NV bob.morris@genie.geis.com
KB7QAC @N0IA.#SONEV.NV

1096. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: T C P Wong <T.C.Wong@shef.ac.uk>
Message-ID: <32EDC7C7.7488@shef.ac.uk>
Source record: 98023
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

Evan Platt wrote:
>
> If someone is standing next to them with a scanner for ither 46 or
> cellular, yes, they will hear the entire conversation.
>
> "Mel Robinson" <mello@bconnex.net> wrote:
>
> >If I buy a digital spred spectrum phone, and I phone someone who takes the
> >call on either a cell phone or a 46-49 mhz cordless, will the conversation
> >be picked up by a scanner, eventhough I am sending a digital signal?
> >If so, there is no such thing as a private conversation, until someone
> >invents a pre-scanning device incorporated in the phone, that like call
> >display tells you what type of phone you just connected too. There
> >probably is a big market for such a device....If anyone markets such a
> >device after to-day's date be prepared to share Revenues with me.
> ==
> To reply vie e-mail, reply to eplatt@wco.com.
> Sorry for the inconvience, but spammers will pull your name without
> your permission from postings, sending unsolicited e-mail!

Hi,

Sorry about my limited knowledge. I thought a spread spectrum phone uses
digital code division multiple access (CDMA). The continous voice
conversation was being first Pulse code converted then, depends on the
current instantaneous psuedo noise signal, each divided part digital
voice signal was modulated using shift keying method and so each part
have a different shift key frequency. The only way to decode the
information is when the receiving hand set to run the psuedo noise
sequence simultaneously.
So I am a bit unsure , and would most wish to know, how a analogue
scanner can intercept the conversion.
Information on this subject is most appreciated

Patrick

--
Dr. Patrick Wong
Radar and Commumincation Group
Department of Electrical and Electronic Engineering
The University of Sheffield, UK.
Tel.- +44-114-2825582
Fax.- +44-114-2722097
E-mail.- t.c.wong@sheffield.ac.uk

1097. Need info on military radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Kirk <rms000704@interramp.com>
Message-ID: <32EDC61B.580C@interramp.com>
Source record: 98024

I need info or a source of info on a french military radio set.
I beleive made in the US, looks similar to a american AN/PRC-104.
Probably manufactured in the 1980's. VHF FM? SSB? Data modes?
Approx: 28 lbs, 8 x 10 x 3
Freq's: 33 to 47
Markings as follos:
STTA
EMETTEUR-RECIPTEUR-ER79A
MARCHE No74/83006

STTA
CASE CY 744 A/PRC
CSF.79 Bd HAUSSMANN PARIS

Any information would be appreciated.

--

Kirk Rufus Olins,
Traders, Gmbh
E-mail: kirk32767@mindspring.com

1098. Re: Motorola Part Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: peace@ais.net
Message-ID: <5ckiso$7dl@news2.ais.net>
Source record: 98025
Cross-posted to: rec.ham-radio,rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

C (cpierce@usit.net) wrote:
: I am in need of a IC for a Motorola Moxy 150 Mhz radio. I have contacted
: the Motorola service rep. in my area and I keep getting the runaround each
: time I speak to them. I have been trying since May of last year to get
: this IC and usually I hear that "I'm sorry we forgot to order it for you"
: or "I lost the numbers you gave me". If someone has the ability to order
: this for me please let me know.
:
: It is the desc. IC with the following numbers on it "M2078" and "274 H
: 8436". I have tried to cross this to another number but have had no
: sucess.
:
: Please do not take me wrong I am not bashing Motorola, just tried of not
: geting the part that I needed.

Call parts Identification first at 1-847-538-0021.Then go from there
--
Georg Kirn Email:Peace@Ais.net

1099. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: hbrown@voicenet.com
Message-ID: <5ckmvp$ae@news1.voicenet.com>
Source record: 98026

"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:

>Don't forget that you can buy "spreaders" to mount SMD chips on a 0.1in
>DIL pin header. For UK readers they're in the Farnell catalogue; could
>somebody please re-post details of a US distributor?

Farnell now distributes in the US. They have a terrific catalog. They
are located in South Carolina. I don't have their catalog at home.
Will get the info at work today and post it here if someone does not
beat me to it.

73, Harry, W3IIT

1100. rx/tx with 807, who knows something ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <32ede036.367832@news5.inter.NL.net>
Source record: 98027

I have collected for some years several items to build a tube rx and or
tx. I am not looking for a big radio, some 50 or less watts is good.
I have some new 807 tubes with sockets, so I hope some one knows a good
circuit to build something with the 807. I only operate in CW.
Any costs will be payed off course.
73 de Bart PA3GGM.

address:
W.B. Mudde
Ds. Schoutenlaan 3
4797 CC Willemstad
The Netherlands
In the beginning there was nothing, therefor I'm satisfied now

1101. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <vigADGA7hd7yEweo@ddwyer.demon.co.uk>
Source record: 98028

My proposal for best ssb noise is as follows;
Build a single coil helical resonator at the required frequency (rather big at your frequency) optimise input and output loops /taps for minimum loss (2db?), Build bipolar maintaining oscillator with just enough Varicap to tune over the range, introduce emitter negative feedback extending down to DC employ a modest ft transistor with reasonable die area say a medium power device. Arrange vco configuration so that coil is grounded (single ended) take output across impedance at the earthy end of the coil.
Note noise floor primarily a function of the ratio of osc level versus device noise can be partly due to audio noise.
Close in noise a function of Q hence helical resonator gives best result if you can get enough tuning.

>>From Bob Currell G4EIK
>>I hope you find what you want Steve, but have you realised that you are
>>expecting near crystal oscillator level performance from a VCO.
>
>I don't think so. A mediocre crystal oscillator will do -140
>and a state of the art one with do -180.
>
>>It would need a very tight filter bandwidth to get very much better than
>>-107dBc at 10kHz although it is possible.
>
>As I said, we did considerably better than that at Konel 20 years
>ago by 1) tapping way down on the tank so the amplifier didn't
>de-Q the tank and 2) keeping the gain down which raises the
>signal to noise ratio at the input of the transistor. The Konel
>KR-78 didn't have a very high Q tank, just a low impedance one.
>Knowing what I know now, I could probably get another 10 dB.
>without doing anything heroic.

Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax: +44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

1102. Re: Schematics for PCL82 small tx

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5cknii$h8c@news1.mnsinc.com>
Source record: 98029

Cesare.Lavazza@nemo.it (Cesare Lavazza) whistled a happy tune like:

|>Where to find a schematic for a small AM tx with one or two PCL82 or
|>ECL82 or similar triode-pentode tubes?
|>Thanks.
|>Saluti.

|>--
|>E-mail: Cesare.Lavazza@nemo.it
|>WWW: http:\\radionostalgia.net\Users\Lavazza
|> http:\\www.geocities.com\CapeCanaveral\4573

SALUTI Cesare!
I think I already told you this once but I will try again!!

You can find such schematics and articles at:

http://www.mnsinc.com/bry/hamfiles.htm

ENJOY! Arrivederci - Bry

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1103. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2801970512210001@news.vcnet.com>
Source record: 98030

In article <5cjud9$pk8@news1.voicenet.com>, hbrown@voicenet.com wrote:

> I just ran across this discussion and have no expertice on the
> subject. However it occured to me that the reason for the arcing
> occuring was because the switch was thrown. The impedances could
> really be momentarily messed up during this short time and cause
> conditions to occur that bring about oscillations. Very high rf
> current flow when the contacts break contact could be the source.
>
> If I'm completely off base let me know kindly please.
>
> 73, Harry, W3IIT

The Kenwood Service Dept in Compton, California used to tell TL-922
owners' whose bandswitches arced and burned up, that the arcing was caused
by rapidly switching the bandswitch back and forth while transmitting.
This would be like Chrysler telling minivan owners' whose transmissions
failed that the failure was caused by rapidly shifting back and forth
between gears while travelling at highway speed.

To the best of my knowledge, bandswitch contact-arcing always occurs across
open contacts. For example, in Rick (KC0HH) May's two, toasted, AL-80
bandswitches shown in Figure 15 at
http://www.vcnet.com/measures/
the amplifier was solely being used on 75m when bandswitches #1 and #2
arced and burned up their 10m and 15m contacts. When bandswitch #3
started arcing, Rick realized that something peculiar was going on. Rick
reported that the arcing ceased after he modified the VHF-suppression
circuitry in the amplfiier.

IMO, 10m and 15m contact arcing in a bandswitch is indicative of
intermittent VHF parasitic oscillation---especially when another indicator
is found, such a VHF parasitic-suppressor resistor that measures more than
double its marked value of R.
On page 33 of "Parasitics Revisited" in the October 1990 issue of QST,
the 10m and 15m contacts have literally evaporated from the TL-922
bandswitch. The replacement bandswitch in this TL-922 continued to arc
until the beautiful silver-plated Trio-Kenwood VHF suppressors were
replaced with ugly, but lossy, Ni-Cr-Fe VHF suppressors.
---
e-mail copy to Mr. Brown

--
--Rich-- ag6k, 805-386-3734

1104. ATV Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Dave Hockaday <wb4iuy@ipass.net>
Message-ID: <32EE3C53.4163@ipass.net>
Source record: 98031

A friend and I are working on a homebrew ATV rx and tx for 900 mhz using motorola building blocks for the lna, downconverter, and exciter/PA. Does anyone out there have experience in same? If so, I'd like to swap notes and pick your brains...

--
Dave Hockaday WB4IUY
wb4iuy@ipass.net
WB4IUY@W4RAL.#RTP.NC.USA.NOAM

http://www.ipass.net/~hockaday/
http://www.ipass.net/~wb4iuy/
http://www.ipass.net/~teara/
http://www.geocities.com/TheTropics/3349/
http://www.RTPnet.org/~fcarc/
http://www.RTPnet.org/~rdrc/

1105. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: laird@pier.ecn.purdue.edu
Message-ID: <5cl5bh$s0a@mozo.cc.purdue.edu>
Source record: 98032
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

>>If I buy a digital spred spectrum phone, and I phone someone who takes the
>>call on either a cell phone or a 46-49 mhz cordless, will the conversation
>>be picked up by a scanner, eventhough I am sending a digital signal?
>>If so, there is no such thing as a private conversation, until someone
>>invents a pre-scanning device incorporated in the phone, that like call
>>display tells you what type of phone you just connected too. There
>>probably is a big market for such a device....If anyone markets such a
>>device after to-day's date be prepared to share Revenues with me.

Similarly, if I am using landline ISDN phone to call a
local radio station, will everyone in the whole damn
county be able to hear me when the station decides to
put me "on the air"?

Duh...

--kyler

1106. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970128152200.KAA04658@ladder01.news.aol.com>
Source record: 98033

Hi Rich--

This being a newsgroup, I'd rather see the promised in-depth technical discussion of what your after-market product actually does or doesn't do--rather than have to sort through this never-ending stream of anecdotal lip-flap. If you simply wish to advertise your product, wouldn't it be better to use a webb page??

Rick K1BQT

1107. Re: SX42 crystal filter query....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: provero@connix.com
Message-ID: <5cjm0o$h6@beast.connix.com>
Source record: 98034

In <19970127034000.WAA08605@ladder01.news.aol.com>, commquart@aol.com (CommQuart) writes:
>My crystal filter in my SX-42 is inoperative. Does anyone know of
>the correct characteristics for the 455-kc crystal used in the this
>(Cohn?) design? I am tempted to use a 455-KHz HC-6 crystal from
>my junkbox to replace it -- but I am not sure what the crystal frequency
>is supposed to be, or if it is operating in series or parallel mode in
>this
>circuit.
>
>Any old timers out there who can give me some advice?
>
>Peter Bertini K1ZJH
>Senior Technical Editor, Communications Quarterly Magazine
>"The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

I can't speak directly to the SX-42, but most of the Lamb single
crystal filter circuits are similar. Here's the scoop on the
similar circuit in a SP-210:

(from TM 11-866)

14. CRYSTAL FILTER

a. The Quartz Crystal Filter (T1) couples the 1st detector
(V3) to the 1st IF amplifier (V5). Its selectivity can be varied in
definite steps by the CRYSTAL SELECTIVITY switch (SW7) controlled
from the front panel by knob and pointer E7. In addition,
its selectivity characteristics can be greatly sharpened on one side or
the other by adjusting the PHASING condenser (C32), which is
controlled by knob E8.

b. When the CRYSTAL SELECTIVITY switch is set at OFF the quartz
crystal is short-circuited and signal voltages present in the
secondary of the 1st detector plate coil (L26) are impressed
directly on the control grid of the 1st IF amplifier tube (V5).
At any other setting (1 to 5) the quartz crystal is in use and acts
as an extremely high "Q", high impedance, series tuned circuit
interposed between the secondary of plate coil (L26) and the 1st IF
grid circuit (L27, C33), which constitutes the load into which the
crystal works. Selectivity is varied by altering the impedance of
this parallel tuned circuit (L27, C33), which is accomplished by adding
resistance (R42, R43, R44, R45) in series with coil L27 and capacitor
C33. As this series resistance is increased (reducing the parallel
impedance of circuit L27, C33) the overall selectivity of the filter
is also increased.

Hope this helps,

P.J. "Josh" Rovero email: provero@connix.com
Oceanographer work: rovero@sonalysts.com
Meteorologist radio: KK1D
Curmudgeon at large web: http://www.connix.com/~provero/

1108. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5cld6c$n0t$1@nadine.teleport.com>
Source record: 98035
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <32EE02BE.2FA2@bridge.bst.bls.com>,
Gary Tennyson <gary.j.tennyson@bridge.bst.bls.com> wrote:

>. . . While the measurements
>couldn't approximate the predicted results when ignoring the
>permeability, I also couldn't approximate the predicted results assuming
>a value of 850 (#33 ferrite core).

>I measured the inductance of the ferrite rod loop antenna last night. I
>measure 9.98 mH (call it 10). The coil consists of 400 turns on a 1/2"
>diameter #33 ferrite core. The coil is single layer and about 4.5
>inches in length. If I did the math properly, I get an effective
>permeability of only 45 or so.

A ferrite rod has a large air gap in the magnetic path (the gap being the air path from one end of the rod to the other). This causes the "effective" permeability to be much less than the permeability of the rod. An approximate equivalent circuit can be constructed with resistors representing the magnetic reluctances of the paths. You have two "resistors" in series -- one representing the ferrite rod and one representing the gap. The gap resistor is typically much larger than the rod resistor. Amidon used to send out a chart showing effective vs. rod permeability as a function of rod permeability and geometry -- don't know if they still do.

If you were to wind the coil on a ferrite toroid, whose magnetic path is entirely in the ferrite, you would find the effective permeability to be essentially the same as the core's permeability. But of course it would make a lousy antenna. The whole idea of the antenna is to couple to the field going by in the air. The rod does this because part of its field is also in the air.

Roy Lewallen, W7EL

1109. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <5cl1g2$mlv@vixen.cso.uiuc.edu>
Source record: 98036

In a previous article, w7el@teleport.com (Roy Lewallen) says:

>In article <Pine.GSO.3.95.970118213251.3897A-100000@oso.slonet.org>,
> Clifford Buttschardt <cbuttsch@slonet.org> wrote:
>>I have been told to be sure and use electronic grade RTV for long term use
>>in outside antennas in which the exposed ends of coax must be sealed for
>>extended periods. What is this material and where can it be purchased?
>> As a first guess I would think that it is RTV in which a non acedic
>>base is use. If this is true, can any clear RTV be used that does NOT
>>smell like acidic acid (vinegar) when opened? Cliff Buttschardt K7RR
>
>For a couple of decades now I've used the vinegar-smelling stuff for all
>sorts of electronics purposes, indoors and out, and never seen a trace of
>corrosion. Has anyone else, or have you just heard (as I have) that it
>causes corrosion?
>
>Roy Lewallen, W7EL
>

I have been using it for at least 10 years also and have never had any
corrosion from it. I've also used the ammonia-smelling stuff and haven't
had any problems with it either.

Zack W9SZ

--

1110. Re: rx/tx with 807, who knows something ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32EE2F31.B7F@idecc.com>
Source record: 98037

Bart Mudde wrote:
>
> I have collected for some years several items to build a tube rx and or
> tx. I am not looking for a big radio, some 50 or less watts is good.
> I have some new 807 tubes with sockets, so I hope some one knows a good
> circuit to build something with the 807. I only operate in CW.
> Any costs will be payed off course.
> 73 de Bart PA3GGM.
>
> address:
> W.B. Mudde
> Ds. Schoutenlaan 3
> 4797 CC Willemstad
> The Netherlands
> In the beginning there was nothing, therefor I'm satisfied now

There is a nice plan for a pair of 807's in the 1947 Radio Handbook. I could send you a copy if you like. Are you sure you want to go to the trouble? Unless you already have a high voltage supply and high current chokes required it may cost you more to build than buying a nice QRP kit complete!

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

1111. Old base station Antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Steve Noonan <snoondhs@pop.k12.vt.us>
Message-ID: <32EE24D3.2AEA@pop.k12.vt.us>
Source record: 98038

Does anyone have an old base station antenna that they wouldn't mind giving a way to me? I am 16 and I am just gettig started. Right now I have a homemade antenna that I built from stuff around the house. It works ok, but I need to get a real antenna. The problem is, I'm broke. So if any one has an old base station antenna that they don't need anymore, I would appreciate it very much if you would consider giving it to be. I live in Danville Vermont. If you live within a couple of hours from here I could come pick it up. Or if you don't live close I could pay for shipping. I would really appreciate a base station antenna, also if anyone has an old power supply that they don't need, I could use one of those to. Right now I am running of a 12 Volt adapter that is meant for a cordless phone. Makeshift, but it's working for now. Thanks in advance!

Your Friend,
Steve Noonan Jr. (Hitch Hiker) my e-mail is snoonan@danville.k12.vt.us

1112. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Gary Tennyson <gary.j.tennyson@bridge.bst.bls.com>
Message-ID: <32EE02BE.2FA2@bridge.bst.bls.com>
Source record: 98039
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

> Steven Swift wrote:
>
> I have a little 'c' program that calculates what you need for loop
> antennas. .....

In a previous post, I mentioned that I couldn't balance measured results against predicted results (assuming published WWVB field strength gradients) on a ferrite core antenna at 60 kHz. That predicted value, though, ignored the permeability of the core.

As Steve's post mentioned (and which I didn't know), the voltage available (at a given field strength) from a loop antenna is multiplied by the effective permeability of the coil. While the measurements couldn't approximate the predicted results when ignoring the permeability, I also couldn't approximate the predicted results assuming a value of 850 (#33 ferrite core).

I measured the inductance of the ferrite rod loop antenna last night. I measure 9.98 mH (call it 10). The coil consists of 400 turns on a 1/2" diameter #33 ferrite core. The coil is single layer and about 4.5 inches in length. If I did the math properly, I get an effective permeability of only 45 or so.

Using this value, the predicted and actual values of available voltage are very close.

Gary Tennyson
gary.j.tennyson@bridge.bst.bls.com

1113. Direction Finding

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: Ivan Lucas <lucasir@cf.ac.uk>
Message-ID: <E4qB74.7pt@cf.ac.uk>
Source record: 98040

Anyone know where I can find info on radio direction finding?

(Please email if poss. to Lucasir@cardiff.ac.uk)

Ivan

1114. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: faunt@netcom7.netcom.com
Message-ID: <FAUNT.97Jan28083213@netcom7.netcom.com>
Source record: 98041

Unfortunatly, Farnell in the US and Newark seem to have merged, and if you call the number that was given for Farnell, you get Newark, and if you request a catalog, you get a Newark catalog. Not an altogether useless thing, but I'd like to see one of these really neat Farnell catalogs.

73, doug

From: hbrown@voicenet.com (Harry Brown)
Newsgroups: rec.radio.amateur.homebrew
Date: Tue, 28 Jan 1997 11:22:33 GMT

"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:

>Don't forget that you can buy "spreaders" to mount SMD chips on a 0.1in
>DIL pin header. For UK readers they're in the Farnell catalogue; could
>somebody please re-post details of a US distributor?

Farnell now distributes in the US. They have a terrific catalog. They are located in South Carolina. I don't have their catalog at home. Will get the info at work today and post it here if someone does not beat me to it.

73, Harry, W3IIT

1115. Re: VHF/UHF NF optimization

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-28 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5cli5e$pe0@hpcvsnz.cv.hp.com>
Source record: 98042

Bob Doyle (doyle@primenet.com.DELETE-FOR-EMAIL) wrote:

: Ya but...

: I think you can always match the impedance that the device wants to
: "see" for optimum NF to 50 ohms and get a 1:1 VSWR.

?? Maybe I'm reading this diffrently than you meant...but if your
circuit's input impedance is 500 ohms and optimal noise figure occurs
for a 200 ohm source impedance, when you do the 4:1 match from 50 to
200 to get optimal noise figure, you have a 2.5:1 SWR.

But that's not to say you couldn't change the circuit (through [negative]
feedback) to modify the circuit's input impedance to get a match, if
that is important to you. In a television receiver, for example, you
wouldn't want to have a lot of echos on a long transmission line, because
that can lead to ghosts. On the other hand, there are cases where you
want to have a load that's a lot different than the source impedance,
while maintaining good noise figure, and if that doesn't occur naturally,
you can aid it, again through feedback.

--
Cheers,
Tom
tomb@lsid.hp.com

1116. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <E4r14E.1w1@eskimo.com>
Source record: 97883
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

novatech@eskimo.com (Steven Swift) writes:

> I am planning on checking out the exact formula, but a short coil on
>a long rod gives a higher effective permeability than a long coil. The

I know it's bad form to follow-up on your own article, but here's an
approximately correct closed form solution.

Let L=length of rod
d=diameter of rod
Um=material permeability
Ue=effective permeability

The following formula are almost right:

set k = 0.022*exp(-0.039*L/d)

then Ue = Um/(1+k*(Um-1))

This will be close enough.

References: Chapter 4, "Communications Receivers," Rohde, Whitaker, Bucher
and Chapter 4, "VLF Radio Engineering," Watt.
--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

1117. Re: Johnson Match-Box for WARCs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: jgarver@ichips.intel.com
Message-ID: <5cm6k3$7q6@news.jf.intel.com>
Source record: 97919

In article <5claug$o6@dfw-ixnews12.ix.netcom.com>,
Craig J. Sterling <cjsterl@ix.netcom.com> wrote:
>Greetings,
and hallucinations!

>Does anyone have any experience with the small version of the Johnson
>Match-Box for WARC Band coverage? If so, what was the modification and
>does it reduce the units efficiency.

The procedure that I used with my Matchbox Jr. was to select the nearest
ham band and adjust both knobs until a match is found. I done this
only with balanced, ladder line fed antennas that presented an impedance
below 1500-2000 ohms. The matchbox does not like high impedance feeds,
WARC band or not. I had no trouble matching various antennas on the WARC
bands with various wire antennas. It will NOT match 160 meters without
extensive mods that will ruin a nice Matchbox, IMHO.
I have run 700-800 watts through my little Matchbox Jr. with no problems.
The manufacturer specs it at 275 watts max.
I really like the Matchbox because its easier and faster to tune as well
as more efficient than a T-tuner. But it has its place and its not good
for end-fed halfwave antennas and other high-Z matches. Also, why use a
nice inherently balanced tuner like this on a coax line?

--
jgarver@ichips.intel.com K7YO I don't speak for Intel

1118. Re: Email Address

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5cm8os$fqn@news.teleplex.net>
Source record: 97920

My Email Address is pbunn624@teleplex.net

1119. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <32f0b14b.6202957@eskinews.eskimo.com>
Source record: 97921

k1bqt@aol.com (K1BQT) wrote:
>Hi Rich--
>
>This being a newsgroup, I'd rather see the promised in-depth technical
>discussion of what your after-market product actually does or doesn't
>do--rather than have to sort through this never-ending stream of anecdotal
>lip-flap. If you simply wish to advertise your product, wouldn't it be
>better to use a webb page??
>
>Rick K1BQT

Hold on there, Rick. Rich didn't get on this thread to advertise his product.
I was the original poster clear back in October and it's been going ever
since. There has been a lot of good technical fact and opinion along with the
lip-flap. Sorting out which is which is a whole 'nother story, however.

73, Bill W7TI
wrt@eskimo.com

1120. www.hamradio-online.com: Did Hams Create The Little LEO Mess Themselves?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: vbook@vbook.com
Message-ID: <5cmi56$o2@kanga.accessone.com>
Source record: 97922
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital
Body handling: HTML body converted to readable text

"Did Amateur Radio Bring On the Little LEO Mess Itself?"

Perhaps suggests Lyle Johnson, WA7GXD at his banquet speech at last November's ARRL/TAPR Digital Communication's Conference. Do Amateur bandplans stifle innovation that leaves our bands vulnerable to usage by other services? Thought provoking reading that every ham should see - Always free at http://www.hamradio-online.com

Other stories now running at Ham Radio Online include:

G4KGC/G3WDG Break UK 24 GHz Distance Record
** Did Amateur Radio Bring On the Little LEO Mess Itself?
** Auctioning The Airwaves
** Founder of Atari, Inc credits Ham Radio
** Amateur Radio Spread Spectrum Communications
** FCC Allocates 300 MHz of Unlicensed Spectrum
** High Speed Wireless Internet Access in Laramie, Wyoming
** Long term forecast: Solar storms
** Sunspot Cycle 23, Where Are You?
** Frugal Hamming

Ham Radio Online brings news, technology, fun and thought provoking articles to hams in 60 countries. The Ham Radio Online web site has the largest readership of any independent Amateur Radio web site in the world. Stop on by and check us out.

73, Ed, KF7VY
Ham Radio Online is a self-funded web site with no paid advertising. We run this unique web site as a hobby with many thanks to the numerous contributors from throughout the world of Amateur Radio and beyond.

Ed (KF7VY) and Kim (N7VPL) Mitchell
email to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

1121. Re: POP CORN NOISE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: ghstwrtr@aol.com
Message-ID: <19970129075401.CAA24190@ladder01.news.aol.com>
Source record: 97923

Why, for heaven's sake, would you refrain from mentioning the
manufacturer? Have stock in the company. or something???

1122. Re: Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: bboone@mindspring.com
Message-ID: <5cnb89$s8g@camel4.mindspring.com>
Source record: 97924
Cross-posted to: rec.crafts.brewing,rec.radio.amateur.homebrew

Dana Yeomans (dana@keystone.intergate.net) wrote:
: what does that have to do with ham radio? i am n4pge in griffin, georgia.x

home BREW, as in beer. There used to be a homebrew in fido that was for
beer -- Bobby kr4b

1123. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970128234726.28256E-100000@prog1.caprica.com>
Source record: 97925

```
* * * * * * * * * * ATTENTION * * * * * * * * * * * * *
* *
* The email address in my "From" header is incorrect! *
* It was changed to defeat spam-bots that send email. *
* To email me, please use my CORRECT email address: *
* *
* teddyb@caprica.com *
* *
* My Email is neither a newsgroup or a public forum! *
* I do NOT want any advertizing via Email. Who ever *
* sends unsolicited advertizing via Email risk prompt *
* cancelation of internet service without refund and *
* possible prosecution for harrassment and/or fraud! *
* *
* * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

On Fri, 24 Jan 1997, J&J Mac wrote:

> Stan Aughenbaugh wrote:
> >
> > Right on Rob! It irritates the #$%^^& outof me when I see one of these
> > 'Band Nazis' or your word 'info nazis' act like they are the sole
> > arbiters of who should know what.

Stan, you and Rob and Jim are really showing yourselves to be buttholes. Like typical LIBERALS you resort to anyone with morals as a "nazi". I'm sure my friends in the JDL would appreciate that a lot. Did you also vote to re-elect that adulterous anus from Arkansas in the Oval Office? It wouldn't surprize me in the least, but that's all off topic, I suppose. If you knew anything at all about real nazis you'd know that it has something very much in common with your beloved liberalism: SOCIALISM... Rememeber? "Nazi" is short for "National Socialist",(in German "national" is spelled "nazional" or something like that).

You buttholes have a lot of nerve. You who like to run around using the term "nazi" on anyone you think is too strict are watering down people's knowledge of what evil scumbags the REAL nazis were. And then out of the other side of your face you vote, march and screem for:

1: more government

2: gun-control

3: godless schools to force lies into our kids heads such as there being nothing wrong with perversions like homosexuality

4: re-enslaving most of my people into dependancy on government

5: the continued legalization and taxparer-funding of that damnable holocaustic carnage upon infants,(aka "abortion"), which has murdered hundreds of millions of Americans, started by a true Nazi sympathizer and a true racist named Margeret Sanger who was the founder of the notorious group called "Planned Parenthood".

...and all the other such socialist crap you liberals defecated upon America and the world and yet with all that evil you liberals impose upon us you DARE to call any of us moral conservatives a "nazi"? That HAS to be the most BLATENT and arrogant example of hypocracy anyone has ever yet committed!

Yeah, this really IS way off this newsgroup's topic, but YOU were the ones who pushed my button by calling me a nazi when I am one of the most anti-nazi people I know. And as far as I'm concerned, anyone who is for the lowering moral standards, be it a moral standard that is related to the ham radio hobby or not, displays that they have no conscience, no decent upbringing and nothing to offer ham radio except degradation. And anyone who cheers them on is no better either.

> > I think your comments were great and to the point. Last thing we need on
> > this group are the thought police. Personally I always try to give an
> > answer if I have it. The responsibility lies in how the information is
> > used.

Yeah Stan, why dont we just get rid of all the rules and create a spectrum wide citizens band... is that what you want? That's how you make it sound. If you want to jam or help jam communications, do us hams who CARE about the hobby a favor by leaving your license at the door as you go out to buy a CB radio. Then you won't need to BUILD something to jam 27 MHz... you'll have a CB and you can play "drop the mall" all day long.

> > Gad! I sure am glad MArconi and Edison (or Tesla) didn't have to put up
> > with these types, we'd all still be senfing smoke signals to each other.

And you'd be figuring out ways to jam that too, I'll bet.

> I dunno! they would probably be in with the EPA whining about how the
> smoke singals are causing 'second-hand-smoke' fatatalities!

The EPA? Isn't that YOUR bunch? Anyone against good moral conduct HAS to be a liberal,(that's the whole point of this reply). To a conservative, good moral conduct comes FIRST, even above tax-cuts,(preferabley WITH tax-cuts)!

You guys got some nerve calling an Alan Keyes/Abe Lincoln/Teddy Roosevelt type of Conservative Republican a nazi. In my book licentious liberals are so lame they aren't even worthy to kiss the southbound end of a northbound rat. We have a repeater set aside for your type in Los Angeles on 147.435 where all the queers and weirdos can go screw up without being hassled while us hams who want to respect the rules use the rest of the spectrum and as long as the animals stay in their cage we don't shut them down. Usually they don't stay there and then we and the local OO's get to enjoy a good hunt.

As far as I'm concerned you who bash me for endorsing good morals in the hobby are just a bunch of Richard Burton wannabe's.

You have just seen that can't just push me and think I'll turn tail and run. I will not just push back... I'll blast back with both barrels.

1124. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970129012034.28256G-100000@prog1.caprica.com>
Source record: 97926

```
* * * * * * * * * * ATTENTION * * * * * * * * * * * * *
* *
* The email address in my "From" header is incorrect! *
* It was changed to defeat spam-bots that send email. *
* To email me, please use my CORRECT email address: *
* *
* teddyb@caprica.com *
* *
* My Email is neither a newsgroup or a public forum! *
* I do NOT want any advertizing via Email. Who ever *
* sends unsolicited advertizing via Email risk prompt *
* cancelation of internet service without refund and *
* possible prosecution for harrassment and/or fraud! *
* *
* * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

On Sat, 25 Jan 1997, tim_hynde wrote:

> Ted wrote:
>
> > So I have to wonder... What's next? Maybe allegations about the Oklahoma
> > City bombers being hams? Or maybe some idiot will start promoting that
> > white supremacy net on 75M that meets on certain mornings? Maybe cult
> > leaders like Jim Jones and David Koresh were hams too? What was Fidel
> > Castro's callsign again? Sheesh! This hobby needs good PR enough as it is
> > already without these carrot-waxers giving the rest of us a bad image!
>
> Jim Jones was not, but he did make regular 20m transmissions from the
> camp via an amateur in his group. I worked him and recieved a QSL card,
> it had several pictures of the campsite on the front. The amateur took
> his life along with the others about 5 months later.

I'm sorry to hear that.

> Speaking of PR Ted, what image do you leave with newcommers reading your
> posts? Someone offers to help you with an antenna problem and you pitch
> a fit because they didn't do it the way you wanted. I'm sure YOURE
> responces made the newcommers want to jump right in.

You have a problem with me disliking conjecture and opinions when what I
was asking for was measurements? Unlike most of those 6-digit income
operators who can afford to buy everything off the shelf but now and then
dabble in a small project just for fun, I'm dirt-poor and build what I
build out of sheer neccessity, so can't afford to waste materials and
time on errors caused by bad information. I can't afford to not get it
right the first time. I HAVE TO take it so seriously, because any money

wasted on errors could have gone toward catching up on bills or on food.

> While YOU'VE been bitching about the rest of us what have YOU done to
> promote the hobby in positive manner?

If you weren't skipping posts you'd have seen some things. I'm not going to sit here and brag on myself. And as far as I'm concerned, having a fierce attitude,(which I admit I have), is not immoral, nor is there any rule against it. If you waste a commodity which is precious to me such as my time, you can expect to be told off. So don't act surprized when it happens. If you KNOW you don't have the right answer when the right answer is what someone needs, are you helping or hindering? Answer me that.

> I really love the part where you
> keep your anonymity, if your going to make a statement Teddy, right or
> wrong, sign your name to it. It doesn't mean much without it.

You just typed my name, so you must have seen it. You wouldn't have seen it unless I let it be seen. What do you want, a DNA sample? Tough!

1125. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970129014520.28256H-100000@prog1.caprica.com>
Source record: 97927

```
* * * * * * * * * * ATTENTION * * * * * * * * * * * * *
* *
* The email address in my "From" header is incorrect! *
* It was changed to defeat spam-bots that send email. *
* To email me, please use my CORRECT email address: *
* *
* teddyb@caprica.com *
* *
* My Email is neither a newsgroup or a public forum! *
* I do NOT want any advertizing via Email. Who ever *
* sends unsolicited advertizing via Email risk prompt *
* cancelation of internet service without refund and *
* possible prosecution for harrassment and/or fraud! *
* *
* * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

On Sat, 25 Jan 1997, tim_hynde wrote:

>
> Ted wrote:
> >
> > I'm not so stupid as to believe that the "old war stories" that were
> > posted in this thread were just "jokes".
>
> Uhh, yes Ted, you are that stupid.

Up yours. Your previous post made it obvious that you endorse these
Richard Burton wannabe's.

1126. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970129015318.28256K-100000@prog1.caprica.com>
Source record: 97928

* * * * * * * * * * ATTENTION * * * * * * * * * * * * *
* *
* The email address in my "From" header is incorrect! *
* It was changed to defeat spam-bots that send email. *
* To email me, please use my CORRECT email address: *
* *
* teddyb@caprica.com *
* *
* My Email is neither a newsgroup or a public forum! *
* I do NOT want any advertizing via Email. Who ever *
* sends unsolicited advertizing via Email risk prompt *
* cancelation of internet service without refund and *
* possible prosecution for harrassment and/or fraud! *
* *
* *

On Sat, 25 Jan 1997, J&J Mac wrote:
>
> Ted wrote:
> >
> > I'm not so stupid as to believe that the "old war stories" that were
> > posted in this thread were just "jokes". Until I spoke up it was obvious
> > they were accounts of events. To defend it, even if it were a joke, is to
> > show a blatent lack of care or respect for the hobby's image.
> >
> > Admit it... You dont give a hoot if the general public sees ham radio as
> > a valuable asset to humanity or not.
> >
>
> Look Ted, I can see where you might be coming from but you also must
> realize that a VERY large number of CB'ers are running illegal
> amplifiers which are usually not filtered correctly for the frequencies
> they are used.

Does the thought of turning them in make you squeemish or something?

Or like Mr Rodgers would put it... "Can you say FCC?"

> by getting just one of this type of CB'er OR HAM for that matter to ease
> off the key for just one day is worth this little prectical joke.

Don't you get it? Encouraging hams to violate the rules is no joke!

> The device I made had a range or perhaps 100 meters and effected no one
> but the person who was destroying all modes of receiption in a one mile
> radius.

But it did affect someone else. It cost you your integrity! And now that you are bragging about it here in public it's just one more case of outlaw conduct by a ham that someone can nit-pick about when they need excuses to give away OUR bandspace to UPS or some other service! THAT is the point. If we can be labled as irresponsible it can cost us dearly!

Do you even care about that, especially after we JUST went through the threat of losing 2M and 70cm to commercial LEOS? Probably not.

Those of you doing or endorsing this can just DROP the lame excuses. Like I indicated in an ealier post, it's nothing but a selfish disregard for the law which makes you no better than the CB'ers, because you're stooping to that same level that they operate on.

1127. Re: Newsgroup Wishlist

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970129023506.28256L-100000@prog1.caprica.com>
Source record: 97929
Cross-posted to:
rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,news.admin.hierarchies,news.groups

This post was manually optimized for use with voice synthesyzer. Some items may appear to be misspelled to the sighted, but they have just been spelled more phoneticly.

On Sunday, January twenty sixth 1997, Dana Yeomans wrote:

hi there, i aggree with you, i am blind, and have to listen to the voice synthesyzer, and i wish they wouldn't post pictures on web sights. the fellow that invented netscape should have his but kicked, because it don't do the blind any good. so take care all from n4pge in griffin, georgia.

My reply to Dana is as follows:

May I suggest that you switch to a text based browser such as lynx?

To use lynx, you would need an internet account called a unix shell because lynx is a unix program which you operate remotely using an ordinary emm ess doss based terminal program such as telix for windows which has the type of terminal emulations most compatable with lynx such as vee tee one oh two.

Since lynx is purely text based you should have much less trouble from any pictures you would have encountered on web sites using a frame based browser such as netscape.

Lynx is not very hard to learn. It has key press commands instead of the point and click icons so your voice synthesyzer will almost never find something that it can not read. The only graphic visual effect it has are the hyper text items which activate another you are ell if you highlight the hyper text by positioning your cursor over it with your down arrow or space bar and then hit your enter key. However, lynx can allow you to toggle it to display numbered choices instead, if the web page you are on allows it.

I just thought that I should mention lynx to you in case you had never heard of it or did not know what lynx was. If I have not presumed incorrectly, your voice synthesyzer program probably works better when it encounters text than graphics. If so, then maybe my suggestion can help your situation.

You can get a fair price on a unix shell account for twenty dollars per month with unlimited hours from a company called prime net.

prime net is correctly spelled as one word.

spelling is pea are eye emm ee enn ee tee

The toll free number is for prime net is 1, 800, 4 6 3, 8 3 8 6

I am not with prime net only because I got a better deal from a smaller company that only serves southern california.

Good luck Dana and seventy three.

Signed

Ted

The following is a short warning that I put in my posts.

Warning to spammers.

The email address in my From header is incorrect.
The correct address is teddyb@caprica.com

Spelling phoneticly:

tee ee dee dee why bee

at

see aee pea are eye see aee

It was changed to defeat systems that automaticly abuse email by sending unwanted advertizements.

My Email is neither a newsgroup or a public forum.

I do NOT want any advertizing via Email. Who ever sends unsolicited advertizing via Email risks prompt cancelation of their internet service without refund and possible prosecution for harrassment and/or fraud.

End of warning to email advertizers.

1128. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970129014756.28256I-100000@prog1.caprica.com>
Source record: 97930

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* * * * * * * * * * ATTENTION * * * * * * * * * * * * *
* *
* The email address in my "From" header is incorrect! *
* It was changed to defeat spam-bots that send email. *
* To email me, please use my CORRECT email address: *
* *
* teddyb@caprica.com *
* *
* My Email is neither a newsgroup or a public forum! *
* I do NOT want any advertizing via Email. Who ever *
* sends unsolicited advertizing via Email risk prompt *
* cancelation of internet service without refund and *
* possible prosecution for harrassment and/or fraud! *
* *
* * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

On Sat, 25 Jan 1997 orion@capital.net** wrote:

>
> b2dude@aol.com (B2Dude) wrote:
>
> >This jammer might also interfere with the 27mhz R/C car band! If they are
> >running a 60m.p.h. gas car, U could really screw ther day. Be nice and
> >don't build it. some cars cost $1000+!!!
>
> Anybody who is foolish enough to operate a radio-control car
> anywhere near 27 Mhz is asking for a crash anyway.

So are you gonna be the one to tell the FCC and the toy companies to
reallocate the RC channels?

1129. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970129040006.28256M-100000@prog1.caprica.com>
Source record: 97931

On Sunday, January twenty sixth 1997, Dana Yeomans wrote:

hi there, he sounds like a nut for sure, i have been a ham for years, and haven't seen some act like that. .73's from n4pge in griffin, georgia.

My reply to Dana is as follows:

And after all the trouble I went to for over an hour and a half to manually reformat that previous post especially so that your voice synthesyzer might handle it easier.

Having an unyealding respect for the rules that have made the amateur radio hobby so great does not make a person a nut.

However, when a person risks his license and the reputation of amateur radio to satisfy a selfish and greedy urge to take the law into his own hands to deal with bad eleven meter abusers, that is not what I call a very rational act.

Signed

Ted

1130. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Ted <teddyb@die.spam.die>
Message-ID: <Pine.BSF.3.91.970129011405.28256F-100000@prog1.caprica.com>
Source record: 97932

```
* * * * * * * * * * ATTENTION * * * * * * * * * * * * *
* *
* The email address in my "From" header is incorrect! *
* It was changed to defeat spam-bots that send email. *
* To email me, please use my CORRECT email address: *
* *
* teddyb@caprica.com *
* *
* My Email is neither a newsgroup or a public forum! *
* I do NOT want any advertizing via Email. Who ever *
* sends unsolicited advertizing via Email risk prompt *
* cancelation of internet service without refund and *
* possible prosecution for harrassment and/or fraud! *
* *
* * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

On 25 Jan 1997, B2Dude wrote:

>
> This jammer might also interfere with the 27mhz R/C car band! If they are
> running a 60m.p.h. gas car, U could really screw ther day. Be nice and
> don't build it. some cars cost $1000+!!!

You are right, but they don't care about anything but themselves. That's exactly why I jumped down their throats right off. Ham radio is supposed to be a community venture, a "team-effort". That means knowing how to be a "team-player".

I was just talking to a friend the other day suggesting that we need to get back into doing things like antenna-raising parties like in the old days... yet another wonderful thing that has darn near disappeared from the ham scene due to self-centeredness. It's sad.

1131. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2901970602240001@news.vcnet.com>
Source record: 97933

In article <32f0b14b.6202957@eskinews.eskimo.com>, wrt@eskimo.com (Bill Turner) wrote:

> k1bqt@aol.com (K1BQT) wrote:
> >Hi Rich--
> >
> >This being a newsgroup, I'd rather see the promised in-depth technical
> >discussion of what your after-market product actually does or doesn't
> >do--rather than have to sort through this never-ending stream of anecdotal
> >lip-flap. If you simply wish to advertise your product, wouldn't it be
> >better to use a webb page??
> >
> >Rick K1BQT
> ----------
> Hold on there, Rick. Rich didn't get on this thread to advertise his product.
> I was the original poster clear back in October and it's been going ever
> since. There has been a lot of good technical fact and opinion along with the
> lip-flap. Sorting out which is which is a whole 'nother story, however.
>
> 73, Bill W7TI
> wrt@eskimo.co

It's hardly my product, Rick, since I am not the only person who sells low vhf-Q suppressor retrofit kits.

Shortly after the original article about lossier VHF suppressors was published in the October, 1988 issue of QST magazine, I was contacted by an attorney who happens to be W5NTQ. He told me that I could apply for a U. S. patent of low VHF-Q suppressors within one year of copyrighted publication, and he recommended that I do so. I declined, so the idea fell into public domain. Thus, no individual or company can ever patent it. For some of us, it's just a hobby, Rick.

Bill: I agree that there has been a substantive technical discussion. If Rick has been seeing a "never-ending stream of anecdotal lip-flap", he must be skipping over the technical parts. Sure, the blather about fake photos (of arced bandswitches), , fabricated (KC0HH) testimony , and claims such as "it's the entire staff at Eimac" sounds a bit like a take-off on the O. J. Simpson civil trial, but that sort of thing SHOULD be easy to skip over---except for those who are mezmerized by such. OTOH, a purely technical discussion might be as dry as last Saturday's toast.

Rick: who made: " the promised in-depth technical discussion"?

RE: lack of technical topics: I have repeatedly tried to engage one of the naysayers in this debate in a technical discussion of Wes Stewart's

scientific measurements of Rp in various types of VHF parasitic-oscillation suppressors, but so far I have been stonewalled, Rick.
Rp should be the core-issue here since VHF voltage amplification is basicly Mu*VHF-Rp. More VHF Rp equals more VHF gain in an HF amplifier. Less VHF-Rp equals less VHF gain in an HF amplifier..
---
e-mail copy to Bill W7TI

--
--Rich-- ag6k, 805-386-3734

1132. Re: rx/tx with 807, who knows something ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32f156eb.81032548@news.santafe.edu>
Source record: 97934

Steve <thebizlk@erols.com> wrote:

>Tons of transmitter schematics with one or two 807s. Let me know what ya
>want. Never saw one used in a receiver.

I have an 807 standing on a shelf above my 150 MHz pentium PC just to
remind me how my involvement in electronic started, ca 1955.

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

1133. parametric amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: efbrya@acxiom.COM
Message-ID: <c=US%a=_%p=Acxiom_Corporati%l=PO-CONWAY-1-970129140636Z-934@po-conway-1.conway.acxiom.com>
Source record: 97935

Can anyone tell me of a good reference for the
design/construction/quirks of parametric amplifiers? I heard they were
popular some years back but can't find out much about them. There was a
little mention of them in one of Don Lancaster's columns.

Thanks

Eric Bryan
efbrya@acxiom.com

Eric Bryan
efbrya@acxiom.com

1134. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970129145501.JAA07339@ladder01.news.aol.com>
Source record: 97936

In article <5cjud9$pk8@news1.voicenet.com>, hbrown@voicenet.com (Harry Brown) writes:

>I just ran across this discussion and have no expertice on the
>subject. However it occured to me that the reason for the arcing
>occuring was because the switch was thrown. The impedances could
>really be momentarily messed up during this short time and cause
>conditions to occur that bring about oscillations. Very high rf
>current flow when the contacts break contact could be the source.
>
>

Hi Harry,

Actually a bandswitch can fail from many causes.

Improper tuning, a fault in the load, improper lead dress around the switch, dirt or deposits (one common cause is if the rotor rubs the ceramic, it deposits metalic trails along the ceramic) and so on.

One person even has a fettish about parasitics, he even $ells kits to "cure" parasitics even though there is no evidence they ever occur. He admits his own PA arced from a load fault, and ignores other people who have said the same thing.

Good science tells us if the switch arcs, it is from RF near the operating frequency. The tank capacitor has almost zero reactance over the upper VHF range, it looks just about like a short circuit.

source ---------------{{{{-------{{{{{{{{{{-------->
I ^ ^
tune cap === ^---switch--^
I
ground

It is impossible to develop enough voltage across the few ohms of tune cap reactance shunting the source to ground to allow the switch, downstream through even more low pass components, to arc.

The cause of switch arcing HAS to be excessive voltage near the fundamental operating frequency, or one of the other causes listed above.

I think that you'll see this makes sense, unless you believe in pathological science.

73 Tom

1135. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5cnpueplv1@nadine.teleport.com>
Source record: 97937

In article <32EE79DF.6B535908@bnl.gov>, Scott Coburn <scott@bnl.gov> wrote:
>Roy Lewallen wrote:
>>
>> If you were to wind the coil on a ferrite toroid, whose magnetic path is
>> entirely in the ferrite, you would find the effective permeability to be
>> essentially the same as the core's permeability. But of course it would
>> make a lousy antenna. The whole idea of the antenna is to couple to the
>> field going by in the air. The rod does this because part of its field
is
>> also in the air.
>
>Wow, neat information. Is there a gogd book that explains all of this
>stuff and more about ferrite/loop antennas?

I'm not sure. When I had the need some years ago to design a switching power supply, I discovered that my EE education had included almost nothing about the principles of magnetics, so I had to dig it out from several textbooks.

The only thing I can recall having read about ferrite "loopstick" antennas is a short article in the National Semiconductor Audio/Radio Handbook. My copy is dated 1980. They reference a Bendix application note by HJ Laurent and CAB Carvalho titled "Ferrite Antennas for AM Broadcast Receivers".

Hopefully someone else can come up with a more readily-available reference.

Roy Lewallen, W7EL

1136. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970129143401.JAA06307@ladder01.news.aol.com>
Source record: 97938

Hi Bill--

Wooops...sorry about that. I've been following this thread for several months, but didn't get in on the beginning of it. I guess, in the hope of learning something meaningful and central to the issue, I was attempting to goad Rich into focusing on substance. For me, the "infomercial" stuff gets real old after a while--and detracts from the debate!

Rick K1BQT

1137. Re: SSB filter / IF amp using opamps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: mcovingt@ai.uga.edu
Message-ID: <5cnja4$i0k@hobbes.cc.uga.edu>
Source record: 97939
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

A few points...

(1) I think the reason op-amps aren't normally used is the noise level. In radio receiver circuitry, all the amplifiers need to be low-noise. But present-day op-amps may be good enough; earlier ones weren't.

(2) A Q-multiplier is an oscillator that doesn't have quite enough feedback to oscillate. Thus, it's an amplifier with a strong peak at a particular frequency. Q-multipliers are an older technology. Good IF filters are nowadays made with crystal filters.

(3) One of the most important attributes of an IF filter is its "ultimate attenuation," i.e., how much attenuation you get when you are well away from the passband. The more the better, because an unwanted signal could be as much as 50 dB stronger than the one you're trying to hear.

--
Michael A. Covington http://www.ai.uga.edu/faculty/covington/
Artificial Intelligence Center <><
The University of Georgia Unless otherwise indicated, I am not
Athens, GA 30602-7415 U.S.A. speaking officially for the University.

1138. Re: Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: pcb@connix.com
Message-ID: <32ef61e1.69978075@news.connix.com>
Source record: 97940

Diane,
try rec.crafts.brewing
That is a great homebrewed beer group and you will get a courteous and
useful response.

Brian Gibbs <brian@brimar.demon.co.uk> wrote:

>Posted to rec.radio.amateur.homebrew
>
>In article: <5ce12h$gbe@ralph.vnet.net> moore@vnet.net (Diane Moore) writes:
>>
>> I am asking this question for my husband who has just completed making
>> his first batch from a kit we bought in the wireless catalog for
>> Christmas. He is hooked! `````````
>>
>>
>> He would like to know if you can use a 7.5 gallon carboy to rack off 2
>> gallons of beer? The kit has all of the equipment (except a place to
>> rack off) for 2 gallons. He knows that he would like to expand soon
>> to making 5 gallons at a time and he does not want to invest in two
>> different size carboys.
>>
>> Any help would be appreciated!
>>
>> Diane Moore
>> moore@vnet.net
>>
>>
>>
>
>Diane, I have been a radio ham for over 35 years. It seems I have
>been missing this exciting facet of the hobby!
>
>Hope someone will come up with an answer........best regards
>--
>
>| Brian Gibbs EMail brian@brimar.demon.co.uk
>| Neston, Nr Corsham, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU
>
>
>

1139. Re: VHF/UHF NF optimization

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: "Charles H. Reichert" <qa2696@email.mot.com>
Message-ID: <32EF6E2C.41C67EA6@email.mot.com>
Source record: 97941

Tom Bruhns wrote:
>
> Bob Doyle (doyle@primenet.com.DELETE-FOR-EMAIL) wrote:
>
> : Ya but...
>
> : I think you can always match the impedance that the device wants to
> : "see" for optimum NF to 50 ohms and get a 1:1 VSWR.
>
> ?? Maybe I'm reading this diffrently than you meant...but if your
> circuit's input impedance is 500 ohms and optimal noise figure occurs
> for a 200 ohm source impedance, when you do the 4:1 match from 50 to
> 200 to get optimal noise figure, you have a 2.5:1 SWR.
>
> But that's not to say you couldn't change the circuit (through [negative]
> feedback) to modify the circuit's input impedance to get a match, if
> that is important to you. In a television receiver, for example, you
> wouldn't want to have a lot of echos on a long transmission line, because
> that can lead to ghosts. On the other hand, there are cases where you
> _want_ to have a load that's a lot different than the source impedance,
> while maintaining good noise figure, and if that doesn't occur naturally,
> you can aid it, again through feedback.
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com

--

I have a theory document under the ASP 4.0 Freeware page
describing the input NF impedance does not mean a "match".
The Preamp only needs a 50 Ohm resistive source. The
antenna doesn't care if it see's a mismatch in this case.

See http://www.imaxx.net/~kd9jq

73 Chuck KD9JQ

\|/
^ ^
(O O)
==========.ooO==U==Ooo.==========
| KD9JQ 847-358-3827 Home |
| Charles H. Reichert 847-632-6669 Work |
| 955 Concord Ln. |

| Hoffman Ests., IL. 60195 kd9jq@imaxx.net |
==========

1140. Re: Old base station Antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Tim Johnston - KF4FTP <tim@naxs.com>
Message-ID: <32EFB320.432A@naxs.com>
Source record: 97942

Steve Noonan wrote:
>
> Does anyone have an old base station antenna that they wouldn't mind

What frequency are you intrested in?

There are some ingenious ways of creating log cost 2m antennas that I know of - wire, tv twin lead,etc. Is that your intrest, or is it HF?
--
Tim Johnston, KF4FTP
E-mail: mailto:tim@naxs.com -or- mailto:70333.406@compuserve.com
Web: http://www.hapcopoles.com

1141. Chirp on Heath HW 16 CW xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Sheldon Darack <shel@fuwutai.lucent.com>
Message-ID: <32EF919F.46E2@fuwutai.lucent.com>
Source record: 97943

I have a Heath HW 16 cw xcvr that operates under xtl control. It has pretty bad chirp on transmit. These were once very popular and I can't believe that they were used with that much chirp. Anyone recall that problem and remember the solution?

Tnx and cul

Shel WA2UBK shel@lucent.com

1142. Re: How works VSWR measuring equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Cecil Moore <Cecil_A_Moore@ccm.ch.intel.com>
Message-ID: <32EF9724.2C5A@ccm.ch.intel.com>
Source record: 97944
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Roy Lewallen wrote:
> This is direct measurement and calculation of ISWR, which is numerically
> the same as VSWR, commonly referred to as SWR.

Hi Roy, here's a relatively easy way to indirectly measure the
SWR on the ladder-line without measuring the Imax and Imin.

First measure the actual voltage conversion ratio of your balun,
e.g. I put a 200 ohm dummy load on the output of my 4:1 balun
and adjust it for a 1:1 SWR on the 50 ohm side.

Then I locate the PC-200 point on the ladder-line. (I'm trying to
coin that term for the point on the ladder-line where placing a
single Parallel Capacitor will result in a purely resistive 200
ohms. The SL-50 point would be where a Series L(inductance) will
cause a purely resistive 50 ohms). The location of the PC-200 point
can be closely estimated using the transmission line feature of EZNEC.

So I have a known capacitance at the PC-200 point resulting in a
1:1 SWR on the 50 ohm side of my 4:1 balun. Eureka, the parallel
inductive feedpoint reactance is equal to that capacitive reactance.
Put that inductive reactance in parallel with 200 ohms, convert it
to a series impedance, and that series impedance is the FEEDPOINT
IMPEDANCE OF THE LADDER-LINE AT THE TRANSMITTER. Knowing that series
impedance and the Z0 of the ladder-line allows us to calculate the SWR.
Knowing the length of the ladder-line and the velocity factor allows us
to calculate the antenna feedpoint impedance and the impedance anywhere
up and down the transmission line. Of course, the feedpoint impedance
at the transmitter is probably the most useful information.

73, Cecil, W6RCA, OOTC

1143. Re: Ham-Homebrew Digest V97 #64

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: arisk@spidernet.COM.cy
Message-ID: <199701291838.UAA07475@mail0.spidernet.net>
Source record: 97945

Can someone send me a transistor 3SK113 or 3SK97 which i cannot find in our small island market.All costs will be promptly coverd in US dollars cash.Please email me .
Thanks in advance de Aris-5B4JE

1144. RF Chokes for MF.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Steve@chubs.DEmon.co.UK
Message-ID: <I875mVAj257yEw7m@chubs.demon.co.uk>
Source record: 97946

I'm building a PA stage for 160 but I'm a little confused about RFC's.
It must have a low DC resistance as it's being used in a VMOS FET O/P
Stage at about 40 watts.
I would like to use a piece of ferrite rod from an old MW radio or even
a T50 torroid. Unfortunatly I have no idea how many turns to put on it

I have heaps of 26 SWG wire (U.K) so I'd like to use that if possible.

I don't want to spend ages trying to work out complicated math (even if
I could do it) so if anyone could help me I would be very greatful.

Regards and thanks in advance.
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
Visit Radio World -
HTTP://www.chubs.demon.co.uk

1145. F.S. Digital D.M.M. (new)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: "Roger H. Smith" <goldwing@iquest.net>
Message-ID: <01bc0e16$ee9f06c0$26abf6ce@goldwing.iquest.net>
Source record: 97947
Cross-posted to: fido.ham-sale,in.ham-radio,misc.forsale.non-computer,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

I have 4 left !

> BRAND NEW & UN-USED : Digital Multi-Tester : Huge 3& 1/2 " display, Fuse
> protected, U.L. listed, Diode check, Transistor check (hFE) (NPN & PNP
> types), 5 DC ranges (200m-2-20-200-1000), 2 AC ranges (0-200 & 200-750),

> 5 DC Amperage ranges (200uA-2mA-20mA-200mA - 12Amp), 6 Resistance ranges
> (200-2K-20K-200K-2M-20M), Comes with 9v battery, test leads, & manual.
> Has a pop-out stand & low battery indicator. Physical size : 5 & 3/4"
X
> 3" X 1 & 1/2". Even has re-calibration instructions ! .... This is
a
> NICE little D.M.M. .... I have 7 to sell .... $20.00 plus actual
> shipping costs (unit is very small & light)
>
> E-Mail to: "goldwing@iquest.net"
>
> Thanks & 73's .... Roger N9PMC
>

1146. 150mhz VCO w/low phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Steve@chubs.DEmon.co.UK
Message-ID: <ZMi96TAEm57yEw6R@chubs.demon.co.uk>
Source record: 97948

>There's alot of things I'd like to buy from minicircuits, but YOU CAN'T.
>They won't sell small quantities of anything. They don't send the
>catalog, and they've got no distributors that will sell small quantities.
>--

In the U.K. a company called "Advanced Crystal Technology" do the same
thing.
I'm not sure if it's any help but the number is;

+44 (0)1635 528520 0r FAX on 528443

I have their catalogue if anyone wants anymore information.
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
Visit Radio World -
HTTP://www.chubs.demon.co.uk

1147. F.S. Digital D.M.M. (new)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: "Roger H. Smith" <goldwing@iquest.net>
Message-ID: <01bc0d9e$9b6df600$d0abf6ce@goldwing.iquest.net>
Source record: 97949
Cross-posted to: fido.ham-sale,in.ham-radio,misc.forsale.non-computer,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

BRAND NEW & UN-USED : Digital Multi-Tester : Huge 3& 1/2 " display, Fuse protected, U.L. listed, Diode check, Transistor check (hFE) (NPN & PNP types), 5 DC ranges (200m-2-20-200-1000), 2 AC ranges (0-200 & 200-750), 5 DC Amperage ranges (200uA-2mA-20mA-200mA - 12Amp), 6 Resistance ranges (200-2K-20K-200K-2M-20M), Comes with 9v battery, test leads, & manual. Has a pop-out stand & low battery indicator. Physical size : 5 & 3/4" X 3" X 1 & 1/2". Even has re-calibration instructions ! ..... This is a NICE little D.M.M. ..... I have 7 to sell ..... $20.00 plus actual shipping costs (unit is very small & light)

E-Mail to: "goldwing@iquest.net"

Thanks & 73's ..... Roger N9PMC

1148. WANTED : RF Transmitter IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: zenitec@mail.global.co.za
Message-ID: <5cojpe$q9v@osprey.global.co.za>
Source record: 97950

I would like to build a small transmitter to xmit a (burst) code generated by an IC (eg. Microchip's Keyloq chips) with a range of 500-1000metres. To keep it small, I want to use an IC for the transmitter as well as the RF amp (if needed).

Do such chips exist? Are they easy to use? What are the implications of using a transmitter with this range?

Can anyone with info please reply to my email address.

Thanx

1149. Re: QEX articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5co82i$6gi@lace.colorado.edu>
Source record: 97951

In article <32EEAC1E.5F3@ford.com>, UN93B <UN93B@ford.com> wrote:
>Does anyone know how I can get an old article from
>QEX? Their FTP site only goes back to about 1993.
>The article I'm looking for is from 1990-1992, I think.
>The article shows how to build a switching power supply
>that will deliver 2000 VDC at 1 amp or so.
>
>Thanks, Brett

The article is Feb. or Mar '91. There were some typos in
the schematic, and so several corrgenda were printed in
following QEX's, including some discussion about the output
filter and about the gate-driving parts. I personally
started the circuit, but found the "50-50" duty cycle
square wave generator was anything but. So I went for
a flip-flop, using the Q and Qbar outputs as 50% duty
cycle, opposite phase inputs. At this point, it's not
wired up with the big transformer, sucking the big amps
out of the wall yet; it's a little power supply at the
moment, so I can't comment on the full-power capability
of the circuit as reported.

If you ask me to, I can locate the exact issues of the
article and the comments (that I know about). Send me a buck
or two and your address, and I'll send you copies of all
the articles and comments I have (if the ARRL doesn't
complain about copyrights, etc).

Pursuant to U.S. Code, Title 47, Chapter 5, Subchapter II, ◆227,
any and all nonsolicited commercial E-mail sent to this address
is subject to a download and archival fee of $500.00 U.S.
E-mailing denotes acceptance of these terms.

Bruce
N6URH

1150. Need schem. for FODTRACK20 rotor controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Allen@mailhub.scf.lmsc.lockheed.com
Message-ID: <5co8bl$s0j$1@lscruz.scf.lmms.lmco.com>
Source record: 97952

Thanks to the persons who answered my post for the rotor controller.
I downloaded the info from Amsat's website. I would like to have copies
of the schematics of the FODTRACK20 rotor controller interfaces. I
couldn't figure out how to extract them from FODTRACK20.DOC.
I am looking to build them to replace my analog controls. Thanks.

Allen WB6RWU

allen@cruzio.com
allen@lmsc.lockheed.com

1151. Re: TWT Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: sutin@sol.ucolick.org
Message-ID: <5coagg$b8r@darkstar.ucsc.edu>
Source record: 97953

Paul C. Barnes <cribbage@ix.netcom.com> writes:
>I have a ham friend who is trying to build a TWT power supply. He has it with
>12 volt d.c. in and 110 V 400hz a.c. out. He says that the supply he built
>work o.k. at .5 amps, but when he tries to draw 5 amps it drops down
>drastically in voltage. I suggested he needed to feed back from the output to
>the oscillator that was doing the chopping and increase the duty cycle. I
>don't know how he is doing it, but I told him I would ask here and see if
>anyone had any ideas, schematics for good power supplies or the such.
>
>Thanks, Paul W4YRL

The RSGB microwave books (volume 3?) have a TWT amp design, complete with
board layouts. The voltage stabilization is done with a feedback method
of some sort -- I don't recall if it works like you suggest.

Brian Sutin *** UCO/Lick Observatory *** Santa Cruz, CA 95064 *** KD6TLA
Boruch bn Michael bn Lion bn Benjamin bn Moishe bn Nachum Sutin Ha'Levi
Fred: "May I rescue you?" `Top Hat'
Ginger: "No, thank you. I prefer being in distress." RKO 1935

1152. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Stan Aughenbaugh <Stan.Aughenbaugh@MCI.COM>
Message-ID: <32EFBDE0.4C5@MCI.COM>
Source record: 97954

Ted wrote:
>
<snip to delete his spam ad>
>
> On Fri, 24 Jan 1997, J&J Mac wrote:
>
> > Stan Aughenbaugh wrote:
> > >
> > > Right on Rob! It irritates the #$%^^& outof me when I see one of these
> > > 'Band Nazis' or your word 'info nazis' act like they are the sole
> > > arbiters of who should know what.
>
> Stan, you and Rob and Jim are really showing yourselves to be buttholes.
> Like typical LIBERALS you resort to anyone with morals as a "nazi". I'm
> sure my friends in the JDL would appreciate that a lot. Did you also

Who died and left you boss?
Or Did someone give you a badge and make you the Lone Ranger of ethics,
information, and morals?
What I *really* said, was that you can give or not give information
but it's none of your nosey business what will be done with it.
Is that clear enough? if they don't volunteer it it's none of your
business.

> Rememeber? "Nazi" is short for "National Socialist",(in German "national"
> is spelled "nazional" or something like that).
> You buttholes have a lot of nerve. You who like to run around using the
> term "nazi" on anyone you think is too strict are watering down people's

Are you a intelligent person ACTING like a jerk? Or a real jerk playing
it straight?

> knowledge of what evil scumbags the REAL nazis were. And then out of the
> other side of your face you vote, march and screem for:
>
> 1: more government
Wrong, less and BTW less NAZI-like intrusion into individual's lives.
> 2: gun-control
Couldn't be farther from the truth.
> 3: godless schools to force lies into our kids heads such as there >being nothing wrong
with perversions like homosexuality
Your ethics are as corrupt as your politics. You apparently (point 3)
think schools *should* teach sex, morals, ethics... should they
also require all males be circumcised to enter school? Do you
have any other religious requirements?

I think the schools have no right to teach any of those until we see
some
success with math, reading, the spoken and written language.

> 4: re-enslaving most of my people into dependancy on government

What the *hell* are you talking about? You are the one wanting to run
other people's minds and probably later their bodys(actions).
Will you allow independant thought or go straight for the throat like
the thought police in 1984 by Orwell. 're-enslaving most of my people'
my tired ass. I don't care if a person is Jewish (apparently it's
important to you) or anything else, if they stay out of my business,
I'll leave them alone, but the self appointed enforcers of morals,
ethics
etc, are NAZI's regardless of their various pursuasions religious,
moral,
race, or creed.

> 5: the continued legalization and taxparer-funding of that damnable
> holocaustic carnage upon infants,(aka "abortion"), which has murdered

You sure have a problem keeping to topic... let me remind you...
Someone's request for information and your hypocritical refusal to
answer and also castigate them. Where *did* you get that badge?

> hundreds of millions of Americans, started by a true Nazi sympathizer d
> a true racist named Margeret Sanger who was the founder of the notorious group called
"Planned Parenthood".
There's that worrying about other's morals and minding other people's
business... stay the hell out, social worker.
<snip>
> us you DARE to call any of us moral conservatives a "nazi"? That HAS to

Well you got that part right anyway.

> be the most BLATENT and arrogant example of hypocracy anyone has ever yet committed!

You certainly have showed us!

>
> Yeah, this really IS way off this newsgroup's topic, but YOU were the ones
> who pushed my button by calling me a nazi when I am one of the most
> anti-nazi people I know. And as far as I'm concerned, anyone who is for
> the lowering moral standards, be it a moral standard that is related to the
> ham radio hobby or not, displays that they have no conscience, no decent
> upbringing and nothing to offer ham radio except degradation. And anyone
> who cheers them on is no better either.

I might even use the 'Jack Booted Mind Thug' here!
Big Brother would have loved you. Do you peek in people's windows too.

>
> > > I think your comments were great and to the point. Last thing we need on
> > > this group are the thought police. Personally I always try to give an

> > > answer if I have it. The responsibility lies in how the information is
> > > used.
>
> Yeah Stan, why dont we just get rid of all the rules and create a
> spectrum wide citizens band... is that what you want? That's how you
No, I want is adult society with all of us responsible for their own
actions, vs the adult-child one you appear to want to create with you as
the adult and all the rest of us the children (ur is that slaves)

> it sound. If you want to jam or help jam communications, do us hams who
> CARE about the hobby a favor by leaving your license at the door as you
> go out to buy a CB radio. Then you won't need to BUILD something to jam
> 27 MHz... you'll have a CB and you can play "drop the mall" all day long.
>
> > > Gad! I sure am glad MArconi and Edison (or Tesla) didn't have to put up
> > > with these types, we'd all still be senfing smoke signals to each other.
>
> And you'd be figuring out ways to jam that too, I'll bet.

You blew it again bunky! I didn't ask the question, I just caught you
peeking down dresses.

> > I dunno! they would probably be in with the EPA whining about how the
> > smoke singals are causing 'second-hand-smoke' fatatalities!
>
> The EPA? Isn't that YOUR bunch? Anyone against good moral conduct HAS to
> be a liberal,(that's the whole point of this reply). To a conservative,
> good moral conduct comes FIRST, even above tax-cuts,(preferabley WITH
> tax-cuts)!
...and keep those boots shined... you haff' friends in de old country?
(intended as a joke, but Bunky won't think so, it's not politically
correct)
>
> You guys got some nerve calling an Alan Keyes/Abe Lincoln/Teddy Roosevelt
> type of Conservative Republican a nazi. In my book licentious liberals
careful on the facts...
> are so lame they aren't even worthy to kiss the southbound end of a
> northbound rat. We have a repeater set aside for your type in Los Angeles
> on 147.435 where all the queers and weirdos can go screw up without being
> hassled while us hams who want to respect the rules use the rest of the

Respect whatever you like, but you still have no license to enforce
anybodies urles or ethics. The usual method is to go to the group
that *does* enforce the rules, and get a badge from them. Until then
if you don't have a badge you don't enforce the ethics or rules.

> As far as I'm concerned you who bash me for endorsing good morals in the
> hobby are just a bunch of Richard Burton wannabe's.

Who gave you that badge as the Lone Ranger of Morals?
I think your real problem here is either constipation or a secret desire
to be a social worker.

> You have just seen that can't just push me and think I'll turn tail and
> run. I will not just push back... I'll blast back with both barrels.

blastless & brainless.

Stan KF0NC
"90% of all statistics are made up"

1153. Re: rx/tx with 807, who knows something ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: John Rabson <word.factory@zetnet.co.uk>
Message-ID: <19970129204127682l3@zetnet.co.uk>
Source record: 97955

> Steve <thebizlk@erols.com> wrote:

> >Tons of transmitter schematics with one or two 807s. Let me know what ya
> >want. Never saw one used in a receiver.

IIRC, G3VA once told of an aerial farm at Bletchley Park in WW2 which
fed a large number of receivers via a buffer amplifier built from 807s.

73 de G3PAI

1154. FS: Kenwood TS-530-s

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Rick Cruickshank <rick@keepntouch.com>
Message-ID: <32EF938B.3CDF@keepntouch.com>
Source record: 97956

Kenwood TS-530-s HF rig (SSB only)
includes external VFO-240 (plugs directly into 530-s)
USB/LSB/CW modes
operates: 10-160 M. (including 12,17,30 M. WARC bands)
digital readout
sollid state recieve/tube transmit - (2) 6146 finals (1) 12BY7 driver
100 watts output
includes: Astatic D-104 (hand held power mike)
boxes and owner's manuals with both units
$600.00 as package (negotiable)

This would make a nice starter rig for someone just getting into HF, or
a nice "stand-by" second rig.

Contact: John H. Fish, N4SHX-1107 or e-mail rick@keepntouch.com

--
" The immense importance of a pint of ale
to a common person should not be overlooked. "
Cannon of St Paul's Cathedral
18th Century

1155. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: John Harper <j..harper@worldnet.att.net>
Message-ID: <32EFDE5F.2C72@worldnet.att.net>
Source record: 97957

Ted wrote:

>
> Up yours. Your previous post made it obvious that you endorse these
> Richard Burton wannabe's.

Ted,

What a rude way you have of expressing yourself in public forum. Your
mother and I are very dissappointed in you, Son.

--
John H. ((((((((((/\))))))))))
/ \
/87.9\
/ FM \
http://www.GeoCities.com/CapeCanaveral/6702

1156. TH6DXX for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Kenneth Scharf <ken.janis.scharf@worldnet.att.net>
Message-ID: <32EFE5BA.4C77@worldnet.att.net>
Source record: 97958

If anyone who will be attending the Miami Hamfest this weekend is interested in a TH6DXX antenna, I have one for sale. It is in good condition, but may be missing some small nuts and bolts. $75

Kenneth Scharf, wa2mze

1157. Re: 150mhz VCO w/low phase noise

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Kenneth Scharf <ken.janis.scharf@worldnet.att.net>
Message-ID: <32EFE76C.3364@worldnet.att.net>
Source record: 97959

Steve Simpson wrote:
>
> >There's alot of things I'd like to buy from minicircuits, but YOU CAN'T.
> >They won't sell small quantities of anything. They don't send the
> >catalog, and they've got no distributors that will sell small quantities.
> >--
>
> In the U.K. a company called "Advanced Crystal Technology" do the same
> thing.
> I'm not sure if it's any help but the number is;
>
> +44 (0)1635 528520 0r FAX on 528443
>
> I have their catalogue if anyone wants anymore information.
> --
> Steve "Chubby" Simpson
> Radio/Night Club D.J.
> Steve@chubs.demon.co.uk
> Visit Radio World -
> HTTP://www.chubs.demon.co.uk

I found this info in another thread.

Mini-Circuits
P.O. Box 350166
Brooklyn NY 11235-0003
(718) 934-4500
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102707.464@compuserve.com

1158. Wanted Manual for heathkit GR-91

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Kenneth Scharf <ken.janis.scharf@worldnet.att.net>
Message-ID: <32EFE619.5F13@worldnet.att.net>
Source record: 97960

Does anyone have a copy of a Heathkit GR-91 manual that they might photocopy for me? I am trying to restore one I found at a garage sale.

Thanks
Kenneth Scharf, WA2MZE

1159. Re: rx/tx with 807, who knows something ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Kenneth Scharf <ken.janis.scharf@worldnet.att.net>
Message-ID: <32EFE8BD.30@worldnet.att.net>
Source record: 97961

Steve wrote:
>
> Bart Mudde wrote:
> >
> > I have collected for some years several items to build a tube rx and or
> > tx. I am not looking for a big radio, some 50 or less watts is good.
> > I have some new 807 tubes with sockets, so I hope some one knows a good
> > circuit to build something with the 807. I only operate in CW.
> > Any costs will be payed off course.
> > 73 de Bart PA3GGM.
> >
> > address:
> > W.B. Mudde
> > Ds. Schoutenlaan 3
> > 4797 CC Willemstad
> > The Netherlands
> > In the beginning there was nothing, therefor I'm satisfied now
>
> Tons of transmitter schematics with one or two 807s. Let me know what ya
> want. Never saw one used in a receiver.
Just on a goof, WA2IYH and myself wired his SB200 linear amp to work in
both directions! It boosted the receive signal about 10db (same as in
transmit?!) and NO ONE could overload that preamp! Not bad for a pair
of 160w tubes! We thought the directly heated cathodes would cause hum,
but this is RF remember.....

1160. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Alf Green <alf@agreen.iac.honeywell.com>
Message-ID: <5coa75$on6@cstnews.iac.honeywell.com>
Source record: 97962

Bob wrote:

> There's alot of things I'd like to buy from minicircuits, but YOU CAN'T.
> They won't sell small quantities of anything. They don't send the
> catalog, and they've got no distributors that will sell small quantities.

Absolutely wrong. I have bought many parts from them, as well as getting
regular updates to the catalogs.

I simply call their main #, (718) 934-4500, tell them what I want and
give them my Visa #. The parts are in my hands within a couple of days.

I see in their latest VCO designers handbook they have a number for
"Small Order accounts, Dept F" (800) 214-6428 x 606

73, Alf NU8I
Scottsdale, AZ DM43an

1161. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: "Brien G. McCrea" <brienm@worldnet.att.net>
Message-ID: <32EFF6A3.14FE@worldnet.att.net>
Source record: 97963

Stan Aughenbaugh wrote:
>
> Rob Neff wrote:
> >
<snipped liberally>

> Gad! I sure am glad MArconi and Edison (or Tesla) didn't have to put up
> with these types, we'd all still be senfing smoke signals to each other.
>

My better sense tells me to stay out of this one, but I couldn't
resist...
Tesla did have to put up with these types ... he had to put up with
Thomas A. Edison.

:>)

Brien
KE7WB

1162. Re: Newsgroup Wishlist

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: John Rabson <word.factory@zetnet.co.uk>
Message-ID: <19970129204557682l3@zetnet.co.uk>
Source record: 97964

In message <Pine.BSF.3.91.970129023506.28256L-100000@prog1.caprica.com>
Ted <teddyb@die.spam.die> writes:

> because lynx is a unix program which you operate remotely using an

It is also available for All-in-1 under VAX VMS. For IBM Office
Vision I believe you can use Charlotte.

73 de G3PAI

1163. Re: Need contact information for "73" magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: wdmilner@atcon.com
Message-ID: <5co41j$6or$1@thor.atcon.com>
Source record: 97965

Scott Coburn <scott@bnl.gov> wrote:

>Could someone please post some information about how to contact "73"
>magazine? Address, phone number, etc. Do they have a web site?

Their address is as follows:

73 Amateur Radio Today
70 Route 202 North
Peterborough NH
03458 USA
Vx: 603.924.0058
Fx: 603.924.8613

Not sure about any net addresses. A search on one of the engines might
turn something up.

73,

Dean, VE1CBF VE1CBF@VE1CBF.ns.ca
wdmilner@atcon.com FN96VC

- - ... ... - -

1164. SJ7412-5 Transistor ID?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: shiso@notso.net
Message-ID: <shiso-2901972216020001@d-ma-fallriver-66.ici.net>
Source record: 97966

Can any one give me the specs on the SJ7412-5 power transistor? This one is a Motorola. Thanks in advance. Bruce KD1MW Use- shiso@ici.net

1165. Re: Pse help w/SNELGROVE filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970129185456.26639A-100000@Stratus.CAM.ORG>
Source record: 97967

There was a company in Canada that made crystal filters. I have a
9MHz SSB filter made by them. I got around 1975, and it came from
somebody who got it from somebody else. Meaning, I am not quite sure
exactly when it was manufactured. I do recall that there was an
article in Ham Radio magazine around 1973 or 74 by a VE3 that used
the same filter.

The bad news is that while I can very easily locate that filter, the
plate that described it came off. It's around here somewhere, but
it would take a lot of effort to find it, so I can't easily tell you
whether the filter you have would by some lucky chance be the same.

Either I can't remember any details, or I never knew anything about
Snelgrove, other than that they made this filter that I have.

Not very useful information.

Michael VE2BVW

On 27 Jan 1997, Mihail Mateescu wrote:

> Hi everybody !
>
> I would like to enlist your help in finding specifications for a crystal =
> filter manufactured by SNELGROVE Co. Ltd in Don Mills, Ontario. Model =
> number is:
> F 1500-1L
> It seems to be a LSB filter with 1.500 MHz carrier frequency but I am =
> unable to find proper termination impedances or other characteristics as =
> insertion loss, bandwidth, stop band attenuation and in-band ripple. My =
> attempts to locate this company proved fruitless, as it seems that they =
> are out of business. Apparently, there is a company with this name in =
> Don Mills, but is involved in real estate (!) business.
>
> Any help ? Thank you all.
>
> 73 de Mike, YO3CTK
>
>
>

1166. Re: QEX articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: "Harry H. Brown" <hbrown@vf.lmms.lmco.com>
Message-ID: <32EF4C88.41C67EA6@vf.lmms.lmco.com>
Source record: 97968

Bret,

I have a copy of the article at home. Send me an e mail at hbrown@voicenet.com if you are unable to get a copy from QEX. There was an errata item a couple of issues of QEX from the origional that I have also.

Has anyoue out there actually built a supply per this article that may tell us about some of the pitfalls?

73, Harry, W3IIT

UN93B wrote:
>
> Does anyone know how I can get an old article from
> QEX? Their FTP site only goes back to about 1993.
> The article I'm looking for is from 1990-1992, I think.
> The article shows how to build a switching power supply
> that will deliver 2000 VDC at 1 amp or so.
>
> Thanks, Brett

1167. WTB: 3CX3000A7 PULL OUT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: John <teckserv@ct2.nai.net>
Message-ID: <32EF80E9.90E@ct2.nai.net>
Source record: 97969

Looking to buy a 3CX3000A7 in good condition for project.

Thanks

email John at: teckserv@ct2.nai.net

1168. WTB:MODEM-2400B-EXTERNAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Bill Yawn <boat.run@worldnet.att.net>
Message-ID: <32F011A4.2DFF@worldnet.att.net>
Source record: 97970

I'M LOOKING FOR A 2400BAUD EXTERNAL MODEM.

1169. Curry Communications EXP-17 (LOWFER)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-29 00:00:00 UTC
From: Gary Herbst <ggherb@ccmail.monsanto.com>
Message-ID: <01bc0e34$516fc920$23022389@GGHERBST.MONSANTO.COM>
Source record: 97971

Hi All,

I just decided to try my hand at the 1750M band by purchasing a
Curry Communications EXP-17 unit. Anyone work this band in the
Midwest (Missouri) or anywhere for that matter.

Anyone have experience with this unit?

73

Gary-

1170. SX-100 mechanical info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Vincent Biancomano <103520.355@CompuServe.COM>
Message-ID: <5cqb4o$73q$1@mhade.production.compuserve.com>
Source record: 97843

Wanted: Hallicrafters SX-100 Info

To those familiar with the SX-100 receiver's mechanical construction and knowledgable of its specific relationship to the receiver's electrical stability at the higher frequencies, please drop me a line.

Regards,
Vince, WB2EZG

1171. Re: Chirp on Heath HW 16 CW xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Sheldon Darack <shel@fuwutai.lucent.com>
Message-ID: <32F0AC32.5534@fuwutai.lucent.com>
Source record: 97844

Thanks for the replys.
Most of the problem seems to be that all my xtls are very old and the 40 meter xtl I was using is chirpy. I tried a tv color burst xtl on 80 and it didn't have the chirp.
I checked through the power supply and the plate/screen voltages don't sag more than the manual indicates when key down. (although the bias voltages do sag, and the bias resistors don't seem to have drifted totally off the map)
When listening on anothr receiver in the room, the note sounds rough so either my regulation does need work or at this close proximity I'm hearing the neon oscillators.

1172. Mailing List Reflector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: ke7gh@primenet.COM
Message-ID: <01BC0EB7.ECC0E5C0@ip194.phx.primenet.com>
Source record: 97845

```
BitBucket is a mailing list (reflector) devoted to
specialized amateur radio communication techniques.

-SSTV, ATV, FAX, APT, DSP
-Packet, Pactor, GTOR, Clover, RTTY
-R/C, Telemetry, Balloons, Rockets, Robotics
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To subscribe:
TO: majordomo@primenet.com
SUBJECT:
BODY: SUBSCRIBE bitbucket

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email service by the byte you may want to consider carefully
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TO: bitbucket@primenet.com

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```

1173. swiftech radio frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: russell@rcannell.demon.co.uk
Message-ID: <32f6b6e0.9814603@NEWS.DEMON.CO.UK>
Source record: 97846

Swiftech Marine VHF model M168 help wanted

Can anyone advise me how to enable a frequency on this radio. The
frequency i am after is 156mhz or channel 0 on the marine band.

Any advise appreciated

Regards

Russell
e-mail russell@rcannell.demon.co.uk
Young student who has just had the big-bang theory and the
creation of the universe explained to him.
"Ok let's see if i've got it this time..first there was nothing
and then it exploded?"

1174. TenTec 1208 20M->6M Xvtr Kit Help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Paul Knight <pknight@elec.ctl.etn.com>
Message-ID: <32F0DADC.6261@elec.ctl.etn.com>
Source record: 97847

Well, I bit the bullet and ordered one. If anyone
has any construction advice, stories, addenda, etc.,
please drop me a note with them. I will gather
them all, and post a summary to the net shortly.

--
Thanks & 73,

Paul Knight WD8DKY
pknight@elec.ctl.etn.com

-or-

PEKnSLK@aol.com

1175. 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: wb5rue@amsat.ORG
Message-ID: <01IETJVP4L009ARGD1@ARWEN.UTHSCSA.EDU>
Source record: 97848

Ted <teddyb@die.spam.die> wrote:

<the "real Ted" deleted>

-On Sat, 25 Jan 1997 orion@capital.net** wrote:
->
-> b2dude@aol.com (B2Dude) wrote:
->
-> >This jammer might also interfere with the 27mhz R/C car band! If they are
-> >running a 60m.p.h. gas car, U could really screw ther day. Be nice and
-> >don't build it. some cars cost $1000+!!!
->
-> Anybody who is foolish enough to operate a radio-control car
-> anywhere near 27 Mhz is asking for a crash anyway.
-
-So are you gonna be the one to tell the FCC and the toy companies to
-reallocate the RC channels?

GO GET 'EM TED!
The only RC's you'll find on 27 Mhz are TOYS. The real "$1000"
RC's are on VHF and UHF, usually around 70 Mhz or 470 Mhz. Yes,
there are hams that use 6 meters and 70cm for RC. As far as
the issue of jamming goes, it is ILLEGAL -- PERIOD. Whether
you agree with the issue at hand, jamming is malicious interference
and is ILLEGAL no matter what the service.
[off subject=ON]
[SoapBox = ON]
I heard an interview with the chief editor of the New York Times
last week that concerned the recording of telephone (cell phone)
conversations of "Mr. Newt". He stated that it really
didn't matter that the evidence was gathered in an illegal
manor but only the seriousness of the charges involved.
SCARY!!!! Does this mean that if you are charged with
a serious crime that your constitutional rights just go
out the window? The nature of the evidence or the manor
in which it was obtained doesn't matter? REALLY SCARY!!!
There are many guilty-even-if-proven-innocent crimes.
Sexual harassment, child abuse, rape -- all very serious
but they are thrown around so flagrantly in many instances
that they are deluded and many times the REAL crimes are
lost in the shuffle. Kind of like crying wolf.
And these jokers (Stan and the like) accuse us
of being Nazis? My grandfather was there! I have
hundreds of pages of his memoirs of that era. It was
truly scary what the Nazis did to people they didn't

like. Even their own citizens. It is starting all over in this country just like it did in Germany in the late 1920's and early 1930's. REALLY SCARY!!! [SoapBox=OFF]

Sorry for getting of the subject of this newsgroup but these liberal idiots that throw around politically-correct insults like Nazi, homophobe and the like just burn me up. They run out of arguments of their own (assuming that they had one to begin with) so they use these politically-correct insults to blur the subject at hand.

Kevin, WB5RUE
Those who are willing to give up liberties for safety's sake deserve neither liberty nor safety.
I am Voltohm of Borg! Resistance is E/I, Power is EI, you will be attenuated!

1176. 910 MHZ atv xmit info needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: "David A. Cooley" <cooldave@ipass.net>
Message-ID: <32F0C754.2649@ipass.net>
Source record: 97849

Looking for info on building a 910 MHZ ATV xceiver from Motorola and/or
national IC's/modules (IE: MC1374 modulator, MC13176 UHF xmitter etc...)

Thanks,
Dave

--
==
David Cooley N5XMT Packet: N5XMT@W4RAL.#RTP.NC.USA.NOAM
Internet: cooldave@ipass.net And Web: http://www.ipass.net/~cooldave/
Sponges grow in the ocean... Wonder how deep it would be if they didn't!
==

1177. Re: SSB filter / IF amp using opamps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: rohrwerk@pcOnline.com
Message-ID: <rohrwerk-3001971033440001@tsc-p23.pconline.com>
Source record: 97850
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article
<Pine.SOL.3.91.970126102950.4389A-100000@godzilla2.acpub.duke.edu>, "James
P. Meyer" <jimbob@acpub.duke.edu> wrote:

> On Sun, 26 Jan 1997, Maroof H. Choudhury wrote:
>
> > I tried making a narrowband active SSB filter with TL071. used a 455KHz
> > ceramic resonator int the noninv amp feed back loop, (replaced the feedback
> > bypass cpacitor with the resonator). The result was, a very high Q filter
> > around 455KHz (certainly many times higher than the resonator) with
about 28dB
> > gain.
>
> Very high Q doesn't always mean you have a bandwidth that will do
> you any good or that the bandwidth is flat across the top.
>

etc.

This reminds me: with some of the new wide bandwidth opamps that work into
the RF region, I'd wondered about making active filters in a typical IF
region of 9 MHz or so. Limiting factors might be dynamic range, compared
with an analog filter.

John Seboldt K0JD

1178. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32F0D459.6213@nospam.wco.com>
Source record: 97851

Ted wrote:

>
> I was just talking to a friend the other day suggesting that we need to
> get back into doing things like antenna-raising parties like in the old
> days... yet another wonderful thing that has darn near disappeared from
> the ham scene due to self-centeredness. It's sad.

Funny, This here libral voted for the adulturer from Arkansas to piss
you off just happens to have
several antenna raising parties scheduled for early spring. Damn Ted!
you and I just might have to hear each other on the air! that is unless
you don't know morse code..

Jim..

1179. Re: QEX articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: tbaca@boi.hp.com
Message-ID: <5cqjs1$hmo1@hpbs1500.boi.hp.com>
Source record: 97852

TIEMANN BRUCE (tiemann@spot.Colorado.EDU) wrote:
: In article <32EEAC1E.5F3@ford.com>, UN93B <UN93B@ford.com> wrote:
: >Does anyone know how I can get an old article from
: >QEX? Their FTP site only goes back to about 1993.
: >The article I'm looking for is from 1990-1992, I think.
: >The article shows how to build a switching power supply
: >that will deliver 2000 VDC at 1 amp or so.
: >
: >Thanks, Brett

: The article is Feb. or Mar '91. There were some typos in
: the schematic, and so several corrgenda were printed in

: If you ask me to, I can locate the exact issues of the
: article and the comments (that I know about). Send me a buck
Bruce, if you can tell us the issues, we can get reprints from QEX
as described in the following:

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other magazine, but our own. Please contact other magazine publishers
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Phone: 860-594-0278 Internet Address: bdicosimo@arrl.org

WV7I

_____
/ony Baca Hewlett Packard Co. Boise, Idaho tbaca@boi.hp.com

1180. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: orion@capital.net**
Message-ID: <32f0e7a7.9751076@news.capital.net>
Source record: 97853

John Harper <j..harper@worldnet.att.net> wrote:

>Ted wrote:
>
>>
>> Up yours. Your previous post made it obvious that you endorse these
>> Richard Burton wannabe's.
>
>
>Ted,
>
>What a rude way you have of expressing yourself in public forum. Your
>mother and I are very dissappointed in you, Son.
>
>--
>John H. ((((((((((/\))))))))))
> / \
> /87.9\
> / FM \
>http://www.GeoCities.com/CapeCanaveral/6702

Ted has been raving a lot lately. Probably off his medication again.

--
73,
Butch N2YMJ
(To send mail, delete the
two stars at the end of my address.)

1181. WTB: B&W Miniductors 3011, 3015, etc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: kc5ng@dlep1.itg.ti.com
Message-ID: <5cqpl6$rg2@sf18.dseg.ti.com>
Source record: 97854

Looking for B&W Miniductors, especially #3011 and #3015, for use in
homebrew transmitter projects. Not interested in large-diameter
coils like those used on Bugcatcher antennas, only interested in
smaller ones for transmitter tank coils.

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

1182. Re: QEX articles (2 kV switching supply)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5cqqd3$rv4@lace.colorado.edu>
Source record: 97855

In article <n7ws.250.0013034C@azstarnet.com>,
Wes Stewart <n7ws@azstarnet.com> wrote:

>I'd like to know this too. I was thinking about building one to power my
>2M 8877 until I started pricing components. The cores alone were going to be
>over $100 and FETs with those ratings aren't too common, so I shutter to think
>about them.

I got cores "200-3E2A" from Johnson Shop Products, at $4.00 each.
According to the ARRL, type J material = type 3E2A material, (and 193 ~
200). This makes $40 + shipping for the cores.

Of course, if you absolutely MUST send Amidon all your money, I'm sure
they'll be more than happy to take it.

I did pay full price for the FETs, $17 each for five of them, to IXYS
directly.

>
>While the small size is appealing, I also would question the reliability. One
>screw-up and an awful lot of hardware goes bang. Just my humble opinion.

... which is why I haven't had the balls to make the full power version yet.

By the way, the article claims the whole supply is <8 lbs, but between the
cores and the input filter caps (they spec 5500 uF @~400 V) that's more
than that right there. Does anyone know where this filter cap is in the
photo of the circuit? It should be big enough to see, but I can't find it.

Bruce
N6URH

1183. Re: Q:Minicircuit VCO as Crystall replacement?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5cr1j3$jto@hpcvsnz.cv.hp.com>
Source record: 97856

Gabe Nemeth (gabe@bnr.ca) wrote:
: Hi and thanks for reading.
: I have a quesion for any designers out there.
: Can a mini-circuit VCO (or any low cost VCO) be used in place of a
: crystal in HAM Radio Transceivers?

Well, not just a plug-in replacement perhaps... and if you want
frequency stability, you are going to have to lock it to something.
They are not intended to be used like a stable VFO, but as part of
a feedback loop that locks to a solid reference frequency, usually
generated with a ... crystal oscillator.

--
Cheers,
Tom
tomb@lsid.hp.com

1184. FS: 5CX3000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bc0ef4$35b51440$49229bcf@kn6dv.qnet.com>
Source record: 97857

and socket + other HD parts.
kn6dv@qnet.com

--
http://www.av.qnet.com/~kn6dv

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for atractive vices, he will fail.
(Walter Lippmann)

1185. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: n7ory*@*primenet.com
Message-ID: <32f216a0.24487162@news.primenet.com>
Source record: 97858

<snippity, snip-snip>

>Does the thought of turning them in make you squeemish or something?

Like they would do anything. Check the batteries in you reality
sensor.

>But it did affect someone else. It cost you your integrity! And now that
>you are bragging about it here in public it's just one more case of
>outlaw conduct by a ham that someone can nit-pick about when they need
>excuses to give away OUR bandspace to UPS or some other service! THAT is
>the point. If we can be labled as irresponsible it can cost us dearly!

Waaa.. Waaaa.. Come on Ted, what part of a real life are you just not
interested in?

>
>Do you even care about that, especially after we JUST went through the
>threat of losing 2M and 70cm to commercial LEOS? Probably not.

Went? I'm afraid not, try, GOING.. It ain't over the the fat lady
sings.

>
>Those of you doing or endorsing this can just DROP the lame excuses. Like
>I indicated in an ealier post, it's nothing but a selfish disregard for
>the law which makes you no better than the CB'ers, because you're
>stooping to that same level that they operate on.

Let me turn that around for you:

"Those of you bashing and cursing this can just DROP the lame excuses.
Like I indicated in an ealier post, it's nothing but a selfish
disregard for the <freedom of information and the exchange of ideas>
which makes you no better than the CB'ers, because you're stooping to
that same level that they operate on."

Some CBers like to cover other up with a carrier when they don't like
what they hear. I'm sure you'd cancel posts, if you haven't allready,
if you could.

That's about the size of it.

Rob Neff

1186. Re: WANTED : RF Transmitter IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: J&J Mac <jmacd@nospam.wco.com>
Message-ID: <32F0F26B.4546@nospam.wco.com>
Source record: 97859

cava wrote:
>
> I would like to build a small transmitter to xmit a (burst) code
> generated by an IC (eg. Microchip's Keyloq chips) with a range of
> 500-1000metres. To keep it small, I want to use an IC for the
> transmitter as well as the RF amp (if needed).
>
> Do such chips exist? Are they easy to use? What are the implications
> of using a transmitter with this range?
>
> Can anyone with info please reply to my email address.
>
> Thanx

RF Parts in San Marcos CA carry a variety of RF IC's but they might be
over-kill for your project.
Give them a call at 1-800-RF-PARTS or 619-744-0700
They can give you ideas as to what you might need.

Jim.

1187. Re: rx/tx with 807, who knows something ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Don Huff <donh@vcd.hp.com>
Message-ID: <32F0FE76.1960@vcd.hp.com>
Source record: 97860

Bart Mudde wrote:
>
> I have collected for some years several items to build a tube rx and or
> tx. I am not looking for a big radio, some 50 or less watts is good.
> I have some new 807 tubes with sockets, so I hope some one knows a good
> circuit to build something with the 807. I only operate in CW.
> Any costs will be payed off course.
> 73 de Bart PA3GGM.
>
> address:
> W.B. Mudde
> Ds. Schoutenlaan 3
> 4797 CC Willemstad
> The Netherlands
> In the beginning there was nothing, therefor I'm satisfied now

Hi Bart OM,

Since the 807 was one of the most popular tubes for ham rigs,
there must be hundreds of designs that used them. Look in any ham
radio magazines or handbooks from WWII through the 60's. I have
built rigs using 807's, 807W's (smaller version of 807), as well as
their near-equivalent, the 1625. Very friendly tubes to use.
Have fun!

73,
Don, W6JL

It all started with two point charges...

1188. Re: MLA-2500 P/S caps?? 150 uF @ 450V??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: steve100@dircon.co.uk
Message-ID: <32f12ec4.6603493@news.dircon.co.uk>
Source record: 97861
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap

On Tue, 07 Jan 1997 07:14:46 GMT, garyk9gs@pitnet.net (Gary K9GS)
wrote:

>A while back there was someone selling replacement caps for the
>MLA-2500 Power Supply. 100-150 uF @ 450 Volts.
>
>Does anyone remember who was selling them or know of a source? I do
>know that caps in this size/voltage are difficult to buy.
>
I found something similar from an installation electrician locally...
We have them over here in some of our switching stations for the 3
phase supply to the factory, maybe try someone whos with the local
power co.?

1189. Re: NEED PHONE # FOR BOWMAR CRYSTALS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: webbte <ted.webb@columbiasc.ncr.com>
Message-ID: <E4u0vo.G7y@ncrcae.ColumbiaSC.NCR.COM>
Source record: 97862

Mike -
For Bomar in Middlesex, NJ - Its old but may still be good -
908-356-7787 or 800-526-3935

ted / w4NE (ex-AC4CS / WA4KWG)

>==========HQ54, 1/27/97==========
>
>Hi, I f any body has the number for Bowmar crystals, I would really
>appreciate it. E-Mail me
>
>Thanx
>Mike
>
>HQ54@Aol.Com
>

1190. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R3001971038350001@news.vcnet.com>
Source record: 97863

In article <19970129145501.JAA07339@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <5cjud9$pk8@news1.voicenet.com>, hbrown@voicenet.com (Harry
> Brown) writes:
>
> >I just ran across this discussion and have no expertice on the
> >subject. However it occured to me that the reason for the arcing
> >occuring was because the switch was thrown. The impedances could
> >really be momentarily messed up during this short time and cause
> >conditions to occur that bring about oscillations. Very high rf
> >current flow when the contacts break contact could be the source.
> >
Apparently, it happens, Harry. In the letter from an ARRL Director (which is published on my Web site) he describes such an event.
Quoting
"We both lost perfectly good 8877s due to internal flashover within the tube itself most probably caused by an improper load (wrong antenna) being switched to the amplifier. In my case I had a guest operator who inadvertently switched in a 15M Yagi while operating on 20M. There was a loud "bang", and the 8877 along with the bias circuitry, RF plate choke, and both meters were destroyed. I didn't need a network analyzer as is suggested by Telewski to understand the problem! The wrong antenna presented the tube with an unrealistic plate impedance prompting the parasitic VHF or UHF oscillation. KD9Q's amplifier, which was commercially built, experienced a similar situation."
(Note: the 'internal flashover' he mentioned seems to be commonly caused by loose gold inside the 8877) In the recent shipment of three, kaput, 8877s I received from Lon, K5JV, two of the 8877s had loose particles of gold, which created abnormally high internal leakage. When gold lands on the ceramic insulator between the anode and the grounded grid, IMO, internal flashover is not impossible. In 1986, Eimac's now-retired Chief Specs Engineer, W. B. Foote, told me that the 8877 design engineers determined that gold evaporates from the 8877's grid during an oscillation condition. I asked Foote what the frequency of oscillation was? He said possibly VHF, possibly UHF.
>
> Hi Harry,
>
> Actually a bandswitch can fail from many causes.
>
> Improper tuning, ...

When someone on this thread measured the maximum peak tune-capacitor voltage during mistuning in a SB-220, the result was 3700v-p. I tried

mistuning my SB-220 and nothing I could do would arc the tune capacitor or arc the bandswitch. No surprise there since the measured breakdown voltage of the switch exceeds 5500v. I mistuned my TL-922, and nothing appeared to arc.

...a fault in the load,

True. However, there was apprently no load-fault in Rick (KC0HH) May's case. (see Figure 15)

> improper lead dress around the
> switch,

Bzzzzzzzzzzt.......cough, cough There are no leads around the bandswitch in a SB-220, TL-922, or any other amplifier I have seen the insides of.

>...dirt or deposits (one common cause is if the rotor rubs the
> ceramic, it deposits metalic trails along the ceramic) and so on.

Tom: I have never seen an amplifier that uses a bandswitch whose rotor rubs on the ceramic. Which amplifier uses a bandswitch with a rotor that rubs on the ceramic?

> One person even has a fettish about parasitics, he even $ells kits to
> "cure" parasitics even though there is no evidence they ever occur.
...snip...
Sounds a bit kinky.
Evidence:
1. "Parasitics Revisited", 9/90 & 10/90 QST magazine.
2. Figure 15 and Figure 16(new, courtesy of W6IEG) at
<http://www.vcnet.com/measures/

> It is impossible to develop enough voltage across the few ohms of tune cap
> reactance shunting the source to ground to allow the switch, downstream
> through even more low pass components, to arc.

Tom are you saying that tune capacitors do not have internal VHF resonances? As I recall, someone measured the internal VHF resonances in a tune capacitor and posted the results on this thread. Does anyone remember who made these measurements?

> The cause of switch arcing HAS to be excessive voltage near the
> fundamental operating frequency, ...snip...

Does it make sense that fundamental (HF) energy could wipe out the VHF suppressor resistor, Rs, at the instant when HF-energy wipes out the bandswitch?
Factory-stock SB-220s have a penchant for tank arcing and wiping out Rs when operated on 40m. The SB-220's suppressor-inductor, Ls, has about 3.5 ohms of reactance at 7MHz. In my opinion, it would take around 20v to wipe out Heath's Rs. Since Rs and Ls are in parallel, in order to do this, around 6a rms at 7MHz would have to pass through Ls. However, Ls is in series with the 5pf of internal anode-C in the 3-500Z. At 7Mz, 5pF has 4500 ohms or reactance. From E=I*R, 6a*4500 ohms =s 27,000v-rms. Does

27,000v make sense? ..... Another problem with the HF-energy theory is that the 10m contact is usually the most damaged, while the 15m contact is usually damaged less, and the 20m contact even less so. This pattern of damage is not consistent with HF energy. However, it is consistent with what I would expect from VHF energy. In the photos of arced bandswitches on my Web site, such is apparent.

> I think that you'll see this makes sense, unless you believe in
> pathological science.
>
> 73 Tom

BTW, last week on KTLA-TV, which is Channel 5 in LA, newsman Hal Fishman reported that a TV-satellite which relays CNN and two other TV networks was permanently knocked out by a front-ejection solar disturbance, and that a number of military satellites were damaged at the same time.. Fishman mentioned a previous front-ejection solar disturbance which forced a Space Shuttle mission to return home prematurely a few years ago. ...Cosmic photons? Any comments, Mr. Rauch?
---
e-mail copy to Mr. Rauch

--
--Rich-- ag6k, 805-386-3734

1191. Re: Chirp on Heath HW 16 CW xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: a313@Lehigh.EDU
Message-ID: <5cr75b$1m1e@ns1-1.CC.Lehigh.EDU>
Source record: 97864

In article <32EF919F.46E2@fuwutai.lucent.com>, Sheldon Darack <shel@fuwutai.luce
nt.com> writes:
>I have a Heath HW 16 cw xcvr that operates under xtl control. It has
>pretty bad chirp on transmit. These were once very popular and I can't
>believe that they were used with that much chirp. Anyone recall that
>problem and remember the solution?
>
>Tnx and cul
>
>Shel WA2UBK shel@lucent.com
>
The rig has no voltage regulation. However, mine works well with crystal
control on 80 and 40 with a slight chirp on 15. I suggest you check the HV
filter caps for value and quality. You may be running some raw ac hum as well
as poor ps regulation.

73's Dick K8WHA

1192. The parasitic tar baby

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.251.01F1B7EA@azstarnet.com>
Source record: 97865

With apologies to Roy.

I've updated my page with some different graphs and stuff.

www.azstarnet.com/~n7ws/supp-1.htm

N7WS

1193. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: "bondo@buggy" <sjonesy@slic.com>
Message-ID: <32F11423.7DCD@slic.com>
Source record: 97866

Its better stand around and look stupid than to open your mouth
and remove all doubt....

1194. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: n7ory*@*primenet.com
Message-ID: <32f11266.23405093@news.primenet.com>
Source record: 97867

>Stan, you and Rob and Jim are really showing yourselves to be buttholes.
>Like typical LIBERALS you resort to anyone with morals as a "nazi". I'm

Um, Ted? I'm a *conservative* Republican. Let's get that straight.

>sure my friends in the JDL would appreciate that a lot. Did you also vote
>to re-elect that adulterous anus from Arkansas in the Oval Office? It

No, did you? Neither did anyone I asked, but someone did.

>wouldn't surprize me in the least, but that's all off topic, I suppose.
>If you knew anything at all about real nazis you'd know that it has
>something very much in common with your beloved liberalism: SOCIALISM...
>Rememeber? "Nazi" is short for "National Socialist",(in German "national"
>is spelled "nazional" or something like that).

Get the political platform correct Jim. We conservatives are not like
that. You see Jim, I don't want government involved, where did you get
the impression that we did?

>You buttholes have a lot of nerve. You who like to run around using the
>term "nazi" on anyone you think is too strict are watering down people's
>knowledge of what evil scumbags the REAL nazis were. And then out of the
>other side of your face you vote, march and screem for:

No.. When you guys don't like whats being said, you do what you can to
shut them up, or at least attack their character. See any similarities
yet?

>5: the continued legalization and taxparer-funding of that damnable
>holocaustic carnage upon infants,(aka "abortion"), which has murdered
>hundreds of millions of Americans, started by a true Nazi sympathizer and
>a true racist named Margeret Sanger who was the founder of the notorious
>group called "Planned Parenthood".

I'm beginning to think that you couldn't point out a Republican if you
were at a GOP rally.

<snip worthless chatter>

You need help Jim. If you don't get help from Charter, please, get
help somewhere.

Rob Neff (N7ORY)

REGULARLY VOTING, Conservative Republican since 1989.

1195. WANTED :- MRF 486 matched pair please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: steve100@dircon.co.uk
Message-ID: <32f12cb8.6079174@news.dircon.co.uk>
Source record: 97868

I'm looking for at least one matched pair of MRF 486 drivers please, I have bought from an outlet in Southern UK but found them waaaay too expensive (SMC), can anyone point me in a helpful direction?
Thanks in advance,
Steve,
Plymouth UK.

1196. Re: WTB:MODEM-2400B-EXTERNAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: mmartin@perigee.net
Message-ID: <32f21b9f.72606719@snews2.zippo.com>
Source record: 97869

Would you give $25.00 + shipping for a good MultiTech 224E?

Regards, Mitch

==========
Martin Electronics Company - Marshville NC ---- Since 1976
FCC Licenced & NABER Certified Technician -- Amateur KA4OBE
mmartin@perigee.net ----- www.perigee.net/~mmartin
PGP Public Key at www.perigee.net/~mmartin/pgpkey.htm
==========

1197. Re: rx/tx with 807, who knows something ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5cr6le$2pv@news1.mnsinc.com>
Source record: 97870

OK Bart - let's see if we can help you then!

I have a LOT of schematics and articles available by the WWW for you,
including a FOUR TUBE 807s linear amplifier design etc!

You can get these easily via the web site at:

http://www.mnsinc.com/bry/hamfiles.htm

Look at the bottom of the page for details. You can then print out these
articles or save them on your hard disk drive as .TXT and .GIF or .JPG
files.

Let me know if you need any further help.

73 - Bry

W.B.Mudde@net.HCC.nl (Bart Mudde) whistled a happy tune like:

|>I have collected for some years several items to build a tube rx and or
|>tx. I am not looking for a big radio, some 50 or less watts is good.
|>I have some new 807 tubes with sockets, so I hope some one knows a good
|>circuit to build something with the 807. I only operate in CW.
|>Any costs will be payed off course.
|>73 de Bart PA3GGM.

|>address:
|>W.B. Mudde
|>Ds. Schoutenlaan 3
|>4797 CC Willemstad
|>The Netherlands
|>In the beginning there was nothing, therefor I'm satisfied now

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1198. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: n7ory*@*primenet.com
Message-ID: <32f31927.25134183@news.primenet.com>
Source record: 97871

<snip>
>
>Kevin, WB5RUE
>Those who are willing to give up liberties for safety's
>sake deserve neither liberty nor safety.

I was going to reply with another lengthy post, but, since you obviously don't mean what you say, I'll leave this one alone. (for the most part)

I find it funny that in one breath you tell Ted he's a hero for trying to shut people up, but at the same time you post a signature that says something quite different. So do we give up the our constitutional right to free speach so Ted can have a little safety? Or is that exempt from your interpretation?

73

Rob

1199. Re: Apology

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Bob <_pmw5_@cornell.edu>
Message-ID: <32F1693E.7163@cornell.edu>
Source record: 97872

Ed Burress wrote:
>
> In article <5cipu1$a3j$1@news.rain.org> rmote@rain.org (Ray L. Mote) writes:
> >The email attacks on Diane Moore for her beer question were unwarranted
> >and reveal some pretty ugly character flaws on the part of the
> >originators. Unless you can enforce a single meaning worldwide for the
> >word "homebrew", you'd better be prepared for similar intrusions of your
> >precious group in the future. After the treatment she received here, I
> >pity the next ham who wants to put up a tower in *her* neighborhood!
>
> Point well taken Ray. We were all new users once, and I don't ever
> remember being treated that way in the old days for making a simple
> mistake while posting. We need to all remember that as a Hams, we
> represent our community on the air and off. Truth be known, I spend
> about as much time making crystal malt ales as I do crystal filters.
> I didn't find her posting offensive, and am sorry if others came down
> on her hard. It's not the way it otta be.
> Ed Burress
> KC7GFX

Wht would anyone attack her for making an honest mistake? I saw her post,
and the only news response I saw was one that said something to the
effect of "he had never explored that aspect of the ham radio hobby" or
something like that.. I thought it was a pretty funny, and certainly
wasn't any kind of attack.
--
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.2

mQBtAzK9lTgAAAEDALNAegQHu6xJ7isCW1c57zKpN2N97N14FO6OcHQ1JLQNpbsB
bXmt2KaZMu4+4qLKiaM3S94CANtQlMc/VrQ6fZJNmu2Abg68PrP5RM9PkrKasLiU
8OJ86NbesAZWzN0PFQAFEbQ+Um9iZXJ0IFdleWJyZWNodCwgSlIgLSBOMlFFVyAt
IHBtdzVAY29ybmVsbC5lZHUgLSA2MDctNzU3LTk0MzQ=
=Df2X
-----END PGP PUBLIC KEY BLOCK-----

1200. Re: Need info on military radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <32F10F0F.294@apollo.wes.army.mil>
Source record: 97873

Kirk wrote:
>
> I need info or a source of info on a french military radio set.
> I beleive made in the US, looks similar to a american AN/PRC-104.
> Probably manufactured in the 1980's. VHF FM? SSB? Data modes?
> Approx: 28 lbs, 8 x 10 x 3
> Freq's: 33 to 47
> Markings as follos:
> STTA
> EMETTEUR-RECIPTEUR-ER79A
> MARCHE No74/83006
>
> STTA
> CASE CY 744 A/PRC
> CSF.79 Bd HAUSSMANN PARIS

I have the 83 Jane's Military Communications and I can't find that model
in that edition. Maybe latter? or German?

Butch KF5DE

1201. NEED INFO ABOUT MRF-454 AT 4MHZ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: nabaut@ibm.NET
Message-ID: <199701302254.WAA247978@smtp-gw01.ny.us.ibm.net>
Source record: 97874

Hi folks! greetings from Brasil.

I&#65533;m looking for gain, input and output inpedance data for a MRF-455 @
4 Mhz, in the Motorola "RF DEVICE DATA" I have it only for 30 Mhz.
Thanks in advance.

73 de PY2NI - Horta GG66RK
e-mail: nabaut@ibm.net

1202. Design of PLL and Remote Control circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: hplum <hplum@azstarnet.com>
Message-ID: <5cr5co$4po@news.azstarnet.com>
Source record: 97875

I am looking for some data and circuits for PLL chips as well as data
and circuits as used in remote controled planes and cars. I have a few
projects I want to build but I have been away from these type circuits
for a while and need some help.
Thank You
Harold KB8SOP

1203. Problem with FT1000 RF output stage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: steve100@dircon.co.uk
Message-ID: <32f12d4d.6228474@news.dircon.co.uk>
Source record: 97876

Hi all,
Looking at a smoking FT1000, appears that the drivers - MRF486, have
both burned out. Repeated problem and two dealers and 12 months have
still failed to trace the cause. I am investigating possible internal
harmonics of spurious oscillations that may be finding their way into
the pre-driver stage, incidently it is a push-pull arrangment amp....
any ideas greatly received!
Regards
Steve.

1204. ANY MODS FOR TRIO TR751e /a/uk

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: steve100@dircon.co.uk
Message-ID: <32f12fe0.6887278@news.dircon.co.uk>
Source record: 97877

Anyone have any mods at all for this radio please, I'm particularly
interested to know how to expand the UK band outside the usual 144.000
to 146.000
Thanks in advance,
Steve.

1205. [query] DigiVFO distribution

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: komatsu@nimc.go.jp
Message-ID: <5cp8vk$hvh@ripspost.aist.go.jp>
Source record: 97878
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello, OM.

I am interested in "DIGIVFO" published in former QST. The control
procedure is obtained from ARRL ftp site. I mailed to Dover Research to
order the hardware kit, but no answer has come for 1 month.
Please tell me about further information to order. The Web site or
FAX/E-mail is much helpful.

73,

--
KOMATSU Toshiki / Joint Graduate school of Chem., Univ. of Tsukuba
komatsu@nimc.go.jp, s935562@ipe.tsukuba.ac.jp
FBB/RLI: JF7WED @ JL1ZBF.14.JNET1.JPN.AS

1206. Re: Rejuvenating NiCad Battery Packs (HOW TO)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Nick Di Cintio <dicin@netrover.com>
Message-ID: <32F0E8C4.241B@netrover.com>
Source record: 97879
Cross-posted to: misc.forsale.computers.pc-specific.portables,comp.sys.laptops,alt.cellular,alt.cellular.motorola,alt.cellular.gsm,rec.aviation.misc,rec.radio.amateur.homebrew

Colin Song wrote:
>
> Hi everyone,
> Just like to how which news server has the alt.cellular.motorola
> newsgroup, mine doesn't have one...Please e-mail me. Thank you.
Hi,
I would like to know also. Please email Nick: dicin@netrover.com

1207. WTB 3CX3000A7 PULL OUT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: John <teckserv@ct2.nai.net>
Message-ID: <32F17BB6.4432@ct2.nai.net>
Source record: 97880

Looking for a 3CX3000A7 pull out for a project.
Email John at: teckserv@ct2.nai.net

Thanks

1208. Re: Ruby Laser Kits at Dayton Hamvention 96

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: jleikhim@nettally.com
Message-ID: <5cpc05$q63@server.cntfl.com>
Source record: 97881

Tom wrote:

>I have a friend who is trying to locate "Ruby Laser Kits". They were
>in the Flea Market area at the Dayton Hamvention last year ('96).
>Any information would be appreciated. 73 de KB8PAI, Tom
>toms@glasscity.net

Same here. Please e-mail to Joe at..... jleikhim@nettally.com

1209. R130

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Guido Becker <guidbecker@metronet.de>
Message-ID: <5covbq$svm@news.metronet.de>
Source record: 97882

suche zubeh�r f�r die r130 z.b. wsu-a,wsu-t,bp-um-26
guido becker df6fn,guidbecker@metronet.de

1210. Ne 602

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: csim88@pclink.com
Message-ID: <11d7cd$13e29.34d@news.pclink.com>
Source record: 97972

Hi, can anyone tell me where to buy the NE 602 RF chip? tnx and
please reply via email if you would.

1211. Re: electronic grade RTV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: wk@frc.niwa.cri.nz
Message-ID: <5cos90qlg1@clam.niwa.cri.nz>
Source record: 97973

>Rob the Anonymous wrote:
>>
>>I believe the difference is that the electronic grade RTV can safely be
>>used to insulate HV without having to know for certain if the material is
>>cured all the way through.
>>
>Do the solvent-based products have a specification for the insulating
>properties before they're fully cured?

My understanding is that 'electronic grade RTV' is not acid based
('Neutral Cure'), and thus doesn't corrode the conductors. However,
the neutral cure stuff takes a *lot* longer to set properly. Horses
for courses I suppose.

Wilbert, ZL2BSJ.

1212. Re: Newsgroup Wishlist

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: reinz@Desk.nl
Message-ID: <reinz-3001970256220001@mupe3.desk.nl>
Source record: 97974
Cross-posted to:
rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,news.admin.hierarchies,news.groups

Hi Ted,
you wrote:

To use lynx, you would need an internet account called a unix shell
because lynx is a unix program which you operate remotely using an
ordinary emm ess doss based terminal program.

I want to point out that lynx is also available for em es dos, and is
called DosLynx. I do not use it myself but trust you will be able to find
it on the net.

If memory serves me right you will need to setup slip or pee pee pee first.

hope this helps,

Reinout Heeck The Faster Your Computer
---------- The More Time You Spend
reinz@Desk.nl Waiting For It

1213. FS HD power supply; prop pich rotor etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bc0e4f$a1ae6f20$42229bcf@kn6dv.qnet.com>
Source record: 97975

I have for sale a heavy-duty power supply for a heavy-duty RF deck 6000V
?A.
also available a RF deck or parts for a heavy-duty amplifier.
Prop pitch rotor and power supply + control box and a spare unmodified prop
pitch.
make offer.
805 949 1244 or 805 949 9833

e-mail kn6dv@qnet.com

--
http://www.av.qnet.com/~kn6dv

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for atractive vices, he will fail.
(Walter Lippmann)

1214. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5cp2u0$pt0@hpscit.sc.hp.com>
Source record: 97976

In article <Pine.GSO.3.94.970128233833.3645A-100000@Stratus.CAM.ORG>,
Michael Black <blackm00@CAM.ORG> wrote:
>You might check the Winter 1996 issue of Communications Quarterly. On
>page 29, there's an article by Ulrich Rohde and Chao-Ren Chang entitled
>"Osicllators with Low Phase Noise and Power Consumption". Apparently
>it's a reprint from RF Design. It might be a starting point.
>
> Michael VE2BVW

I'd be curious if anyone has taken this article and reduced it
to practice. There are too many missing details to really
duplicate his design.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

1215. LM34DZ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: jeffreyh@hawaii.edu.no_ads
Message-ID: <5cp343$l3m@news.Hawaii.Edu>
Source record: 97977

All Electronics Corp. has LM34DZ temperature sensors for a couple bucks;
says voltage is linearly proportional to temperature in F. Does anyone
have a circuit diagram using this pup?
73,
Jeff KH2PZ
jeffreyh@hawaii.edu.no_ads (remove "no_ads" to reply)

1216. Re: Chirp on Heath HW 16 CW xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <32f01d5d.57396744@news.flash.net>
Source record: 97978

On Wed, 29 Jan 1997 13:06:23 -0500, Sheldon Darack
<shel@fuwutai.lucent.com> wrote:

>I have a Heath HW 16 cw xcvr that operates under xtl control. It has
>pretty bad chirp on transmit. These were once very popular and I can't
>believe that they were used with that much chirp. Anyone recall that
>problem and remember the solution?
>
>Tnx and cul
>
>Shel WA2UBK shel@lucent.com

Shel,
I don't remember about the -16, but my old HW-101 would chirp if the
OA-2 regulator tube was dying. Does the HW-16 have something like
that? I used one for a while, but I was 16 and an appliance operator
back then!
Kerry
kmiller@flash.net

1217. Re: Chirp on Heath HW 16 CW xcvr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: cwop@aol.com
Message-ID: <19970130055100.AAA23506@ladder01.news.aol.com>
Source record: 97979
Body handling: HTML body converted to readable text

[No readable article body recovered]

1218. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32F05A6F.D1C@nospam.wco.com>
Source record: 97980

Ted wrote:
>
> * * * * * * * * * * * ATTENTION * * * * * * * * * * * * *
> * *
> * The email address in my "From" header is incorrect! *
> * It was changed to defeat spam-bots that send email. *
> * To email me, please use my CORRECT email address: *
> * *
> * teddyb@caprica.com *
> * *
> * My Email is neither a newsgroup or a public forum! *
> * I do NOT want any advertizing via Email. Who ever *
> * sends unsolicited advertizing via Email risk prompt *
> * cancelation of internet service without refund and *
> * possible prosecution for harrassment and/or fraud! *
> * *
> *
>
> On Fri, 24 Jan 1997, J&J Mac wrote:
>
> > Stan Aughenbaugh wrote:
> > >
> > > Right on Rob! It irritates the #$%^^& outof me when I see one of these
> > > 'Band Nazis' or your word 'info nazis' act like they are the sole
> > > arbiters of who should know what.
>
> Stan, you and Rob and Jim are really showing yourselves to be buttholes.
> Like typical LIBERALS you resort to anyone with morals as a "nazi". I'm
> sure my friends in the JDL would appreciate that a lot. Did you also vote
> to re-elect that adulterous anus from Arkansas in the Oval Office? It
> wouldn't surprize me in the least, but that's all off topic, I suppose.
> If you knew anything at all about real nazis you'd know that it has
> something very much in common with your beloved liberalism: SOCIALISM...
> Rememeber? "Nazi" is short for "National Socialist",(in German "national"
> is spelled "nazional" or something like that).
>
> You buttholes have a lot of nerve. You who like to run around using the
> term "nazi" on anyone you think is too strict are watering down people's
> knowledge of what evil scumbags the REAL nazis were. And then out of the
> other side of your face you vote, march and screem for:
>
> 1: more government
>
> 2: gun-control

>
> 3: godless schools to force lies into our kids heads such as there being
> nothing wrong with perversions like homosexuality
>
> 4: re-enslaving most of my people into dependancy on government
>
> 5: the continued legalization and taxparer-funding of that damnable
> holocaustic carnage upon infants,(aka "abortion"), which has murdered
> hundreds of millions of Americans, started by a true Nazi sympathizer and
> a true racist named Margeret Sanger who was the founder of the notorious
> group called "Planned Parenthood".
>
> ...and all the other such socialist crap you liberals defecated upon
> America and the world and yet with all that evil you liberals impose upon
> us you DARE to call any of us moral conservatives a "nazi"? That HAS to
> be the most BLATENT and arrogant example of hypocracy anyone has ever yet
> committed!
>
> Yeah, this really IS way off this newsgroup's topic, but YOU were the ones
> who pushed my button by calling me a nazi when I am one of the most
> anti-nazi people I know. And as far as I'm concerned, anyone who is for
> the lowering moral standards, be it a moral standard that is related to the
> ham radio hobby or not, displays that they have no conscience, no decent
> upbringing and nothing to offer ham radio except degradation. And anyone
> who cheers them on is no better either.
>
> > > I think your comments were great and to the point. Last thing we need on
> > > this group are the thought police. Personally I always try to give an
> > > answer if I have it. The responsibility lies in how the information is
> > > used.
>
> Yeah Stan, why dont we just get rid of all the rules and create a
> spectrum wide citizens band... is that what you want? That's how you make
> it sound. If you want to jam or help jam communications, do us hams who
> CARE about the hobby a favor by leaving your license at the door as you
> go out to buy a CB radio. Then you won't need to BUILD something to jam
> 27 MHz... you'll have a CB and you can play "drop the mall" all day long.
>
> > > Gad! I sure am glad MArconi and Edison (or Tesla) didn't have to put up
> > > with these types, we'd all still be senfing smoke signals to each other.
>
> And you'd be figuring out ways to jam that too, I'll bet.
>
> > I dunno! they would probably be in with the EPA whining about how the
> > smoke singals are causing 'second-hand-smoke' fatatalities!
>
> The EPA? Isn't that YOUR bunch? Anyone against good moral conduct HAS to
> be a liberal,(that's the whole point of this reply). To a conservative,
> good moral conduct comes FIRST, even above tax-cuts,(preferabley WITH
> tax-cuts)!

>
> You guys got some nerve calling an Alan Keyes/Abe Lincoln/Teddy Roosevelt
> type of Conservative Republican a nazi. In my book licentious liberals
> are so lame they aren't even worthy to kiss the southbound end of a
> northbound rat. We have a repeater set aside for your type in Los Angeles
> on 147.435 where all the queers and weirdos can go screw up without being
> hassled while us hams who want to respect the rules use the rest of the
> spectrum and as long as the animals stay in their cage we don't shut them
> down. Usually they don't stay there and then we and the local OO's get to
> enjoy a good hunt.
>
> As far as I'm concerned you who bash me for endorsing good morals in the
> hobby are just a bunch of Richard Burton wannabe's.
>
> You have just seen that can't just push me and think I'll turn tail and
> run. I will not just push back... I'll blast back with both barrels.

Ted, you are so damned warped I can't even understand why any of us even reply to your racist hatred.
It is people like you who give Amateur Radio a bad name. Face it. WE ARE ALL DIFFERENT.
If you don't like it, tough luck.

No try and lighten up a little and try and accept that while some may agree with your rigidly conservative ways, Most of us won't. Your beliefs are not mine.

Signed,

Jim.. The butthole libral who voted for the adulterous anus from Arkansas. And YES my vote was the one that made the difference. I Voted for him just to piss YOU off.

And remember, one mans sin is another mans right.

P.S. Go get a drink of water.

1219. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: J&J Mac <jmacd@nospam.wco.com>
Message-ID: <32F05B07.AB1@nospam.wco.com>
Source record: 97981

Ted wrote:>

>
> If you weren't skipping posts you'd have seen some things. I'm not going
> to sit here and brag on myself. And as far as I'm concerned, having a
> fierce attitude,(which I admit I have), is not immoral, nor is there
> any rule against it. If you waste a commodity which is precious to me
> such as my time, you can expect to be told off. So don't act surprized
> when it happens. If you KNOW you don't have the right answer when the
> right answer is what someone needs, are you helping or hindering? Answer
> me that.
>

Sorry Pal, you ARE wrong. to force YOUR morals upon another IS A SIN!

1220. Re: Need contact information for "73" magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: TRACY WALTERS <n1rkt@dekalb.Net>
Message-ID: <32F0472E.5055@dekalb.Net>
Source record: 97982

Don't know if it is published anymore, I used to follow it. Ther orignal pub. office was in Milford, N.H. that would be area code 603 try information from there.

Good Luck

1221. Re: Need contact information for "73" magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: TRACY WALTERS <n1rkt@dekalb.Net>
Message-ID: <32F047C3.1C01@dekalb.Net>
Source record: 97983

Don't know if it is published anymore, I used to follow it. Ther orignal pub. office was in Milford, N.H. that would be area code 603 try information from there.

Good Luck

1222. TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Ian Mitchell <ian.mitchell@research.utas.edu.au>
Message-ID: <32F08077.64E3@research.utas.edu.au>
Source record: 97984

Hi,

In the November '90 edition of 73 Amateur Radio Today magazine, a 40 meter transceiver using a 74LS00 and a 74LS03 is described. The '00 is used as the oscillator feeding the '03 as a buffer with each of its 4 outputs connected together. I hope people can help me with a couple of questions:

1. The key is connected between +5V and the outputs of the '03 buffer stage via an 8uH inductor. I don't understand this! I would have thought this would increase the power consumption.

2. The receiver section has the simplest mixer I've ever seen consisting of 2 diodes back to back. I would be very interested to hear any comments from anyone on the performance of such a receiver.

Many thanks, Ian

1223. re chirp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: ken cubilo <kcubilo@freeway.net>
Message-ID: <32F08C52.488F@freeway.net>
Source record: 97985

what band or bands is the hw16 chirping on? used to be a mod that
was adding a simple capacitor between two pins of the osc tube that
would get rid of chirp on 15 meters. e mail more info and i will try to
dig out the very old manual with notes on it from my orginal ham rig
the hw16.
73 we8w
kcubilo@freeway.net

1224. Web Site improvements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5cq2ne$nc1@news1.mnsinc.com>
Source record: 97986
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.misc

Hi folks!
I have made a LOT of improvements at my web site.

Probably one of the largest lists of hyper links to great ham radio sites -
classified and grouped according to the following topics:

QRP
DX
CONTESTS
VHF
BOATANCHORS
BUY & SELL
HOMEBREWING
NETS
ARRL & FCC
QSL INFO
TUBES
GLOWBUG CONSTRUCTION PROJECTS
MODIFICATIONS
HAM CHAT LOCATIONS
RADIO HISTORY
PARTS
... and many more!

You name it - you can find it at my web site! Best of all it is FREE with no
strings attached, no annoying e-mails afterward etc.

Take a look and tell your friends:

Bry

http://www.mnsinc.com/bry/

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1225. Another mystery transformer - AF4K

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5cq2ng$nc1@news1.mnsinc.com>
Source record: 97987
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi - I have another mystery transformer here if anyone can help to identify it:
This one has no brand name, and looks like the typical small 1" X 1" X 1.25" thing, upright mount with cover shields on it. All shiny metal covered with some kind of light yellow goop sealant.
Markings are:
MSY-P-43755
SA-7846

It has two 18 ga. red wires out one side.
The other side has three smaller gauge wires 22? black, white & blue.

ANY IDEAS?

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1226. Help! Transformer question!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5cq2nb$nc1@news1.mnsinc.com>
Source record: 97988
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.misc

Hi guys.
I have an interesting looking transformer here and wondered if ANYONE knows what it is or can help me find out?

It is marked TRANS INC. TM 4075

It looks to be about a 50 watt class of transformer, but I have no idea if it is a power transformer or an audio transformer or what!

It has about 8 lugs on each side, and they are numbered 1-16

Any ideas? Please e-mail me
bry@mnsinc.com

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1227. ICOM 736 / 738

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: Jeff <jsmith@fox.nstn.ca>
Message-ID: <01bc0eaa$1070fa40$2308ba89@jeff>
Source record: 97989

Can anybody point me in the direction of information on allowing these transceivers to output on freq. outside of the ham bands for use with a transverter?

Thanks VE1ZAC
jsmith@fox.nstn.ca

1228. Re: Kenwood TM733A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: xTimothy_Shearer@MK.com
Message-ID: <5cq5ct$36c@esgadm.esg.mk.com>
Source record: 97990

fpate@vnet.ibm.com wrote:
>I am looking for info on the Kenwood TM733A dual bander mobil. Does
>anybody have one that can give me some feedback, Likes dislikes?
>
>Thanks
>

I purchased a 733 at the 94 (I think) Dayton hamfest when just introduced. My radio went thru several trips back to kenwood. However I believe my radio was an exception. I like the 733 very much. It has many nice features. You can find new 733's for around $400. I paid about $600 (the money was burning a hole in my pocket!!).

The radio sounds good on the air..according to reports. It has no PL decode..that will cost you $60 or so..you'll need this in a big city. It does now have a backlit mike which is an asset. You can get it with a built in diplexor..mine has 2 antenna connectors which I prefer. The radio in my opinion is very lacking in heatsinking mass. There is a fan in the back but I'm not sure it helps much.

A note I put together some time back follows:

The 733 has this really nice feature of having 6 program setups. This means that you push "PGM" and then one of the 6 menu buttons and the radio sets all frequencies, offsets, tones, power level, backlighting... everything. You set up your favorite operating scenarios and save them to a program mode button. Its real nice.

If you will ever cross band repeat your radio, you can set up one or two of your program buttons to store the setup. You can cross band the radio in 4 button operations. Unless you like to spend 5 minutes pushing buttons each time you want to use the cross band features, this is the way to go.

If you store your cross band setup to a progam mode button, WHILE the radio is actively cross banding...BEWARE that any time in the future when you access that programmed setup...that the radio will immediately begin transmitting if a UHF signal is present. This is not a good thing. It would be easy to hit the wrong sequence of buttons and have a totally un-supervised repeater on the air for hours.

I strongly suggest setting program mode buttons while not in the cross band mode and only engaging the repeater function manually and purposely.

Tim KF8XW

1229. Re: QEX articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.250.0013034C@azstarnet.com>
Source record: 97991

In article <32EF4C88.41C67EA6@vf.lmms.lmco.com> "Harry H. Brown" <hbrown@vf.lmms.lmco.com> writes:
>From: "Harry H. Brown" <hbrown@vf.lmms.lmco.com>
>Subject: Re: QEX articles
>Date: Wed, 29 Jan 1997 08:11:36 -0500

>Bret,

>I have a copy of the article at home. Send me an e mail at
>hbrown@voicenet.com if you are unable to get a copy from QEX. There was
>an errata item a couple of issues of QEX from the origional that I have
>also.

>Has anyoue out there actually built a supply per this article that may
>tell us about some of the pitfalls?

I'd like to know this too. I was thinking about building one to power my 2M 8877 until I started pricing components. The cores alone were going to be over $100 and FETs with those ratings aren't too common, so I shutter to think about them.

While the small size is appealing, I also would question the reliability. One screw-up and an awful lot of hardware goes bang. Just my humble opinion.

73, Wes -- N7WS

>73, Harry, W3IIT

>UN93B wrote:
>>
>> Does anyone know how I can get an old article from
>> QEX? Their FTP site only goes back to about 1993.
>> The article I'm looking for is from 1990-1992, I think.
>> The article shows how to build a switching power supply
>> that will deliver 2000 VDC at 1 amp or so.
>>
>> Thanks, Brett

1230. RCI 2970 Schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-30 00:00:00 UTC
From: George Harris <103021.3555@CompuServe.COM>
Message-ID: <5cq887$64t$1@mhafn.production.compuserve.com>
Source record: 97992
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb

Does anyone have a schematic for a RCI 2970? I need to check a
few things out on a unit I have but I won't even try without a
schematic.
I would sincerely appreciate it if someone could fax or mail one
to me. Please E-mail me at GDHarris@compuserve.
Thanks!
73s
George

--
##
Don't do anything that I wouldn't,
At least, Don't get caught!
##

1231. FS Prop Pitch rotor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bc0f8e$7a96b100$35229bcf@kn6dv.qnet.com>
Source record: 97743

I have a complete system + a spare motor and some parts.
All in good condition and in working order.
Make offer for all.
73 Will, KN6DV

kn6dv@contesting.com

--
http://www.av.qnet.com/~kn6dv

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for atractive vices, he will fail.
(Walter Lippmann)

1232. Re: parametric amplifiers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan31.152237.1105@ke4zv.atl.ga.us>
Source record: 97744

In article <c=US%a=_%p=Acxiom_Corporati%l=PO-CONWAY-1-970129140636Z-934@po-conway-1.conway
.acxiom.com> efbrya@acxiom.COM (efbrya - Eric Bryan) writes:
>
> Can anyone tell me of a good reference for the
>design/construction/quirks of parametric amplifiers? I heard they were
>popular some years back but can't find out much about them. There was a
>little mention of them in one of Don Lancaster's columns.

Eric, the late Sam Harris invented the parametric amplifier back in
the early 1960s. He published a theory and construction article in
73 Magazine. At the risk of misrepresenting it, the parametric amp
worked something like a MASER. It used a klystron to pump a solid
state diode circuit to create a population inversion. A VHF signal
coupled into the diode circuit was then amplified by stimulating
emission, IE triggering the population inversion to cascade back
to the ground state in step with the input VHF signal.

For its time, it offered a very good noise figure and very high
gain. Its chief competition was the WE416B tube preamp. Today we
can get better performance for less cost using a GASFET preamp in
a more conventional circuit.

I've probably got the original 73 Magazine article stored away in
a box around here somewhere. Finding it would be a major expedition.
One of these days, maybe after I retire, I'll get around to sorting
and cataloging all the old junk that I've squirreled away over the
years. Meanwhile, you'll probably have better luck doing a library
search.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1233. Re: Is equipment building and repair a lost art? Your comments, please.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: Bill C <wrc@tir.com>
Message-ID: <32F214DD.647E@tir.com>
Source record: 97745

Digi-Key has them, too...

http://www.digikey.com

Bill KU8H
--

Good judgement comes from experience.
Experience comes from bad judgement.

1234. Re: TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan31.154945.1314@ke4zv.atl.ga.us>
Source record: 97746

In article <32F08077.64E3@research.utas.edu.au> ian.mitchell@research.utas.edu.au writes:
>
>In the November '90 edition of 73 Amateur Radio Today magazine, a 40
>meter transceiver using a 74LS00 and a 74LS03 is described. The '00 is
>used as the oscillator feeding the '03 as a buffer with each of its 4
>outputs connected together. I hope people can help me with a couple of
>questions:
>
>1. The key is connected between +5V and the outputs of the '03 buffer
>stage via an 8uH inductor. I don't understand this! I would have thought
>this would increase the power consumption.

The 74LS03 is an open collector gate (used as a simple inverter in this
circuit by tieing the inputs together). The inductor is the output tank
inductor, and the keying is in the power supply line. Keying the PA voltage
was uncommon in tube amps because of the hazard of the HV, but in this
solid state unit it is the only practical way, IE there's no way to key
the 74LS03 "cathode".

This is a NAND gate, and you could key one of the input leads on each
section, but the keying logic would be reversed, IE an open key would
send, and a closed key would stop sending. So you'd need another section
to invert the keying sense. Keying the OC voltage is the simplest solution.

>2. The receiver section has the simplest mixer I've ever seen consisting
>of 2 diodes back to back. I would be very interested to hear any
>comments from anyone on the performance of such a receiver.

I don't recall that circuit. Is this a "reciprocating mixer"? In that
design, the LO is at half the signal frequency and the dual diodes use
both halves of the cycle to effectively double the frequency when mixing.
This is pretty clever in that it eliminates the LO as a source of
"backwave" from the receiver. (Since the LO of a DC receiver is on
frequency, backwave radiation from the receiver can be a problem.)
Stability of a lower frequency oscillator is also better.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1235. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: J&J Mac <jmacd@nospam.wco.com>
Message-ID: <32F22339.6F08@nospam.wco.com>
Source record: 97747

orion@capital.net** wrote:

>
> Ted has been raving a lot lately. Probably off his medication again.
>
> --
> 73,
> Butch N2YMJ
> (To send mail, delete the
> two stars at the end of my address.)

Lithium, Thorizine or Prozac? Maybe we can all pitch in?

(GRIN)
j..

1236. When Did 0 Call Area Start???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: jrybak@MesaState.EDU
Message-ID: <5ctadt$dpb@mesa7.mesa.colorado.edu>
Source record: 97748

Can anyone tell me when the 0 call area was created? I am trying to track down who, if anyone, previously held my call. I've had it for almost 31 years but I probably wasn't the first holder of it.

Thanks for any help you can provide.

73,

Jim Rybak W0KSD

1237. Re: Ne 602

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: MDM RADIO LTD <mdmradio@earthlink.net>
Message-ID: <32F24D40.6A19@earthlink.net>
Source record: 97749

user wrote:
>
> Hi, can anyone tell me where to buy the NE 602 RF chip? tnx and
> please reply via email if you would.ANS TRY RICHARDSON ELEC www.rell.com or rf parts in calif
619-744-0500 also mcm in oh

1238. Testing gel-cell batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: byoung@qni.com
Message-ID: <5ctg1j$7sn@suba01.suba.com>
Source record: 97750

Group,

I have access to some recently replaced UPS units.
These units have 6 and 12v "gel-cell" batteries that
I would like to put to good use (ARES, APRS, etc...)

Is there a recommended and/or quick'n easy method
for testing voltage, amps, and longevity?

Bill Young
byoung@qni.com
KB0UZQ

1239. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: kahrs@caip.rutgers.edu
Message-ID: <5ctaso$jlp@caip.rutgers.edu>
Source record: 97751

I recommend this book for general, all purpose and useful information on ferrites of all varieties:

AUTHOR Snelling, E. C. (Eric Charles), 1923-
TITLE Soft ferrites : properties and applications / E.C. Snelling.
EDITION 2nd ed.
PUBLISHER London ; Boston : Butterworths, 1988.
DESCRIP x, 366 p. : ill. ; 26 cm.
NOTES Includes bibliographies and index.
SUBJECTS Ferrites (Magnetic materials)
LC CARD 88014480
ISBN 0408027606 :

Mark / KB2VSQ

1240. Sites w/ schematics and projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: krisik@aol.com
Message-ID: <19970131201901.PAA29785@ladder01.news.aol.com>
Source record: 97752

Can somebody tell me if there is any sites w/ schematics and
projects? Thank you very much! You can either post a note on the newsgroup
or email me via aol. Thanks alot! KF6DSW Krisik@aol.com

1241. Re: QEX articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5ctq7o$41g@news1.mnsinc.com>
Source record: 97753

Brett, Harry - or anyone else know what is the URL address on the web for the QEX stuff please???

Reply here and/or e-mail me!

Bry

"Harry H. Brown" <hbrown@vf.lmms.lmco.com> whistled a happy tune like:

|>Bret,

|>I have a copy of the article at home. Send me an e mail at
|>hbrown@voicenet.com if you are unable to get a copy from QEX. There was
|>an errata item a couple of issues of QEX from the origional that I have
|>also.

|>Has anyoue out there actually built a supply per this article that may
|>tell us about some of the pitfalls?

|>73, Harry, W3IIT

|>UN93B wrote:
|>>
|>> Does anyone know how I can get an old article from
|>> QEX? Their FTP site only goes back to about 1993.
|>> The article I'm looking for is from 1990-1992, I think.
|>> The article shows how to build a switching power supply
|>> that will deliver 2000 VDC at 1 amp or so.
|>>
|>> Thanks, Brett

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1242. Re: TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5ctqjh$41g@news1.mnsinc.com>
Source record: 97754

There is a similar design available via my web-site at:

http://www.mnsinc.com/bry/

in the HAM RADIO RESOURCES section under ham files.

Ian Mitchell <ian.mitchell@research.utas.edu.au> whistled a happy tune like:

|>Hi,

|>In the November '90 edition of 73 Amateur Radio Today magazine, a 40
|>meter transceiver using a 74LS00 and a 74LS03 is described. The '00 is
|>used as the oscillator feeding the '03 as a buffer with each of its 4
|>outputs connected together. I hope people can help me with a couple of
|>questions:

|>1. The key is connected between +5V and the outputs of the '03 buffer
|>stage via an 8uH inductor. I don't understand this! I would have thought
|>this would increase the power consumption.

|>2. The receiver section has the simplest mixer I've ever seen consisting
|>of 2 diodes back to back. I would be very interested to hear any
|>comments from anyone on the performance of such a receiver.

|>Many thanks, Ian

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1243. Conversion gain

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32F293FE.5C5D@idecc.com>
Source record: 97755

Im confused, (this is no surprize to my wife or children) When your

injecting a 7.040MHz signal in to an NE602 mixer in a 40m DC reciever

what are you mixing? Isn't the VFO really being used more like a BFO? I

think I understand that part but:

What if I take the same circuit and use a 3MHz VFO and then put a 4MHz

crystal on the output of the NE602? Have I created a superhet? In

addition, now that I've mixed the signal do I get conversion gain from

the NE602?

My big question is:
Do you get the same gain when using it in DC operation?

I hope these questions are not too far out in left field.

--

Tim Hynde \,`/ /

KA8DDZ _).. `_

tim_hynde@idecc.com (__ -\

'`.

(\>_-_,

_||_ ~-/

1244. conversion gain

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <32F29CE0.5A1A@idecc.com>
Source record: 97756

Im confused, (this is no surprize to my wife or children) When your injecting a 7.040MHz signal in to an NE602 mixer in a 40m DC reciever what are you mixing? Isn't the VFO really being used more like a BFO? I think I understand that part but:

What if I take the same circuit and use a 3MHz VFO and then put a 4MHz crystal on the output of the NE602? Have I created a superhet? In addition, now that I've mixed the signal do I get conversion gain from the NE602? Do you get the same gain when using it in DC operation?

I hope these questions are not too far out in left field.

--

Tim Hynde \,`/ /

KA8DDZ _).. `_

tim_hynde@idecc.com (__ -\

'`.

(\>_-_,

_||_ ~-/

1245. FS:2N2222 to-18 transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: DENNYV <DENNYV@clarityconnect.com>
Message-ID: <32F2B667.4D21@clarityconnect.com>
Source record: 97757

I have a quantity of TO-18 metal case npn transistors for sale as follows 25 for $5 ppd. 50 for $9 ppd. 100 for $15 ppd. Orders to:Denny Voorhees; 712 North Elmer Ave; Sayre,PA 18840-1804. If you Email me that you are sending an order I will have itready for the return mail. Thanks and 73 Denny AD3O

1246. SB-220 MODS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: Tim Raffety <Tim_Raffety@Oxy.com>
Message-ID: <32F27B62.55C2@Oxy.com>
Source record: 97758

Sometime ago I was able to locate a resource for several mods for the Heathkit SB-220. Does anyone know of a source on the web where any information can be obtained to mods for this amp? Such as QSK operation and such?

Thanks in advance!

1247. Re: Coax Duplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: "Allan (VE6AQK)" <doblera@cadvision.com>
Message-ID: <32F2AB32.232F@cadvision.com>
Source record: 97759

au wrote:
>
> I have heard of a coaxial duplexer used for some homebrew repeaters. I
> assume that it is a notch type of duplexer. Does anybody have any
> experience making one of these? And also how stable was it?
>
> George N7BUI

try this site George...

http://www.dallas.net/~jvpoll/dup6m/dup.html

73
Allan

1248. Re: Coax Duplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: "Allan (VE6AQK)" <doblera@cadvision.com>
Message-ID: <32F2AC8A.6C2B@cadvision.com>
Source record: 97760

au wrote:
>
> I have heard of a coaxial duplexer used for some homebrew repeaters. I
> assume that it is a notch type of duplexer. Does anybody have any
> experience making one of these? And also how stable was it?
>
> George N7BUI

Sorry George, he moved it..

http://www.dallas.net/~jvpoll/dup6m/dup6m.html

Allan

1249. Re: Sites w/ schematics and projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <32F2F672.1F49@wenzel.com>
Source record: 97761

I have started a page of links at http://www.wenzel.com/pages/circuits.htm

Krisik wrote:
>
> Can somebody tell me if there is any sites w/ schematics and
> projects? Thank you very much! You can either post a note on the newsgroup
> or email me via aol. Thanks alot! KF6DSW Krisik@aol.com

1250. Singapore / Hongkong components market

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: maroof@cybersys.net
Message-ID: <5ctutg$14o$1@post.servtech.com>
Source record: 97762
Cross-posted to: sci.electronics.components,rec.ham-radio,rec.radio.amateur.homebrew

Hello,

I'm trying to build myself an HF tranceiver. Can anyone tell me a good source
in Singapore / Hongkong where I could buy electronic comopnents / kits ?

Thank you

PLEASE EMAIL

Maroof H. Choudhury
maroof@triton.kaifnet.com

1251. FS TUBES FS TUBES FS TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: soundnmind@rica.net
Message-ID: <32f21d78.0@news.rmci.net>
Source record: 97763

Hello all...

This is an updated list as of 1/31/96 additions and price changes.

We recently purchased ANOTHER BATCH of DRAKE PA TUBES. So We're extenting the SPECIAL ON...
6JB6 NOS RCA, SYLVANIA, GE, etc. (normally these run $22. ea) Our price while present stock lasts $ 18.ea.

We also have:
4-125A/4D21 have 3 RCA, 1 Amperex NOS $75.ea

2A3 RCA others USED BUT GOOD $25.ea

2A3s I have 10 new RCAs $70.ea
Willing to do some trading on these

6146(A), (W) NOS US (sylv and others) $16. ea

6146B GE NOS $24.ea

4CX300 EIMAC NOS $115.ea

EL-34 SVETLANA matched pairs $30.pr

807 RCA and others NOS $13.ea

811A SVETLANA w/fact warr. $19.ea

572B PENTA (American materials) $54.ea

3-500Z PENTA 13 month warr $118.ea

3-500Z PRIDE 12 month warr $95.ea

4-400A PENTA 13 month warr $170.ea

4-400 US lo hrs certified full output $60.ea

833A Svetlana new w/fact warr $130.ea.

6JS6/6LQ6 US we just got a few in $25.ea

We have no 8950s but we have a few other common sweep tubes.

5868/AX9902 only few hrs use. certified to be full output 1 pair only.

Can you use these? Make us a fair offer, or trade.

WE HAVE MANY OTHER TUBES SO IF YOU DONT SEE WHAT YOU NEED HERE PLEASE CALL.

We take VISA/MC

Thanks
Dee

PATTY AND DEE'S MARINA, COLLECTORS OF DRAKE, COLLINS, JOHNSON, HAMMARLUND, LEAK, MCINTOSH AND OTHER
BOATANCHORS THAT GLO IN THE DARK.

http://home.rica.net/soundnmind

(800) 755-2365 SOUND IN MIND PO Box 371 Crimora, Va. 24431....UPS address: 534 W Main St Waynesboro, Va. 22980

1252. FS TUBES FS TUBES FS TUBES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: soundnmind@rica.net
Message-ID: <32f22263.0@news.rmci.net>
Source record: 97764

Hello all...

This is an updated list as of 1/31/96 additions and price changes.

We recently purchased ANOTHER BATCH of DRAKE PA TUBES. So We're extenting the SPECIAL ON...
6JB6 NOS RCA, SYLVANIA, GE, etc. (normally these run $22. ea) Our price while present stock lasts $ 18.ea.

We also have:
4-125A/4D21 have 3 RCA, 1 Amperex NOS $75.ea

2A3 RCA others USED BUT GOOD $25.ea

2A3s I have 10 new RCAs $70.ea
Willing to do some trading on these

6146(A), (W) NOS US (sylv and others) $16. ea

6146B GE NOS $24.ea

4CX300 EIMAC NOS $115.ea

EL-34 SVETLANA matched pairs $30.pr

807 RCA and others NOS $13.ea

811A SVETLANA w/fact warr. $19.ea

572B PENTA (American materials) $54.ea

3-500Z PENTA 13 month warr $118.ea

3-500Z PRIDE 12 month warr $95.ea

4-400A PENTA 13 month warr $170.ea

4-400 US lo hrs certified full output $60.ea

833A Svetlana new w/fact warr $130.ea.

6JS6/6LQ6 US we just got a few in $25.ea

We have no 8950s but we have a few other common sweep tubes.

5868/AX9902 only few hrs use. certified to be full output 1 pair only.

Can you use these? Make us a fair offer, or trade.

WE HAVE MANY OTHER TUBES SO IF YOU DONT SEE WHAT YOU NEED HERE PLEASE CALL.

We take VISA/MC

Thanks
Dee

PATTY AND DEE'S MARINA, COLLECTORS OF DRAKE, COLLINS, JOHNSON, HAMMARLUND, LEAK, MCINTOSH AND OTHER
BOATANCHORS THAT GLO IN THE DARK.

http://home.rica.net/soundnmind

(800) 755-2365 SOUND IN MIND PO Box 371 Crimora, Va. 24431....UPS address: 534 W Main St Waynesboro, Va. 22980

1253. Re: TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: Ian Mitchell <ian.mitchell@research.utas.edu.au>
Message-ID: <32F19543.5BCF@research.utas.edu.au>
Source record: 97765

Gary Coffman wrote:
> Ok, that's not a reciprocating mixer since it uses an on-frequency
> LO. Could it be that the second diode is used for TR? Perhaps this
> is a single diode unbalanced mixer with the second diode DC biased
> to act as a Rx TR switch or overload protector. I can't really tell
> from your description how this circuit works.
>

Gary, I'll scan the circuit and post it tomorrow. I don't have the
patients for ASCII circuit drawing!

Ian

1254. Re: RCI 2970 Schematic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: Philippe <ccadic@planetepc.fr>
Message-ID: <01bc0f68$867bb180$1ebd33c2@minidou.isicom.fr>
Source record: 97766
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.cb

> Does anyone have a schematic for a RCI 2970? I need to check a
> few things out on a unit I have but I won't even try without a
> schematic.
> I would sincerely appreciate it if someone could fax or mail one
> to me. Please E-mail me at GDHarris@compuserve.

http://www.spiraweb.com/rciweb
TRy

1255. Re: Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: cooperjim@aol.com
Message-ID: <19970131042801.XAA22776@ladder01.news.aol.com>
Source record: 97884

How many 807's are in a carboy?

73
Jim NE6O

1256. STK 032 or NTE 1090

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: ka0yos@arn.net
Message-ID: <5crt6r$k5h@services.arn.net>
Source record: 97885

Howdy,

Anyone know where to find a Sanyo STK 032 or an ECG 1090 or NTE 1090. This is a 25 Watt power module that uses a plus and minus supply. I need this replacement part! Unfortunatly it is obsolete.

73,
Joe

1257. F.S.-Rechargeable Power Ctrs. (6 more)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: "Roger H. Smith" <goldwing@iquest.net>
Message-ID: <01bc0f3c$3d972020$33abf6ce@goldwing.iquest.net>
Source record: 97886
Cross-posted to: fido.ham-sale,in.ham-radio,misc.forsale.non-computer,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

First 2 went fast ..... Now I have 6 more to sell :

BRAND NEW, UNUSED, & IN-BOX : Portable Rechargeable Power Center :
Provides 12 vdc @ 4 amp and 3,6,&9 vdc @ 1 amp. Has pop-up carry handle,
Nylon shoulder strap, Built-in work light, Twin cigar lighter outlets, Fuse
protected, Charge & Discharge status indicator LED's, and Auto DC charger
cord (recharges in your vehicle). Runs a lap-top computer for about 6
hrs., A cellular telephone for about 4 hrs (TALK) and 70 hrs. (STANDBY),
And who knows how long it will run an H.T. !!!
I HAVE TWO (2) OF THESE TO SELL (Maybe more later.....MAYBE) $25.00 plus
actual shipping charges from IN. to you. E-mail me WITH YOUR ZIP-CODE
if interested ....
Thanks ! ..... Roger N9PMC :-)

1258. ATV-repeater

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: Tommy Karlberg <ecstka@ldecs.ericsson.se>
Message-ID: <32F1A384.7260@ldecs.ericsson.se>
Source record: 97887

Hey!

We are thinking about building a 23 cm ATV-repeater. I wounder if anyone has any thoughts/experiences about RX/TX-spacing, duplex-filter (how do we make then, ino? articles?). Any info appreciated!

Best 73's de SM7PAF / Tommy

1259. Re: F.S.-Rechargeable Power Ctrs. (6 more)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: "Richard M." <digitech@bogus.net>
Message-ID: <32F1B43F.54CA@bogus.net>
Source record: 97888
Cross-posted to: fido.ham-sale,in.ham-radio,misc.forsale.non-computer,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics,sci.electronics.basics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

This isn't ALT.SELLSTUFF.ANYWHERE
Keep your ads where they belong... and not in discussion groups.

Roger H. Smith wrote:
>
> First 2 went fast ..... Now I have 6 more to sell :

--
DO NOT REPLY TO digitech@BOGUS.net
Send mail to digitech@serv.net or
Click here -> mailto:digitech@serv.net
DO NOT REPLY TO digitech@BOGUS.net

1260. Re: WIN 95 - O/S, or SHELL??? Was ->QST on CD BEWARE!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970131091001.EAA04082@ladder01.news.aol.com>
Source record: 97889

In article <32EE5F7D.7E46@cornell.edu>, Bob <_pmw5_@cornell.edu> writes:

>ress F8. Select command line mode. Welcome to DOS (7?, WIN 95 DOS??).
>Acts alot like DOS 7. Now type WIN. WIN 95 comes up, acts the same as
>always.

In many ways this question is the equivalent of how many angels can dance on the head of a pin. My original answer and I can't find a better one, is however many God wants to.

If you want real fun though, try loading mouse.com or mouse.sys in the boot to dos session and then type win. What happens then? Win95 is an operating system, or at least does all of the things that an operating system does. I might also point out that if any operating system allows something to write in the wrong place it goes flatline too. I've made Unix, os/2, win NT, Desqview, dos, cpm and a lot of other alleged and real operating systems go flatline too. There are people who hate Win95, and others who love it. Those who love it, cheer when it's pointed out that most new computers come with win95 as the OS, while those who hate, claim it's the result of good marketing and collusion. I personally thought that WFWG met most of the definition of an operating system with a dos boot loader, but that's an entirely different problem. My basic point though is that it's meaningless to discuss what's an operating system unless there's a common definition of what one does, and what one doesn't. OS/2 for example won't usually die if a dos program tries to write to the wrong area (Note I said usually, I managed to mess up more than once with dos programs), but it also has problems letting some dos programs function properly without severe tinkering. -art clemons-

1261. Coax Duplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: au@ix.netcom.com
Message-ID: <5crmjd$pna@dfw-ixnews9.ix.netcom.com>
Source record: 97890

I have heard of a coaxial duplexer used for some homebrew repeaters. I assume that it is a notch type of duplexer. Does anybody have any experience making one of these? And also how stable was it?

George N7BUI

1262. Frequency standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970131143401.JAA12820@ladder01.news.aol.com>
Source record: 97891

Looking for commercial oven controlled standard. (I pulled mine off the work bench when it tangled with the soldering iron cord. You know how work benches get!)

Usual 2-1/4 x 2-1/4 x 4 inch housing OK, anything smaller FB. A "small fry" from Wenzel SUPER. 4 MHz preferred, but these days with divide by anything chips, anything would be OK.

Reply to W4ZCB

1263. Re: Coax Duplexer?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-01-31 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Jan31.145636.967@ke4zv.atl.ga.us>
Source record: 97892

In article <5crmjd$pna@dfw-ixnews9.ix.netcom.com> au@ix.netcom.com(au) writes:
>I have heard of a coaxial duplexer used for some homebrew repeaters. I
>assume that it is a notch type of duplexer. Does anybody have any
>experience making one of these? And also how stable was it?

George, a notch duplexer essentially uses coaxial line stubs to create the notches. The "coax" used is typically large diameter rigid sections which we call cavities. The only real difference in the cavities used and ordinary rigid coax is the mechanical arrangement allowing you to vary the length of the stub by turning an adjusting screw. If you have the patience to "cut and try" you can tune ordinary line sections too.

Now if you try to use small diameter flexible coaxial cable as the stubs, the Q won't be high enough to give you really deep and narrow notches, and mechanical stability won't be very good either. So you really want to use rigid airline for your stubs.

If you have access to some scrap broadcast rigid airline, then you can easily make a good notch duplexer from it. Either 3 1/8 inch line or 6 1/8 inch line will do nicely. The larger varieties of Heliax may also have high enough Q, though it presents some mechanical problems. But ordinary flexible coax like RG-8 just won't do unless you can live with a very wide split and don't need much isolation.

Now you can *make* rigid airline. Copper pipe is best, both because of its high intrinsic conductivity and because it is easy to solder, but you can use aluminum pipe. Brass, and especially iron, are poor materials to use as your "cans" because of their lower conductivity. And in the case of iron, because it is ferromagnetic, which reduces skin depth dramatically, it is highly resistive to RF. Of course increased resistance translates directly to lower Q, and that means shallower and broader notches.

There is another type of duplexer made from coax. This is the so-called "rat race" design. It doesn't use any stubs. It uses a ring of coax with Tees at appropriate points to take advantage of phase cancellation around the ring as the means of isolating the Tx and Rx. This is a 4-port network with the ports being Tx, Ant, Rx, and a 50 ohm load. The lengths between the various ports are arranged so that there is phase reinforcement between Tx and Ant, and between Ant and Rx, but phase cancellation between Tx and Rx, and between Ant and load. This works well at microwave, where waveguide is used instead of coax, and it works Ok at UHF with large rigid airline coax, but trying to use it at 2m with flexible coax just won't give you enough isolation.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1264. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970201065435.24857C-100000@supreme>
Source record: 97767

On 26 Jan 1997, Henry Titchen wrote:

> Hi,
> Hass anyone had any experience with making crystal sets using
> germanium diodes for VHF bands? I am interested in knowing if it is
> possible to use a germanium diode crystal radio to pickup airband signals.

> If it is possible can I just use the standard crystal radio design but
> alter the LC circuit to the frequencies of choice?
>
> Best Wishes,
> Henry Titchen.
> VK6HJT
>

Henry - yes it should be possible. The main limitation would be the extreme deafness of the receiver. You are right in that a crystal set for VHF is just the same as one for MF, but with a smaller tuned circuit (4-6 turns around a pencil and a 2-20pF trimmer should be about right for the air band - but remove the pencil after you've wound the coil).

It is possible to increase the sensitivity of a crystal set by applying bias to the diode. Also some audio amplification (say using a 741 chip) will be useful.

I suggest you get in touch with the WA VHF Group, particularly the people who run the foxhunts in Perth. They use devices called 'snoop loops' that are just what you want (a crystal set with bias on the diode, followed by a 741 audio amp). I built one and they work fine. You can detect an AM fox transmitter over a range of several tens of metres (maybe more). They had an information sheet that had a circuit and construction details (I have a copy here). Building that unit and readjusting its front end for airband should be quite easy.

73, Peter VK1PK (ex VK6BWI)

1265. Re: 30m DC RX, want AM for WWV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970201071227.24857D-100000@supreme>
Source record: 97768

Tim -

On Sun, 26 Jan 1997, tim_hynde wrote:

> After building a couple simple DC and superhet receivers I am wondering
> what must be done for AM reception? Someone said increase the gain of
> the LO going to the mixer, is that correct?

The DC receivers I've built haven't been much good for AM reception. For a start they need to be extremely stable (much better than needed for CW/SSB) and it might also help if there was an audio high pass filter (200Hz?) in the audio stage. It should be possible to get a DC Rx going for casual reception of AM, though I've never really seriously tried.

Superhets are a different proposition. To convert it to AM you would need to:-

1. Switch off the BFO injection to the product detector
2. Install another form of detector (eg a single OA95 germanium diode)
3. Broaden the IF selectivity from 3 to 6 kHz (ie remove or bypass an SSB xtal or mechanical filter where fitted, or make up a ladder filter broad enough for AM).

I remember seeing (in the 1977 ARRL H/book) a detector which used two diodes. You kept both of them in for SSB and switched one out for AM.

>
> Would someone kindly explain the difference in the audio portion of the
> reciever.
> --
Basically no difference. However the DC receiver has most of its gain in the audio stages, so they probably have more gain (90-100dB) than is needed in a superhet's audio stage. Also, as the selectivity of a DC receiver is determined by its audio bandpass characteristics, it is desirable that low pass or band pass filters be inserted early in the receiver's audio chain.

73, Peter Vk1PK

1266. testing inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: kum6306@aol.com
Message-ID: <19970201030401.WAA21599@ladder01.news.aol.com>
Source record: 97769

I am an electronic hobbyist.
Can anyone out there tell me how to identify a variable inductor coil.
this one that I have has no marking on it(it's a variable coil within a
metal case).
Your help will be highly appreciated
thank you

1267. Re: TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: Natasha Petrie <Natasha.Petrie@research.utas.edu.au>
Message-ID: <32F2AF97.63D9@research.utas.edu.au>
Source record: 97770

Gary Coffman wrote:
>
> >2. The receiver section has the simplest mixer I've ever seen consisting
> >of 2 diodes back to back. I would be very interested to hear any
> >comments from anyone on the performance of such a receiver.
>
> I don't recall that circuit. Is this a "reciprocating mixer"? In that
> design, the LO is at half the signal frequency and the dual diodes use
> both halves of the cycle to effectively double the frequency when mixing.
> This is pretty clever in that it eliminates the LO as a source of
> "backwave" from the receiver. (Since the LO of a DC receiver is on
> frequency, backwave radiation from the receiver can be a problem.)
> Stability of a lower frequency oscillator is also better.
>
Hi Gary, well it's definately a DC type arrangement 'cause the osc used
for the transmitter is coupled to the "mixer" via a small value
capacitor. A larger value capacitor connects from the same side of the
mixer directly to the AF amp. The other side of the mixer connects
directly to the top of an LC tuned circuit.

This has me very curious as to its performance so I'm going to build a
receiver based on this design and find out for my self. I'm still very
interested in any other comments from people though.

Cheers, Ian

> Gary
> --

1268. Re: TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: cripps@netcom.com
Message-ID: <cripps-3101972039010001@10.0.2.1>
Source record: 97771

In article <32F2AF97.63D9@research.utas.edu.au>, Natasha Petrie
<Natasha.Petrie@research.utas.edu.au> wrote:

> Gary Coffman wrote:
> >
> > >2. The receiver section has the simplest mixer I've ever seen consisting
> > >of 2 diodes back to back. I would be very interested to hear any
> > >comments from anyone on the performance of such a receiver.
> >
> > I don't recall that circuit. Is this a "reciprocating mixer"? In that
> > design, the LO is at half the signal frequency and the dual diodes use
> > both halves of the cycle to effectively double the frequency when mixing.
> > This is pretty clever in that it eliminates the LO as a source of
> > "backwave" from the receiver. (Since the LO of a DC receiver is on
> > frequency, backwave radiation from the receiver can be a problem.)
> > Stability of a lower frequency oscillator is also better.
> >
> Hi Gary, well it's definately a DC type arrangement 'cause the osc used
> for the transmitter is coupled to the "mixer" via a small value
> capacitor. A larger value capacitor connects from the same side of the
> mixer directly to the AF amp. The other side of the mixer connects
> directly to the top of an LC tuned circuit.
>
> This has me very curious as to its performance so I'm going to build a
> receiver based on this design and find out for my self. I'm still very
> interested in any other comments from people though.
>

As described above, this is what I call a 3rd order mixer. Normal mixing
makes use of 2nd order products (f1 +/- f2), whereas this configuration
uses 3rd order (f1 +/- 2*f2). Obviously, you get 3rd order non-linearity
with back to back diodes.

Performance can be quite good -- certainly better than most configurations
using bipolar transistors, although obviously not up to a properly
optimized 2nd order ring diode mixer, still less a FET switching type.

I have used these mixers in several commercial products. In addition to
the advantages quoted above, using a half frequency LO allows lower cost,
lower power, more available prescalers, especially for frequencies higher
than about 3 GHz. The absence of any transformers or baluns gives good
phase repeatablity, important for image reject mixers, for example.

The only thing to watch is that LO level is critical for optimun
conversion efficiency -- unlike a 2nd order diode mixer where, in general,
the more LO you have the less conversion loss you get.

In an application at 2.4 GHz, quoting from memory, I got about 6 dB conversion loss, 7 dB NF, and an input IP3 of about 0 dBm. Optimum LO injection was about -6 dBm. Not too shabby for a cheap pair of SOT23 Schottky diodes...

Good luck with the project,

Best,

Peter

--
Peter Cripps Associates
Technology Strategy and Product Development
20 Carrera Court
Redwood City, CA 94062
415 364 4413 voice
415 364 1353 fax

1269. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5cu4l2$haf@rosenews.rose.hp.com>
Source record: 97772

Ted (teddyb@caprica.com) wrote:

: I can't believe you guys are acyually encouraging each other, and what's

Shut up.

1270. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5cui5j$14g8$1@news-s01.ny.us.ibm.net>
Source record: 97773

In message <measures-ya02408000R3001971038350001@news.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures) writes:
:>
:>
:>True. However, there was apprently no load-fault in Rick (KC0HH) May's
:>case. (see Figure 15)
:>

You can't confirm or disprove that statement, it has no probative value.
The statement is based entirely on your customer's claim with NO
independent corroboration.

:>
:>Bzzzzzzzzzt.......cough, cough There are no leads around the :>bandswitch in a SB-220,
TL-922, or any other amplifier I have seen the
:>insides of.
:>

What are the wires running from the coil to the switch? They certainly
look like leads to me.

:>.......... Another problem with the HF-energy theory is that the 10m
:>contact is usually the most damaged, while the 15m contact is usually
:>damaged less, and the 20m contact even less so. This pattern of
:>damage is not consistent with HF energy. However, it is consistent
:>with what I would expect from VHF energy. In the photos of arced
:>bandswitches on my Web site, such is apparent.

The pattern is entirely consistent with HF energy. The Plate tuning
coil represents an impedence to RF of ANY frequency. Thus the (RF)
voltage across the coil (impedence) will be proportional to the
magnitude of the impedence from a given (high impedence) point to a
reference (low impedence) point. Since, in the case of an output
network, the low impedence point is the loading capacitor (or antenna
connector) the HF voltage across the coil, and thus the bandswitch, is
highest at the 10 meter contact, somewhat less on 15, still less on 20,
etc. The higher the voltage the bigger and more destructive the arc ...

:>BTW, last week on KTLA-TV, which is Channel 5 in LA, newsman Hal :>Fishman reported that
a TV-satellite which relays CNN and two other TV
:>networks was permanently knocked out by a front-ejection solar
:>disturbance, and that a number of military satellites were damaged at
:>the same time.

Fishman reported rumor and speculation. AT&T, the owner and operator of
Telstar 401 (the "TV satellite" in question) have stated that they

believe the problem to be due to a meteor(ite) impact which physically damaged the spacecraft's main power source. Otherwise, there would be some residual RF emission (one of several emergency beacons) and absolutely no RF has been detected from the craft.

If this had been due to circuit damage from high levels of charged solar particles, other TV satellites of the same design would also have been damaged, particularly those like Telstar 302 which were in orbital positions further to the east and which would have received even higher levels of charged particle bombardment.

Pathological science makes good stories for tabloid TV just like it sells snake oil for amplifiers and RCA still doesn't mark the "normal operating voltage range" on their filament meters.

--
==========
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<71350.1204@compuserve.com>
==========

1271. FS:RF PARTS,EQUIPMENT,KITS.SURPLUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: telco@swbell.net
Message-ID: <5cuq6h$rpe@news1.rcsntx.swbell.net>
Source record: 97774

```
** THIS IS A LIST OF SURPLUS **
AT&T TONE DIALERS
TEST EQUIPMENT
( HOBBY KITS )
AMATEUR KITS
TELEPHONE KITS
DEVICE KITS
COMPUTER KITS
LIGHT KITS
SURPLUS PARTS
LASERS
VIDEO DISK PLAYERS
RF PARTS
TELCO TEST EQUIPMENT
RF & MICROWAVE EQUIPMENT
HP BRIDGES
HP DIRECTIONAL COUPLERS
HP 8494A ATTENUATORS 0 TO 11 DB
THINK JET PRINTERS
LASER OPTICS
LASER TUBES
POWER SUPPLIES
TEKTRONIX OTDR FIBER OPTIC TEST SETS
FIBER OPTIC TALK SETS
CABLE IDENTIFIERS
IFR 1500 SERVICE MONITORS
MICROWATT METERS
MICROWAVE SURVEILLANCE MONITORS
EAGLE RETURN LOSS BRIDGES
( AND MORE )
SEE AT WEB PAGE http://www.i1.net/~mega
NEW PRODUCTS ADDED WEEKLY
THANKS
BOB RICK
ST LOUIS MO
swb
```

1272. Re: When Did 0 Call Area Start???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: cwop@aol.com
Message-ID: <19970201073200.CAA04838@ladder01.news.aol.com>
Source record: 97775

All I can do is narrow it a little: my 1934 callbook doesn't have zeros
and my 1947 does. 73 CW OP

1273. Re: When Did 0 Call Area Start???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: cwop@aol.com
Message-ID: <19970201073500.CAA05027@ladder01.news.aol.com>
Source record: 97776

Whoops sorry, sent that too quick. Anyway there is no W0KSD in the 47 book
if that helps any. 73 CW OP

1274. Re: 706 USA to EURO.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: Madjid <mboukri@cam.org>
Message-ID: <32F2CFEE.1CFE@cam.org>
Source record: 97777

Philippe Givet, F1IYJ wrote:
> =

> Freeman Cheong wrote:
> >
> > I have a Icom IC-706. It is USA version. Does anyone can tell me
> > how to change USA version to Europe version?
> > Many thanks,XX9ER(Macau)

>en dessous du haut parleur vous avez un connecteur ou est branche un
> cable en nappe orange, au dessus du filtre SSB. A sa gauche vous avez
> une serie de diodes CMS
> La combinaison *europe* est de la gauche vers la droite:
> rien-diode-diode-rien-diode
> Utilisez un fer a 280 C et attention aus pistes (CMS) !
> Sorry, it is french !!!! (in europe)--
> 73 de Phil
> =

> Operating-system : Unix . Is there anyone else ?

TRANSLATION: =

[Warning! I assume no responsibilities here. I don't even have a 706.
Kenwood is so much better :)]
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=
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Under the speaker there is a connector with an orange bundle
(flat ribbon maybe) of wires, above the SSB filter. On the
left there is a group of diodes (CMS=3Dcomposants mont=E9s en Surface??)

The Europe combination is from left to right:
Nothing, diode, diode, nothing, diode (01101)

Use a 280C iron and be careful not to destroy tracks and
components.
=3D=3D=3D Good luck =3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D

I wrote part of the Unix Kernel in a Berkeley 4.2 port but ....
I use Windows now. :)

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

1275. Re: Need contact information for "73" magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: Madjid <mboukri@cam.org>
Message-ID: <32F2D104.76D1@cam.org>
Source record: 97778

Scott Coburn wrote:
>
> Could someone please post some information about how to contact "73"
> magazine? Address, phone number, etc. Do they have a web site?
>
> I would like to contact them to get some back issues.
>
> Thanks,
>
> Scott
>
> --
> scott coburn brookhaven national laboratory
> mailto:scott@bnl.gov upton, ny, usa
> http://gorzarg5.phy.bnl.gov/~scott (on long island)

The address of "El Supremo" in QRZ is:

profusion@aol.com

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

1276. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970201154601.KAA22140@ladder01.news.aol.com>
Source record: 97779

In article <measures-ya02408000R3001971038350001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>Any comments, Mr. Rauch?
>----------------------------

Only that we have been round and round this tree many times. Going around the tree once more will make no difference. Even if we cut the tree down, you'll keep right on running around the same old circle howling out the same old tune.

You'll continue to present false claims as fact, just as you always have. Some people will swallow your tall tales of pathological science, and others won't.

Not much either of us can do about that.

73 Tom

1277. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <32f36a75.35084118@news.airmail.net>
Source record: 97780

measures@mail.vcnet.com (R. L. Measures) wrote:
>HF arcs are typically blue, not purple.
This ought to be carved in stone somewhere.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

1278. Re: TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb1.163312.1057@ke4zv.atl.ga.us>
Source record: 97781

In article <32F2AF97.63D9@research.utas.edu.au> Natasha Petrie
<Natasha.Petrie@research.utas.edu.au> writes:
>Gary Coffman wrote:
>> >2. The receiver section has the simplest mixer I've ever seen consisting
>> >of 2 diodes back to back. I would be very interested to hear any
>> >comments from anyone on the performance of such a receiver.
>>
>> I don't recall that circuit. Is this a "reciprocating mixer"? In that
>> design, the LO is at half the signal frequency and the dual diodes use
>> both halves of the cycle to effectively double the frequency when mixing.
>> This is pretty clever in that it eliminates the LO as a source of
>> "backwave" from the receiver. (Since the LO of a DC receiver is on
>> frequency, backwave radiation from the receiver can be a problem.)
>> Stability of a lower frequency oscillator is also better.
>>
>Hi Gary, well it's definately a DC type arrangement 'cause the osc used
>for the transmitter is coupled to the "mixer" via a small value
>capacitor. A larger value capacitor connects from the same side of the
>mixer directly to the AF amp. The other side of the mixer connects
>directly to the top of an LC tuned circuit.

Ok, that's not a reciprocating mixer since it uses an on-frequency
LO. Could it be that the second diode is used for TR? Perhaps this
is a single diode unbalanced mixer with the second diode DC biased
to act as a Rx TR switch or overload protector. I can't really tell
from your description how this circuit works.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1279. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970201175600.MAA29498@ladder01.news.aol.com>
Source record: 97782

In article <5cui5j$14g8$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) writes:

>:>damaged less, and the 20m contact even less so. This pattern of
>:>damage is not consistent with HF energy. However, it is consistent
>:>with what I would expect from VHF energy. In the photos of arced
>:>bandswitches on my Web site, such is apparent.
>
>The pattern is entirely consistent with HF energy. The Plate tuning
>coil represents an impedence to RF of ANY frequency. Thus the (RF)
>voltage across the coil (impedence) will be proportional to the
>magnitude of the impedence from a given (high impedence) point to a
>reference (low impedence) point. Since, in the case of an output
>network, the low impedence point is the loading capacitor (or antenna
>connector) the HF voltage across the coil, and thus the bandswitch, is
>highest at the 10 meter contact, somewhat less on 15, still less on 20,
>etc. The higher the voltage the bigger and more destructive the arc ...
>
>

Dear Rich....

This is the point I ws trying to make, and is the reason I mentioned ten-meters,
which would be a worst case example.

I believe Tom Rauch has shown that the plate tuning capacitor has very low reactance at VHF, and is actually slightly inductive at those frequencies.
If a VHF resonant circuit was formed by the internal capacitance of the tube,
combined with the series inductance of the Plate capacitor and the connecting
straps -- the VHF voltage at the plate tuning capacitor would be substantially
reduced based on the ratio of the inductances of the tuning capacitor and its connecting strap to the DC blocking capacitor.

73

Peter

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1280. subscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: Tim Raffety <Tim_Raffety@Oxy.com>
Message-ID: <32F37FA1.57BC@Oxy.com>
Source record: 97783

```
subscribe
```

1281. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: sutin@sol.ucolick.org
Message-ID: <5d0fud$5vb@darkstar.ucsc.edu>
Source record: 97784

Bob <_pmw5_@cornell.edu> writes:
>
>There's alot of things I'd like to buy from minicircuits, but YOU CAN'T.
>They won't sell small quantities of anything. They don't send the
>catalog, and they've got no distributors that will sell small quantities.

Could you specify what reality you are posting from?

Brian Sutin *** UCO/Lick Observatory *** Santa Cruz, CA 95064 *** KD6TLA
Boruch bn Michael bn Lion bn Benjamin bn Moishe bn Nachum Sutin Ha'Levi
Fred: "May I rescue you?" `Top Hat'
Ginger: "No, thank you. I prefer being in distress." RKO 1935

1282. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0102971606320001@news.vcnet.com>
Source record: 97785

In article <19970201175600.MAA29498@ladder01.news.aol.com>,
commquart@aol.com wrote:

> In article <5cui5j$14g8$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe
> Subich) writes:
>
> >:>damaged less, and the 20m contact even less so. This pattern of
> >:>damage is not consistent with HF energy. However, it is consistent
> >:>with what I would expect from VHF energy. In the photos of arced
> >:>bandswitches on my Web site, such is apparent.
> >
> >The pattern is entirely consistent with HF energy. The Plate tuning
> >coil represents an impedence to RF of ANY frequency. Thus the (RF)
> >voltage across the coil (impedence) will be proportional to the
> >magnitude of the impedence from a given (high impedence) point to a
> >reference (low impedence) point. Since, in the case of an output
> >network, the low impedence point is the loading capacitor (or antenna
> >connector) the HF voltage across the coil, and thus the bandswitch, is
> >highest at the 10 meter contact, somewhat less on 15, still less on 20,
> >etc. The higher the voltage the bigger and more destructive the arc ...
> >
Peter...
>
> This is the point I ws trying to make, and is the reason I mentioned
> ten-meters,
> which would be a worst case example.

Two bandswitches in Rick May's amplifier burned up their 10m contact while the amplifier was being operated on 80m into an antenna that exhibited no anomalies when driven by a Drake L-4B amplifier, at approximately twice the power level of the amplifier that burned up the two bandswitches. Rick installed bandswitch #3. It too intermittently arced like bandswitch #1 and #2. Rick decreased the VHF-Rp of the parasitic suppressor. He said that bandswitch #3 has not burned up from mysterious arcing. If you have any questions for him, Rick's e-mail address is listed on my Web site. Since December of 1989, more than 4500 suppressor retrofit kits have been sold by me. The guarantee: If the suppressor retrofit kit does not remedy the parasitic-symptom, the customer does not pay.

You did not address the issue of the damaged/kaput VHF suppressor resistor that often coincides with mysterious bandswitch arcing.

> I believe Tom Rauch has shown that the plate tuning capacitor has very
> low reactance at VHF, and is actually slightly inductive at those
> frequencies.

As I recall, Mr. Rauch measured the internal VHF resonances in a tuning capacitor. All tuning capacitors have them, Peter. Do VHF resonant circuits always exhibit low reactance at VHF?

A question: Peter--If you were designing an HF amplfier, would you want a VHF parasitic oscillation suppressor that exhibited more (or less) VHF-Rp than another type of VHF suppressor?

---

e-mail copy to Peter

--

--Rich-- ag6k, 805-386-3734

1283. Re: Need contact information for "73" magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: "Mitch, W4OA" <w4oa@vibroplex.com>
Message-ID: <32F3FF65.1EF1@vibroplex.com>
Source record: 97786

Madjid wrote:
>
> Scott Coburn wrote:
> >
> > Could someone please post some information about how to contact "73"
> > magazine? Address, phone number, etc. Do they have a web site?
> >
> > I would like to contact them to get some back issues.
> >
> > Thanks,
> >
> > Scott
> >
> > --
> > scott coburn brookhaven national laboratory
> > mailto:scott@bnl.gov upton, ny, usa
> > http://gorzarg5.phy.bnl.gov/~scott (on long island)
>
> The address of "El Supremo" in QRZ is:
>
> profusion@aol.com
>
> -------------------
> Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
> NEC4WIN Antenna simulation for Windows

info from current issue:
73 Amateur Radio Today Magazine
70 Route 202N
Peterboro, NH 03458-1107
603--924-0058
FAX 603-924-8613

mitch, w4oa
--
mitch, w4oa

Felton "Mitch" Mitchell, W4OA email: w4oa@vibroplex.com
The Vibroplex Co., Inc., 11 Midtown Park, E., Mobile, AL 36606-4141 USA
Orders 800-840-8873, Info 334-478-8873, FAX 334-476-0465
Visit our web site at: http://www.vibroplex.com/

1284. subscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: Roy Little <royl@sos.net>
Message-ID: <32F3E9FC.6B92@sos.net>
Source record: 97787

```
subscribe
```

1285. Re: QRP CRYSTALS E-MAIL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-01 00:00:00 UTC
From: Dick G0BPS <Dick@kanga.demon.co.uk>
Message-ID: <kwWZpSBq008yEwXr@kanga.demon.co.uk>
Source record: 97788

In article <32e9c19b.4767194@nntp.ix.netcom.com>, RJL
<avrial@ix.netcom.com> writes

I have stocks of qrp freq crystals..

** Dick G0BPS ** Seaview House, Crete Road East.
** Kanga Products ** Folkestone Kent CT18 7EG U.K.
http://www.kanga.demon.co.uk Tel / Fax (44) (0)1303 891106

1286. Q: Inline amplifier for L1 band (gps)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: see@sig.of.mine
Message-ID: <5d17rv$hgf@news3.texas.net>
Source record: 97693

Greetings:

Somewhere there might be a kit, or a diagram, or a picture of an inline amp for
use with a gps patch antenna. Maybe around 20db or so gain, using 5V.?
Any help locating such an item will be thought of as a "good thing."

--
success,
Roland
(email=rgb@texas.net)

1287. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970202052901.AAA06011@ladder01.news.aol.com>
Source record: 97694

Rich Writes:

"Since December of 1989, more than 4500 suppressor retrofit kits have been sold by me."

After looking in on this debate for several months, it appears that some of the better technical minds on here have the correct answers about why amplifiers fail--but Rich has the money!

Rick -- K1BQT

1288. ARRL WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: maroof@cybersys.net
Message-ID: <5d16c0$m8v$1@post.servtech.com>
Source record: 97695
Cross-posted to: rec.ham-radio,rec.radio.amateur.homebrew

Hi,

Can anyone tell how to use the "zipped ckt & reprot file"s in
http://www.arrl.org/ard/files/ ?
I downloaded a file exrf9507.zip which contaians two files. one is some kind
of a data file (like pspice) & the other one is unidentified. I can't read/use
them properly. Can anyone help?
Btw, What is ARD, is it a magazine or a software?

Thanks in advance.

Please Email
Maroof

Maroof H. Choudhury
maroof@triton.kaifnet.com

1289. Homebrew 12volt antenna rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: jeffg@istar.ca
Message-ID: <5d1f7b$3l6@news.istar.ca>
Source record: 97696

I'm still looking for a design for a 12v antenna rotator. I was given a 12 volt rotator but, alas no controller. I beleive the rotator was originally from WalMart. The rotator has a 12v connection and a pot, but I'm not sure how the pot fits into the picture. Any help or ideas?
Jeff
VE7CTD

1290. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0202970553010001@news.vcnet.com>
Source record: 97697

In article <19970202052901.AAA06011@ladder01.news.aol.com>, k1bqt@aol.com (K1BQT) wrote:

> Rich Writes:
>
> "Since December of 1989, more than 4500 suppressor retrofit kits have been
> sold by me."
>
> After looking in on this debate for several months, it appears that some
> of the better technical minds on here have the correct answers about why
> amplifiers fail--but Rich has the money!
>
> Rick -- K1BQT

Rick:
If you believe that Gamma-rays, X-rays and Cosmic-rays are 'charged particles', count yourself among the 'better technical minds'.

If you believe that Wes' measurements of the characteristics of various vhf parasitic oscillation suppressors are virtually meaningless, you have yet another reason to count yourself among the 'better technical minds'.

If you don't have a clue as to how the algebraic expression (E1/E2)^23.4 was derived from Eimac's statement that a 3% rise in filament voltage causes a 50% decrease in the emissive life of the tungsten-dicarbide layer in a thoriated-tungsten cathode, count yourself among the 'better technical minds'.

If you believe that the formula for calculating the maximum RF current in a DC blocking capacitor, which appears on page 13.13 in the new *Radio Amateurs Handbook*, is correct, count yourself among the 'better technical minds'.

If you scored 4 out of 4, Rick, Congrats---you are thereby qualified to be a bona fide 'Recognized Amplifier Expert'--Apprentice. (contact Mr. Rauch or Dick Erhorn for further information)

It is true that, at this point, I seem to be burdened with more money than I will ever need in this life---and if Mr. Rauch makes good on his threat to sue me for libel, there is a pretty fair chance that this burden will increase even further.
It can be rightfully argued that this Apple Macintosh 2ci computer and my HP Laserjet-3 printer was paid for with monies from the business of selling mail-order VHF suppressor kits. I dutifully-deducted a fraction of the cost of this equipment from my taxable income (Section 179 of the U. S. Tax Code) because I use said equipment in the business . However, I have not

made a profit from selling suppressor retrofit-kits during the last 8 years. It's just a hobby, Rick.

---

e-mail copy to Rick, K1BQT

--

--Rich-- ag6k, 805-386-3734

1291. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0202970611130001@news.vcnet.com>
Source record: 97698

In article <19970201154601.KAA22140@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <measures-ya02408000R3001971038350001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
> >Any comments, Mr. Rauch?
> >----------
>
> Only that we have been round and round ......
...snip...
Mr. Rauch has seemingly come down with a bad case of photonphobia.

In November, Mr. Rauch said:
__QUOTE
>The former *R+D engineering manager*, Buzz Miklos, of the Salt Lake City
>Varian plant has agreed to speak to one or two people on the telephone
>about your theories. He said he will also come on line, but since he just
>took a position as engineering manager with another tube manufacturer in
>PA, it will be sometime in January before he is able to connect directly
>to this newsgroup.
__END OF QUOTE
Mr. Miklos did not show up on this Newsgroup 'sometime in January', as proffered. No letter from Eimac has since been presented by Mr. Rauch that refutes the information provided by the Eimac/Varian Salt Lake division's personnel department regarding the job title of Mr. Joseph P. Miklos.

Mr. Rauch is somewhat understandably tiptoeing around the issue of Rp. IMO, Rp is the central issue in this discussion. Thanks to Wes (N7WS) Stewart's scientific measurements, we know what Rp is for the two principal types of VHF parasitic-oscillation suppressors at a number of frequencies in the VHF range. (see Figure 12 at
< http://www.vcnet.com/measures/>)
In Wes' measurements, Rp stands for parallel-equivalent resistance. For a VHF parasitic suppressor, Rp is representative of the VHF shunt load resistance presented to the anode of the amplifier tube.
Since voltage gain is basically Mu*Rp, more VHF-Rp means more VHF voltage gain. Conversely, less VHF-Rp means less VHF voltage gain.

The choice is yours, folks. If you want more VHF-Rp in your HF amplfier, suppressors made from copper are for you. If you want even more VHF-Rp, go for silver-strap suppressors, such as those found in the Kenwood TL-922 amplifier, and in Henry Radio amplifiers.
OTOH, if you want less VHF-Rp in your amplifier, according to Wes'

measurements, a nickle-chromium alloy VHF suppressor will produce the desired result---which is really nothing new. In the 1926 Edition of the *Radio Amateur's Handbook*, Mr. F. E. Handy wrote about it.

Mr. Handy was not the only person to arrive at this conclusion before I wrote the October1988 *QST* article "Improved Anode Parasitic-Suppression for Modern Amplifier Tubes". Around the time when I was in middle school, a ham club on the East Coast decided on a club-project of building copies of the first (4) 811A g-g linear amplifier that appeared in a ham magazine. All of the builders, except for one, followed the plans to the letter. The exception was Dr. William Riley., K4GXA. Riley concluded that, since the job of the VHF suppressors is to suppress, maybe a resistive conductor might be a good way to go. So, instead of using copper wire for Ls, Riley used hay-bailing wire for Ls. All of the club-project amplifiers eventually worked. However, over the years, mysterious things reportedly happened to the 811As in the other amplifiers. From time to time, sudden tube failures occured wherein 811A filaments were found in pieces in the bottom of the glass envelope. These tube failures were typically accompanied by a big-bang and an apparent arc. When Bill Riley eventually sold his amplifier 15 years later, his was reportedly the only amplifier that was still using the original (4) 811As. Bill told me that when the other amplifier builders first saw his rusty bailing-wire suppressors, they were amused. I suppose you could say that Bill Riley had the last laugh.
---
e-mail copy to Mr. Rauch

--
--Rich-- ag6k, 805-386-3734

1292. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970202143101.JAA24178@ladder01.news.aol.com>
Source record: 97699

> Subich) writes:
>
> >:>damaged less, and the 20m contact even less so. This pattern of
> >:>damage is not consistent with HF energy. However, it is consistent
> >:>with what I would expect from VHF energy. In the photos of arced
> >:>bandswitches on my Web site, such is apparent.
> >
> >The pattern is entirely consistent with HF energy. The Plate tuning
> >coil represents an impedence to RF of ANY frequency. Thus the (RF)
> >voltage across the coil (impedence) will be proportional to the
> >magnitude of the impedence from a given (high impedence) point to a
> >reference (low impedence) point. Since, in the case of an output
> >network, the low impedence point is the loading capacitor (or antenna
> >connector) the HF voltage across the coil, and thus the bandswitch, is
> >highest at the 10 meter contact, somewhat less on 15, still less on 20,
> >etc. The higher the voltage the bigger and more destructive the arc
...
> >

Measures writes:

> Peter...

> You did not address the issue of the damaged/kaput VHF suppressor
resistor
> that often coincides with mysterious bandswitch arcing.

I am not questioning the occurence of VHF parasitics -- and the fact
that they may occur at the same time other amplifier failures occur.
I question the "fact" that parasitics cause bandswitch
failure or tuning capacitor arcing. Consider Mr. Subich's and
Mr. Rauch's statements concerning the lowpass filter effect of the
ten-meter portion of the tank coil (a very high impedance at VHF).
How can damaging VHF voltages be present at the bandswitch? For
the lower HF bands, more (plate tank) inductance is involved,
and thus more impedance to the flow of VHF energy.

>>> I believe Tom Rauch has shown that the plate tuning capacitor has very
>>> low reactance at VHF, and is actually slightly inductive at those
>>> frequencies. (earlier post by Bertini)

> As I recall, Mr. Rauch measured the internal VHF resonances in a tuning
> capacitor. All tuning capacitors have them, Peter. Do VHF resonant
> circuits always exhibit low reactance at VHF?

No. I don't believe this is correct. I believe Tom showed the
capacitor to exhibit slight Xl at VHF frequencies. Not resonance.
Are you confusing reactance and impedance? Impedance is determined
by the resitive and reactive components of a device at a specific
frequency. For the tuning capacitor to be resonant at a given
frequency, it would need both capacitive and inductive reactances.
Given only it has a "slight" inductive reactance, its impedance
at VHF is most likely very minimal. I believe Mr. Rauch has
REPEATEDLY made this point. It is unlikely any further comments
on my part will sway you from your beliefs.

I do not understand your question regarding resonance and
low reactance. A resonant circuit may imply a high impedance
in the case of parallel resonance, or low impedance in the
case of series-resonance. It depends on
whether you are building a trap or bandpass circuit..
Rich, are you measuring series or parallel resonances with you
dip meter?

>A question: Peter--If you were designing an HF amplfier, would you want
a
>VHF parasitic oscillation suppressor that exhibited more (or less) VHF-Rp
>than another type of VHF suppressor?

Rich, I would honestly want a suppressor that did not compromise
the operating Q of the amplifier at HF frequencies.
I would select values of L, R and C (for the suppressor)
that were effective at VHF, and had minimal effect at HF.
That's where I would put my Q and RX meters to work.

I would also heed some of the other advice gathered in this thread,
and provide arc-over electrodes and current limiting resistors
in the plate supply.

73, Peter

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1293. ACARS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <32F4B195.6204@ping.be>
Source record: 97700
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.dx,rec.radio.scanner

Sins a long time i'm looking for a working sollution to receive and
decode the ACARS.

I have 2 different schematics and 2 different software packages. The
software is from AEA and the other from LOWE.

Some people says that the AEA software is working fine with a hamcom,
when i start the program, i see the data-indicator going on and off buth
the screen stay's empty. (ill try'd with squelch and volume settings
buth nothing works)

The LOWE needs a hardware key.

I'm thinking of bying a complete system with software and interface buth
is it going to work with my TH-79 from Kenwood (should i look for the
problem in the receiving of my Kenwood ?)
Still the litle interface from LOWE is to expencive.

MY QUESTION IS :

Are there any people out there who are working with homebrew interfaces
and what kind of software do they use with it ?
Are they welling to share the schematics and software ?
Sins there are not much people who are intrested in the ACARS system i
don't think to get lots of mail.

A SECOND HAND INTERFACE WITH SOFTWARE IS ALSO WELCOME !!

Thanks to all and ill hope my loking is going to end now :-))

William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

1294. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970202165600.LAA01733@ladder01.news.aol.com>
Source record: 97701

In article <measures-ya02408000R0102971606320001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>
>As I recall, Mr. Rauch measured the internal VHF resonances in a tuning
>capacitor. All tuning capacitors have them, Peter. Do VHF resonant
>circuits always exhibit low reactance at VHF?
>
>

Mr. Measures has a very selective memory, and a great ability to misapply simple and clear facts. His track record clearly proves this.

In this case, Mr. Measures is trying to distort the fact the capacitor goes through a minimum reactance at 150-200 MHz as evidence it must go through a maximum impedance at the same point.

He misquotes me just as freely as he has misquotes Varian, Dave Holtcamp, Marvin Born, and others.

Rich, you "forgot" I measured the voltage distributed through the tank.

Nearly anyone can make this measurement. Connect a VHF signal source at the anode and excite the tank. Measure (that word is becoming distasteful) the voltage along the tank with a high impedance RF probe, and you will see it behaves exactly as common sense would tell us. It is nothing at all like Mr. Measures would have us believe.

No one can be that stubid in the face of so much contrary evidence or even if conventional circuit theory is applied. This parasitic arcing theory of Measures must be an intentional hoax. In that case, any effort to communicate or argue with him is a waste of time.

If you clearly prove him wrong a dozen times in a dozen ways.....he'll keep going and going and going ....just like the mechanical Energizer Bunny on TV.

73 Tom

1295. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970202173000.MAA03511@ladder01.news.aol.com>
Source record: 97702

Hi Rich--

Speaking of formulas, how about this one: Obscure researcher makes an amazing discovery that works as a cure-all for a myriad of ills. Then, to market it, he attacks the establishment that somehow failed to understand and recognize the "real" truth. When confronted, he counters by crying conspiracy--and identifies a powerful special interest group who has much to lose by admitting he's right.

Just like E/I=R, this is a proven formula. Only, this formula is well know for marketing healing crystal, odd potions, and electric blood-vessel stimulators. Instead of burned switches, I think I'd rather see those elusive spectral displays that nobody seems able to produce (or reproduce) under controlled conditions. If the science is good, why would anyone need to conjure up anecdotal evidence, create enemies, and cry conspiricy?

Rick K1BQT

1296. Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: Barry Newberger <bsn@fusion.ph.utexas.edu>
Message-ID: <5d2jk5$h5r@geraldo.cc.utexas.edu>
Source record: 97703

I seem to recall a discussion (perhaps collateral to DDS using MSB) in which
it was pointed out that it is advantageous to drive mixer circuits (maybe a particular
class of mixer circuits, e.g. diode ring) using a square wave LO rather than
a sine wave.

If my memory is serving me correctly, I would appreciate it if someone could
refresh it and repost the explanation.

Thanks,
Barry Newberger

1297. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.253.008366FC@azstarnet.com>
Source record: 97704

In article <measures-ya02408000R0202970611130001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>From: measures@mail.vcnet.com (R. L. Measures)
>Subject: Re: good source for amplifier tips
>Date: Sun, 02 Feb 1997 06:11:13 -0800

[snip]

Rich Measures writes
-
>Mr. Rauch is somewhat understandably tiptoeing around the issue of Rp.
> IMO, Rp is the central issue in this discussion. Thanks to Wes (N7WS)
>Stewart's scientific measurements, we know what Rp is for the two principal
>types of VHF parasitic-oscillation suppressors at a number of frequencies
>in the VHF range. (see Figure 12 at
>< http://www.vcnet.com/measures/>)
> In Wes' measurements, Rp stands for parallel-equivalent resistance. For a
>VHF parasitic suppressor, Rp is representative of the VHF shunt load
>resistance presented to the anode of the amplifier tube.
> Since voltage gain is basically Mu*Rp, more VHF-Rp means more VHF voltage
>gain. Conversely, less VHF-Rp means less VHF voltage gain.

I tried starting a new thread on this issue, but didn't get any takers, so as Roy would say, I'll take a swing at this tar baby here.

I tried to connect to Rich's web site without success, so I can't address what is posted there. However, I have updated my page (http//www.azstarnet.com/~n7ws) with some charts which directly compare two suppressor networks.

For these measurements, the network is necessarily measured by exciting one end with respect to ground and measuring the characteristics. In this situation, the network is measured in a controlled (or well known) environment. The instrumentation is "smart" enough to remove any internal errors and present "corrected" measurement data. THIS IS NOT how the suppressor network is used in an amplifier.

The network is not an isolated device who's characteristics are independent of its environment. It is connected to the anode, which has an unknown source impedance, on one side and the output tank circuit, which has an unknown load impedance, on the other side.

Until these source and load impedances are known (at every frequency of interest) the effects of the suppressor network cannot be surmised.

I know this will sound heretical, but the more I look at this, the more I question the need for these things. If someone can present me a circuit

model in which the addition of a few ohms loss resistance can lower the loop gain enough to prevent an oscillation, I'd love to see it.

Mmmm... love them tar babies.

1298. Re: ARRL WEB site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: hbrown@voicenet.com
Message-ID: <5d2npn$6l4$1@goodnews.voicenet.com>
Source record: 97705
Cross-posted to: rec.ham-radio,rec.radio.amateur.homebrew

ARD is the ARRL Radio Software. You will see it advertized in QST and
QEX in most issues over the last 2 years. The files you downloaded are
likely ones for the analysis of circuits using ARD.

73, Harry, W3IIT

maroof@cybersys.net (Maroof H. Choudhury) wrote:

>Hi,

>Can anyone tell how to use the "zipped ckt & reprot file"s in
>http://www.arrl.org/ard/files/ ?
>I downloaded a file exrf9507.zip which contaians two files. one is some kind
>of a data file (like pspice) & the other one is unidentified. I can't read/use
>them properly. Can anyone help?
>Btw, What is ARD, is it a magazine or a software?

>Thanks in advance.

>Please Email
>Maroof

>Maroof H. Choudhury
>maroof@triton.kaifnet.com

1299. Down East Microwave internet address?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <32F55BD6.63B@mwt.net>
Source record: 97706

Anybody have a www address for down east microwave?
--Scott--N0EDV--

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

1300. Timer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <32F4D430.1907@up.net>
Source record: 97707

I'm looking for a circuit to give an up/down timer cirucit
that will time from 0 to 99 minutes, display (including elapsed
time) on a LED display, have start/stop/reset, and, hopefullly
have a direct keyboard time entry.

1301. WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: "Brian E. Cauchi" <gcauchi@keyworld.net>
Message-ID: <01bc113f$be3cd1c0$0101a8c0@mstcp.keyworld.net>
Source record: 97708
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.ama

Hello... Brian here!

If you have a RADIO and a SOUND BLASTER (or compatible card) you already have all the hardware necessary to receive WEFAX, FAX, SSTV and RTTY.

You can also transmit monochrome FAX and SSTV, with the current version of my FTV software.

*** Put the power of your 80386, 80486 or Pentium processor to real use ***

The external "decoder" units that are used by conventional users are modelled inside this software. This makes it easy to get started, inexpensive and rids you of the inevitable tangle of wires and boxes of decoders.

Absolutely no external hardware, other than a simple audio lead, is required by FTV. The current version decodes:

WEFAX (from weather satellites, e.g. 137-138 MHz)
HF-FAX (from terrestrial stations)
SSTV (from radio amateurs, e.g. 14.230 MHz)
Baudot (press, naval, weather etc)

Here is a run down of the more interesting features:

(1) It keeps the demodulated signal in memory, so that the signal can be analysed again at a different keying rate or polarity! Garbage can be resampled on the fly, which means that minutes of received signals decoded at the wrong baud rate or keying polarity are recovered, on the fly, while still receiving.

(2) The incoming signal is analysed automatically - standard modes, line rates, baud rates and keying polarity are automatically determined following analysis.

(3) Tuning oscilloscope available at all times, without loss of copy.

(4) Program works in real time.

*** What are you waiting for? Try it now! ***

Take a look at my web site for futher details, from where you can download an evaluation copy, at: http://www.geocities.com/SiliconValley/2504

A registered copy costs US$ 25. Registration promotes the further development of this software and entitles the user to future upgrades

paying only for delivery
expenses, if any.

Fianlly, just in case some of you have trouble accessing my web site, here is my postal address (if you want a reply, send a self-addressed label and IRC's to cover expenses):
Brian E. Cauchi,
Gawhra, Domenico Cachia Street, Birkirkara BKR06, MALTA.

What can I say? Try it, and may you have as much fun as I am having...
73's from Brian.

1302. DELCO Transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: maroof@cybersys.net
Message-ID: <5d2omq$1sb$1@post.servtech.com>
Source record: 97709
Cross-posted to:
rec.radio.amateur.homebrew,sci.electronics,sci.electronics.components,sci.electronics.design,sci.electronics.misc

Need id/spec on the following transistor

DELCO
GM
DTG-2400
7342

Thanks in advance.

Please Email !
Maroof

Maroof H. Choudhury
maroof@triton.kaifnet.com

1303. TNC2 clone schematics on the WEB ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: Deschastres / Donnadieu <donnastr@worldnet.fr>
Message-ID: <01bc1147$b1024f00$d39ecec2@Worldnet.sct.fr>
Source record: 97710

Who knows if there is a place on the WEB where I can find schematics to realize a TNC2 (or any TNC) clone.

Thank you.

F1JSC

e-mail : donnastr@worldnet.fr

1304. Re: WTB: B&W Miniductors 3011, 3015, etc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: flanders@groupz.net
Message-ID: <5d2sq3$9t22@duke.groupz.net>
Source record: 97711

kc5ng@dlep1.itg.ti.com (Mustang Maniac) wrote:

>Looking for B&W Miniductors, especially #3011 and #3015, for use in
>homebrew transmitter projects. Not interested in large-diameter
>coils like those used on Bugcatcher antennas, only interested in
>smaller ones for transmitter tank coils.

>--
>Dean W. Hemphill
==========
H&R 1997 Catalog #1, page 60:

B3-3015 $2.50

They don't list the 3011, but they do have the 3004 and an assortment
of the 2.5 and 3 inch coils - a total of 8 different coils are listed.
1-800-848-8001

Jerry W4UK

1305. Re: [query] DigiVFO distribution

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5d304r$3gn@news1.mnsinc.com>
Source record: 97712
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Yeah - does anyone know what has happened to DOver Research???

I have them listed in my sources for kits, but this is the first report I
have seen....

komatsu@nimc.go.jp (KOMATSU Toshiki) whistled a happy tune like:

|> Hello, OM.

|> I am interested in "DIGIVFO" published in former QST. The control
|>procedure is obtained from ARRL ftp site. I mailed to Dover Research to
|>order the hardware kit, but no answer has come for 1 month.
|> Please tell me about further information to order. The Web site or
|>FAX/E-mail is much helpful.

|> 73,

|>--
|>KOMATSU Toshiki / Joint Graduate school of Chem., Univ. of Tsukuba
|>komatsu@nimc.go.jp, s935562@ipe.tsukuba.ac.jp
|>FBB/RLI: JF7WED @ JL1ZBF.14.JNET1.JPN.AS

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1306. subscribe in digest form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: Richard Hensel <rrhensel@sprintmail.com>
Message-ID: <01bc114d$46d8d260$300985ce@me>
Source record: 97713

Hello;
Is there a way to subscribe to this newsgroup in a digest form via e-mail?
Thanks
Richard Hensel
rrhensel@sprintmail.com

1307. Re: ACARS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: Mike Agner <ka3jjz@erols.com>
Message-ID: <32F5454F.5105@erols.com>
Source record: 97714
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.dx,rec.radio.scanner

William Vynck wrote:
>
> Sins a long time i'm looking for a working sollution to receive and
> decode the ACARS.
>
> I have 2 different schematics and 2 different software packages. The
> software is from AEA and the other from LOWE.
>
> Some people says that the AEA software is working fine with a hamcom,
> when i start the program, i see the data-indicator going on and off buth
> the screen stay's empty. (ill try'd with squelch and volume settings
> buth nothing works)
>
> The LOWE needs a hardware key.
>
> I'm thinking of bying a complete system with software and interface buth
> is it going to work with my TH-79 from Kenwood (should i look for the
> problem in the receiving of my Kenwood ?)
> Still the litle interface from LOWE is to expencive.
>
> MY QUESTION IS :
>
> Are there any people out there who are working with homebrew interfaces
> and what kind of software do they use with it ?
> Are they welling to share the schematics and software ?
> Sins there are not much people who are intrested in the ACARS system i
> don't think to get lots of mail.
>
> A SECOND HAND INTERFACE WITH SOFTWARE IS ALSO WELCOME !!
>
> Thanks to all and ill hope my loking is going to end now :-))
>
> William
>
> --
> Visit my Homepage http://www.ping.be/RACO
> E-mail RACO@ping.be and/or William.Vynck@ping.be
> Fidonet 2:291/1800.15
> Radio Amateur ONL4021
> QSL via bureau UBA Belgium Hi Bill; you didn't say on what op system or PC you are
running this,
but there are several possibilites;

a. For most Windows users, you MUST run the ACARS software in a DOS mode. This does not mean a DOS box (as you can in Win95) but completly outside Windows. The reason for this is that ACARS and Windows conflict because each wants to control the serial port connection exclusivly. So you must exit Windows (yes, even '95) completly to run ACARS.
b. Leave your squelch completly open. The reason for this is because most squelches don't react fast enough, and part of the message will be lost before the audio reaches the interface.
If you are interested in getting more info on ACARS, come join us on majordomo@grove.net . Send a message like the following with nothing else in the body of the message;

subscribe acars
We also have a digest service (acars-digest) if you are interested in that. To my knowledge there has been no shareware development of ACARS software, but who knows that may change one day...73s Mike (colistowner, ACARS)

1308. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0202971344300001@news.vcnet.com>
Source record: 97715

In article <19970202143101.JAA24178@ladder01.news.aol.com>,
commquart@aol.com wrote:

...snip...

>I am not questioning the occurence of VHF parasitics -- and the fact
>that they may occur at the same time other amplifier failures occur.
>I question the "fact" that parasitics cause bandswitch
>failure or tuning capacitor arcing. Consider Mr. Subich's and
>Mr. Rauch's statements concerning the lowpass filter effect of the
>ten-meter portion of the tank coil (a very high impedance at VHF).
>How can damaging VHF voltages be present at the bandswitch? For
>the lower HF bands, more (plate tank) inductance is involved,
>and thus more impedance to the flow of VHF energy.

Peter: Have you ever checked a tank L with a dipmeter for the presence of
VHF resonances?
>
>>>> I believe Tom Rauch has shown that the plate tuning capacitor has very
>>>> low reactance at VHF, and is actually slightly inductive at those
>>>> frequencies. (earlier post by Bertini)

As I recall, Tom Rauch found some internal VHF resonances. However, this
is nothing new since variable-capacitor resonances are discussed in the
32nd (1955) Edition of *The Radio Amateur Handbook*.

>...snip... For the tuning capacitor to be resonant at a given
>frequency, it would need both capacitive and inductive reactances.

Do the tuning capacitor plates have inductance?

>Given only it has a "slight" inductive reactance, its impedance
>at VHF is most likely very minimal.

Quite true, Peter---unless the tune capacitor is resonant or near
resonance. Before this discussion began, I hadn't given much thought to
how VHF voltage might be able to arc a tuning capacitor. Thanks to Mr.
Rauch's measurements of a tune capacitor from an AL-80, I think I have an
inking.
Do you remember the problem I proposed of generating over 10,000vrms from
a 120v, 60Hz source with only one capacitor and one inductor? In my
solution to this problem, I picked an L/C combination that was
series-resonant about 0.6Hz away from 60Hz. Assuming that the L and C had
zero ESR, the circuit produced over 10,000vrms. Sure, it took around 100A
to do it. However, the typical filter capacitor in a typical 1500w amateur
radio amplifier has about 10 ohms of ESR. How much current is 2800V/10
ohms?

So why does the 10m bandswitch contact sometimes arc.? An open 10m contact probably has around 1 pF. The typical 10m section of a tank L has around 0.9uH. The series-resonant frequency is 170MHz. In an AL-80, this is in the neighborhood of the anode circuit's resonance at 160MHz. Thanks to Mr. Rauch's measurements, we know that the AL-80's tune capacitor has no resonances in that neighborhood. I have not heard of any case where an AL-80 tune capacitor allegedly arced. However, I have heard of a number of cases where AL-80 10m bandswitch contacts mysteriously arced and evaporated. If you're interested, photos of same are available at Figure 15 on my Web site.
>
...snip...
>Rich, are you measuring series or parallel resonances with you
>dip meter?

I do not know of a way of differentiating between a series-resonance dip and a parallel-resonance dip with a dipmeter.

>>A question: Peter--If you were designing an HF amplfier, would you want a
>>VHF parasitic oscillation suppressor that exhibited more (or less) VHF-Rp
>>than another type of VHF suppressor?
>
>Rich, I would honestly want a suppressor that did not compromise
>the operating Q of the amplifier at HF frequencies.

Did you accept someone's word that this was the case, or did you calculate a typical tank Q reduction, based on Wes' ESR measurement for a Ni-Cr Ls suppressor at 30MHz (4.32 ohms) and/or at 10MHz (0.88 ohms)? If you did the calculations, Peter, I would appreciate seeing how to do it, and how to calculate what the probable increase in harmonic output would be. I don't have a clue as to how to proceed. OTOH, I have heard of no cases where a low VHF-Q suppressor caused increased TVI to channel 2 during 10m operation---which would, according to Wes' measurements, would undoubtedly be THE worst-case. To date, I know of no instance where an FCC citation resulted.
Mr. Rauch made the claim that a serious HF Q degradation would result from using a Ni-Cr VHF suppressor.
Mr. Rauch presented me with the following problem. F=160MHz: An L of 85nH is paralleled with 100 ohms. How does the VHF current divide? According to AC Circuit Analysis, the calculated current through the 85nH L is about 10% higher than the calculated current through the 100 ohm resistor. However, Mr. Rauch concluded that these calculations are invalid. Do you accept Mr. Rauch's conclusion?

>I would select values of L, R and C (for the suppressor)
>that were effective at VHF, and had minimal effect at HF.
>That's where I would put my Q and RX meters to work.
>

I haven't seen a VHF suppressor design that uses a C. What does this circuit look like?

>I would also heed some of the other advice gathered in this thread,
>and provide arc-over electrodes and current limiting resistors
>in the plate supply.
>
In the Sept. 1994 QST critique of the Jan. 1994 QST article "The Nearly Perfect Amplifier", my suggestion about using a peak fault-current limiting resistor in the anode supply was pooh-poohed by the (self) 'recognized amplifier expert'.

An arc-over electrode sounds like a good idea, Peter. However, since tune capacitors, as well as open bandswitch contacts seem to arc during some intermittent VHF parasitic oscillations, IMO, at least two arc-over/spark-gap electrodes are indicated. Adding a low-L low-ohm MOF resistor in series with each spark-gap might help to limit the peak fault current. The Matsushita 3w-rated MOF resistors we use in our suppressor retrofit-kits might do the job. According to Wes, N7WS, the30 ohm units have around 9nH/0.009uH of internal L, and from my own tests I know that they have remarkable overload capacity.
---
e-mail copy to Mr. Peter Bertini

--
--Rich-- ag6k, 805-386-3734

1309. Re: Down East Microwave internet address?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: Jim Tury <tury@erols.com>
Message-ID: <32F51696.3C2C@erols.com>
Source record: 97716

try http://www.downeastmicrowave.com/

1310. Re: Carboy Size??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <32F51F31.556E4B3A@acsu.buffalo.edu>
Source record: 97717

Brian Gibbs wrote:
>
> Posted to rec.radio.amateur.homebrew
>
> In article: <5ce12h$gbe@ralph.vnet.net> moore@vnet.net (Diane Moore) writes:
> >
> > I am asking this question for my husband who has just completed making
> > his first batch from a kit we bought in the wireless catalog for
> > Christmas. He is hooked! ``````````
> >
> >
> > He would like to know if you can use a 7.5 gallon carboy to rack off 2
> > gallons of beer? The kit has all of the equipment (except a place to
> > rack off) for 2 gallons. He knows that he would like to expand soon
> > to making 5 gallons at a time and he does not want to invest in two
> > different size carboys.
> >
> > Any help would be appreciated!
> >
> > Diane Moore
> moore@vnet.net
> It seems I haveomeone will come up with an answer........best regards
> --
>
, Wilts. Packet G3MBN@GB7SDN.#49.GBR.EU

The size of the carboy shouldn't matter since the fermentation process
is producing CO2. The CO2 is heavier than air therefore it should
procduce a protective blanket over the wort.

Jim

Hey this is the wrong newsgroup......

1311. Re: Homebrew 12volt antenna rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: chris@chrisss.demon.co.uk
Message-ID: <32f4a2a5.3007337@news.demon.co.uk>
Source record: 97718

jeffg@istar.ca (Jeff Groberman) wrote:

>I'm still looking for a design for a 12v antenna rotator. I was given
>a 12 volt rotator but, alas no controller. I beleive the rotator was
>originally from WalMart. The rotator has a 12v connection and a pot,
>but I'm not sure how the pot fits into the picture. Any help or
>ideas?
>Jeff
>VE7CTD
>
assuming that your rotator is of the DC variety it will possibly be
controlled by reversing the polarity to the motor. use a twin pole
changeover switch

The pot is propably to supply a variable signal to a meter to indicate
the rotator position and may also include as mine does a pair of end
switches to stop it turning more than 360.

I am in the same position as you and while I think I now know how to
control it, the metering arrangement is still theortical as I haven't
actually made the box of tricks yet.

hope this is of some help

Chris

Chris Selwyn-Smith Landscape Services
chris@chrisss.demon.co.uk
G1RQZ Hampton Court

1312. Re: conversion gain

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb2.230832.8772@ke4zv.atl.ga.us>
Source record: 97719

In article <32f41876.9552336@news.spiritone.com> w7el@spiritone.com writes:
>On Fri, 31 Jan 1997 17:31:12 -0800, tim_hynde <tim_hynde@idecc.com> wrote:
>
>>Im confused, (this is no surprize to my wife or children) When your
>>injecting a 7.040MHz signal in to an NE602 mixer in a 40m DC reciever
>>what are you mixing? Isn't the VFO really being used more like a BFO? I
>>think I understand that part but:
>
>A superhet has at least two oscillators. The last is frequently called the
>BFO. A tunable oscillator other than the last is a VFO. The direct
>conversion receiver has one, so you get to call it either one you like.

A superhet *might* only have one oscillator. It might use an envelope
detector rather than a product detector (for AM), or it might use a
discriminator (for FM). A DC receiver can be considered to be just a
product detector with delusions of grandeur. Its "BFO" is also its
VFO, and the "IF" at which it works is the signal frequency.

>>What if I take the same circuit and use a 3MHz VFO and then put a 4MHz
>>crystal on the output of the NE602? Have I created a superhet?
>
>Yes. Its intermediate frequency is 4 MHz.

That doesn't seem to be what he's describing. The NE602 only has one
set of mixers, it can only do one conversion. If you put a 4 MHz crystal
on the 602 output, it would act as a series resonant pass filter for
4 MHz energy, IE act as an IF filter. It would not do a further
conversion. That requires both an oscillator and a mixer. You'd still
need to follow it with a product detector to get down to baseband. In
other words, you could use *two* NE602s, one as first mixer (with 3 MHz
VFO) and the second as product detector (with 4 MHz BFO), to make a 7 MHz
superhet with a 4 MHz IF.

Note that there's not much point to doing that unless you want to do
IF filtering and supply extra gain at IF with an IF amp. That's what
superhets normally do. The advantage of the superhet is that bandpass
filtering can occur at a single frequency, allowing use of high perfomrance
filters for single signal reception, and because gain can be supplied at
a single frequency, which is usually easier to do with good stability
than with a tunable amp.

The DC receiver supplies all its gain at audio frequencies, and unless
you use a quadrature scheme, won't allow single signal reception. The
high audio gain can also make the receiver subject to hum, noise, and
microphonics. But it is simple, and can work pretty well. It's no good
for AM or FM reception, however, since they don't use product detectors.

(You *can* do it if you use an I/Q scheme, and that's a powerful technique which can displace the superhet in some applications, but that is beyond the scope of this article.)

The third type of receiver is TRF (tuned radio frequency). It supplies all gain and selectivity at the *signal* frequency. This means all the amps have to be tunable, as do any selective filters. This sort of design is hard to stablize, and it is nearly impossible to get uniform selectivity response over the tuning span. Normally a simple diode detector would be used with a TRF design, but a product detector could be used if it has a tunable BFO, IE a DC receiver can serve as a product detector for a TRF receiver. This isn't generally a good plan, and TRF receivers have fallen from favor except for certain specialized uses.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1313. 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: "carl.ratcliffe3@virgin.net"@virgin.net
Message-ID: <5d3272$t8h@news3-gui.server.cableol.net>
Source record: 97720

Hi

I'm a new HAM and would like to build a portable 80m LSB Tx
anyone got any good ideas ?

Where can I find a good circuit diagram ?

Is there anything available on the net ?

1314. FS: Full Power Amp (80-10 Meters)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: "Jeffery A. Purtle" <jpurtle@smartlink.net>
Message-ID: <32F53C75.607D@smartlink.net>
Source record: 97721

The Amp has two 4-400 tubes in it in great condition and easily delivers an 1100 Watts carrier on CW with 100 Watts driving it. It has tuned inputs, which easily match it to the 80, 40, 20, 15, and 10 Meter Bands. It was built by a man named Cliff Kurtz, N6ZU, of Stockton, CA and he guarantees it for life. I know of a man who lives in Los Angeles that had Cliff drive all the way down here to fix it. It is built so heavy that nothing ever happens to anything he builds. I am selling it after moving into an apartment and having no need for it in the future as I see it, unless to make my neighbors mad.

Like I said I live in the Los Angeles area, Valencia to be exact and the price would not cover shipping. I would prefer pick-up to make sure the tubes don't get damaged in transport. I will also include a Swan WM-1500 Watt Meter.

I am asking $300.

Please contact me by phone: (805) 287-5953 or Email: jpurtle@smartlink.net

Thanks and 73,
de AC6IW
Jeff

1315. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <32F54E9C.4B88@wco.com>
Source record: 97722

Sorry Rob, you have the wrong person. I didn't write any of the below.

Rob Neff wrote:>
> >wouldn't surprize me in the least, but that's all off topic, I suppose.
> >If you knew anything at all about real nazis you'd know that it has
> >something very much in common with your beloved liberalism: SOCIALISM...
> >Rememeber? "Nazi" is short for "National Socialist",(in German "national"
> >is spelled "nazional" or something like that).
>
> Get the political platform correct Jim. We conservatives are not like
> that. You see Jim, I don't want government involved, where did you get
> the impression that we did?
>
> >You buttholes have a lot of nerve. You who like to run around using the
> >term "nazi" on anyone you think is too strict are watering down people's
> >knowledge of what evil scumbags the REAL nazis were. And then out of the
> >other side of your face you vote, march and screem for:
>
> No.. When you guys don't like whats being said, you do what you can to
> shut them up, or at least attack their character. See any similarities
> yet?
>
> >5: the continued legalization and taxparer-funding of that damnable
> >holocaustic carnage upon infants,(aka "abortion"), which has murdered
> >hundreds of millions of Americans, started by a true Nazi sympathizer and
> >a true racist named Margeret Sanger who was the founder of the notorious
> >group called "Planned Parenthood".
>
> I'm beginning to think that you couldn't point out a Republican if you
> were at a GOP rally.
>
> <snip worthless chatter>
>
> You need help Jim. If you don't get help from Charter, please, get
> help somewhere.
>
> Rob Neff (N7ORY)
>
> *REGULARLY VOTING*, Conservative Republican since 1989.

1316. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: Bob <pmw5@cornell.edu>
Message-ID: <32F55DF2.380E@cornell.edu>
Source record: 97723

Brian Sutin wrote:
>
> Bob <_pmw5_@cornell.edu> writes:
> >
> >There's alot of things I'd like to buy from minicircuits, but YOU CAN'T.
> >They won't sell small quantities of anything. They don't send the
> >catalog, and they've got no distributors that will sell small quantities.
>
> Could you specify what reality you are posting from?
>

That really helped alot. If you know where you can buy 1 - 2 pieces, let us all know. I've tried, and all they'll sell is an assortment, or 10 of the same devices. As far as the catalog goes, I've submitted my info several times, as well as live, in person at dayton. Have yet to see the designers catalog. That's the "reality" of the issue.

1317. WTB TWT Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: George Anderson <260anderson@msn.com>
Message-ID: <01bc116f$4a1d2f80$cf112399@George.Monroe.edu>
Source record: 97724

I am looking for a Seimens Powers Supply for the RW289 Tube. I can be reached via ganderson@monroe.edu

Also looking for TWT or Solid State map for 24GHZ

Several in The Rochester NY area are interested in 24GHZ SSB but we are in need of power.

Tnx and 73's KB3PW

1318. WTB USED 3CX3000A7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: John <teckserv@ct2.nai.net>
Message-ID: <32F55C35.64F0@ct2.nai.net>
Source record: 97725

Looking for a used 3CX3000A7 for a project.
Email John at: teckserv@ct2.nai.net.

Thanks
John

1319. Two chip DSB exciter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970202071010.5064B-100000@supreme>
Source record: 97789

Hello all - I'm wondering if anyone has tried building a two chip DSB exciter along the following lines:-

1. 3.58 MHz ceramic resonator oscillator (made variable) - using part of CMOS chip

2. Microphone amplifier - using part of CMOS chip - biased for linear operation

3. Balanced modulator made from 4016 or 4066 switch - it would work by switching the audio at 3.58 MHz

I remember building an experimental design a while ago, and got some results from it, but didn't take it any further. Adding extra components may make it useable for a phasing SSB generator.

I have built audio amplifiers using the 4007 chip. I had a lot of success with them. They seem to have built in audio compression, and didn't draw a lot of current. Possibly this could be put to use in the transmit section, with the stage providing a degreee of audio compression that would improve readability but not contribute to distortion.

Your thoughts please!

73, Peter Vk1PK

1320. Re: conversion gain

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: w7el@spiritone.com
Message-ID: <32f41876.9552336@news.spiritone.com>
Source record: 97790

On Fri, 31 Jan 1997 17:31:12 -0800, tim_hynde <tim_hynde@idecc.com> wrote:

>Im confused, (this is no surprize to my wife or children) When your
>
>injecting a 7.040MHz signal in to an NE602 mixer in a 40m DC reciever
>
>what are you mixing? Isn't the VFO really being used more like a BFO? I
>
>think I understand that part but:

A superhet has at least two oscillators. The last is frequently called the BFO. A tunable oscillator other than the last is a VFO. The direct conversion receiver has one, so you get to call it either one you like.

>
>What if I take the same circuit and use a 3MHz VFO and then put a 4MHz
>
>crystal on the output of the NE602? Have I created a superhet?

Yes. Its intermediate frequency is 4 MHz.

> In addition, now that I've mixed the signal do I get conversion gain from
>
>the NE602? Do you get the same gain when using it in DC operation?
>
Yes, you do get conversion gain from the NE602. The NE602 doesn't know whether the signal at its input is the result of a previous conversion (that is, the input is an IF of a superhet) or is coming directly from an antenna (that is, it's being used for the conversion in a DC receiver). So the gain is the same for the two cases, all else being the same.

>I hope these questions are not too far out in left field.

Not at all. You might take a look at "Solid State Design for the Radio Amateur" by Wes Hayward and Doug DeMaw. It's available from the ARRL, and has some good information about receivers, including direct conversion. As I recall, Paul Carr, N4PC, published a series in CQ about a year ago which described the construction of a DC receiver which later became the last conversion of a superhet.

Roy Lewallen, W7EL
(using a temporary email address. Permanent address is w7el@teleport.com.)

1321. Newsgroups: Not receiving?:(WAS repair of NiCads)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: bjnash@connectnet.com
Message-ID: <32f52a29.661901@news.connectnet.com>
Source record: 97791
Cross-posted to: misc.forsale.computers.pc-specific.portables,comp.sys.laptops,alt.cellular,alt.cellular.motorola,alt.cellular.gsm,rec.aviation.misc,rec.radio.amateur.homebrew

It would appear your ISP isnt carrying them! Ask your ISP!!!!

bj

On Thu, 30 Jan 1997 18:30:28 +0000, Nick Di Cintio
<dicin@netrover.com> wrote:

>>Colin Song wrote:
>>> Just like to how which news server has the alt.cellular.motorola
>>> newsgroup, mine doesn't have one...Please e-mail me. Thank you.
>>Hi,
>>I would like to know also. Please email Nick: dicin@netrover.com

AIRCRAFT REMANUFACTURING
1291 E.Vista Way, #150
VISTA, CA. 92084 (619) 749 0239 FAX: 749 6384
Aviation Parts Sales Directory: Infobot@pdsig.com

1322. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-02 00:00:00 UTC
From: "Keith E. Spainhour" <KSpainhour@wilkes.net>
Message-ID: <01bc10bd$7fe049c0$74b174cc@ks>
Source record: 97792

the last time i called minicircuits, they were more than
helpful, i got a knowledgeable person on the phone, they
sent what i asked for, and sell in small quantities. pretty
good considering some places i have delt with
(i have no connection with minicircuits, i'm
just satisfied with there performance)

--
73 de KT4XW
Keith Spainhour
KSpainhour@wilkes.net

Brian Sutin <sutin@sol.ucolick.org> wrote in article
<5d0fud$5vb@darkstar.ucsc.edu>...
> Bob <_pmw5_@cornell.edu> writes:
> >
> >There's alot of things I'd like to buy from minicircuits, but YOU CAN'T.
> >They won't sell small quantities of anything. They don't send the
> >catalog, and they've got no distributors that will sell small
quantities.
>
> Could you specify what reality you are posting from?
>
> Brian Sutin *** UCO/Lick Observatory *** Santa Cruz, CA 95064 *** KD6TLA
> Boruch bn Michael bn Lion bn Benjamin bn Moishe bn Nachum Sutin Ha'Levi
> Fred: "May I rescue you?" `Top Hat'
> Ginger: "No, thank you. I prefer being in distress." RKO 1935
>

1323. 80m SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: "carl.ratcliffe3@virgin.net"@virgin.net
Message-ID: <5d3c7p$af4@news3-gui.server.cableol.net>
Source record: 97726

Does anyone no where I can get a cicuit diagram for a good QRP SSB TX to build ?

1324. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <32f53900.153530860@news.airmail.net>
Source record: 97727

measures@mail.vcnet.com (R. L. Measures) wrote:
>In the Sept. 1994 QST critique of the Jan. 1994 QST article "The Nearly
>Perfect Amplifier", my suggestion about using a peak fault-current limiting
>resistor in the anode supply was pooh-poohed by the (self) 'recognized
>amplifier expert'.

I don't think the use of a current-limiting resistor was the subject
of criticism. It was, rather, the type of resistor used. A
current-limiting resistor is almost always a good idea. Using the
wrong kind of resistor is almost always a bad idea. Using a resistor
that's too "small" is sorta like using the low-voltage fuse in a HV
line.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

1325. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <32f63b26.154080807@news.airmail.net>
Source record: 97728

measures@mail.vcnet.com (R. L. Measures) wrote:

>Dr. William Riley., K4GXA...had the last laugh.
On 75 meters we refer to him as Doc Bull, if that tells you anything.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

1326. Re: Down East Microwave internet address?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: "David A. Minster" <david.minster@bigfoot.com>
Message-ID: <01bc116e$d3cc7d40$52c6aec7@pumba>
Source record: 97729

http://www.downeastmicrowave.com/

David, NA2AA

scott <acepilot@mwt.net> wrote in article <32F55BD6.63B@mwt.net>...
> Anybody have a www address for down east microwave?
> --Scott--N0EDV--

1327. Re: Homebrew 12volt antenna rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: jeffg@istar.ca
Message-ID: <5d3eip$5vp@news.istar.ca>
Source record: 97730

chris@chrisss.demon.co.uk (Chris Selwyn-Smith) wrote:

>jeffg@istar.ca (Jeff Groberman) wrote:

>>I'm still looking for a design for a 12v antenna rotator. I was given
>>a 12 volt rotator but, alas no controller. I beleive the rotator was
>>originally from WalMart. The rotator has a 12v connection and a pot,
>>but I'm not sure how the pot fits into the picture. Any help or
>>ideas?
>>Jeff
>>VE7CTD
>>
>assuming that your rotator is of the DC variety it will possibly be
>controlled by reversing the polarity to the motor. use a twin pole
>changeover switch

>The pot is propably to supply a variable signal to a meter to indicate
>the rotator position and may also include as mine does a pair of end
>switches to stop it turning more than 360.

>I am in the same position as you and while I think I now know how to
>control it, the metering arrangement is still theortical as I haven't
>actually made the box of tricks yet.

>hope this is of some help

>Chris

>Chris Selwyn-Smith Landscape Services
> chris@chrisss.demon.co.uk
> G1RQZ Hampton Court

Thanks, if you come up with a solution, please let me know. I'll do
the same. I never thought of just using a meter on the pot for
position. I'll try it out.
Thanks.
Jeff

1328. Re: Testing gel-cell batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb3.000133.9036@ke4zv.atl.ga.us>
Source record: 97731

In article <5ctg1j$7sn@suba01.suba.com> byoung@qni.com writes:
>I have access to some recently replaced UPS units.
>These units have 6 and 12v "gel-cell" batteries that
>I would like to put to good use (ARES, APRS, etc...)
>
>Is there a recommended and/or quick'n easy method
>for testing voltage, amps, and longevity?

Gell-cells have a limited lifetime, Bill. That's why they are replaced on a regular schedule in UPS service. It is often possible to get more use out of them, but realize they are in their declining years and don't depend on them for anything mission critical such as ARES.

Gell-cells use lead-acid technology, so they need to be charged with a constant voltage charger. But due to limited electrolyte mobility, charge current needs to be limited too during the initial stages of charging, IE when the battery is nearly flat. A good rule of thumb is to limit charge current to 0.1*C where C is the battery's amp-hour capacity. As charging progresses, gradually switch to constant voltage charging and let the current taper off to trickle levels as the cells reach full terminal voltage.

Now, after the batteries have taken a normal full charge (if they won't, you've got candidates for the recyclers), you can test them for capacity with a load test. First assure yourself that they have rated terminal voltage. Fresh off the charger, a 12 volt battery should show about 13.8 volts no load. This is a result of "surface charge", and is normal. After applying a brief load, voltage should drop to 12.5 volts. This is also normal. Now load the battery at a 1*C draw (series parallel strings of auto lights or power resistors can be used to achieve this), and monitor terminal voltage and time. When terminal voltage drops to 10.5 volts, stop and note the time. It should be near 12 minutes. If it is, you have a good battery. If it is substantially less than 12 minutes, you have a weak battery with little remaining life.

What this test is doing is seeing how long it takes to extract 20% of battery capacity. That's all you can safely extract from this sort of battery without risk of permanently damaging it. By loading it with the 1C rate, it should take 60 minutes to fully discharge it, and 12 minutes to 20% discharge it. The 10.5 volt terminal voltage is the lowest terminal voltage to which you can safely discharge this type of battery, so

it serves as the termination point of the test.

Never try to draw more than the 1C current from a gell-cell. They aren't designed to tolerate rapid discharge. Note that this same test can be performed on liquid electrolyte lead-acid batteries, but they're tougher, and can tolerate short duration high current draws. You may want to test that too. Attach a 10*C load and monitor terminal voltage. It should remain above 10 volts. If it sags to less than 8 volts in less than 10 seconds, the battery has high internal resistance and shouldn't be depended upon for starting duties. (Don't do the heavy discharge test for more than 10 seconds at a time or the battery plates may warp.)

These tests should be performed at normal room temperature. The batteries will have substantially less performance at lower temperatures. Six volt batteries can be tested in similar fashion, just divide all the voltages given above by 2.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1329. DEM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: k6ls@amsat.ORG
Message-ID: <32F53258.179B@amsat.org>
Source record: 97732

Down East Microwave Http://www.downeastmicrowave.com

1330. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970203020001.VAA01064@ladder01.news.aol.com>
Source record: 97733

Hi Wes,

Good to see someone taking this thread back to science.

In article <n7ws.253.008366FC@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) writes:

>For these measurements, the network is necessarily measured by exciting one
>end with respect to ground and measuring the characteristics. In this
>situation, the network is measured in a controlled (or well known)
>environment. The instrumentation is "smart" enough to remove any internal

>errors and present "corrected" measurement data. THIS IS NOT how the
>suppressor network is used in an amplifier.

Absolutely.

>The network is not an isolated device who's characteristics are independent
>of
>its environment. It is connected to the anode, which has an unknown source
>impedance, on one side and the output tank circuit, which has an unknown load
>impedance, on the other side.

Ahh, but I do know those impedances. And you can too if you have a PA and a Network Analyzer. They are no big secret.

The effect of the other circuit componets is to bring Q and impedance of both parasitic suppressors to higher but converging values.

>Until these source and load impedances are known (at every frequency of
>interest) the effects of the suppressor network cannot be surmised.

I measured Q in a pair of 3CX800's,and with a suppressor Q of unity outside the PA the Q climbed to over three with the suppressor in the PA. Adding the Measure's voo doo nichrome suppressor exactly as described in his paper resulted in almost the same Q, except just ever so slightly higher than the stock suppressor.

I will give Rich credit, his nichrome did lower the UNloaded Q of the tank nearly 50% on one frequency of interest, ten meters. So it isn't like it's complete voo doo. If the PA oscillates on ten meters, it might settle it down.

>I know this will sound heretical, but the more I look at this, the more
>I question the need for these things. If someone can present me a
circuit
>model in which the addition of a few ohms loss resistance can lower the
loop
>gain enough to prevent an oscillation, I'd love to see it.

It can indeed Wes. Even a Q of three or four is enough to damped the system at VHF.
Some PA's are totally stable without ANY suppressor, and some require a large suppressor. There are so many variables involved a universal suppressor system is impossible to define.

This is why I had to spend almost as much $$$ as Rich makes off his snake oyl cure to get the right equipment. While I could do it by cut and try, it's much nicer to know what you are really doing.

Now if I had uncanny ESP that allowed me to, just by holding a part in my hand, see the cause of the parasitic, if I had a rare Q measuring GDO, if Varian would have whispered the hiiden truth in MY ear in one of the hundreds of conversations I've had with them that they ONLY told Mr. Measures (NEVER have they told this parasitic stuff to anyone else in the world...just their best friend Mr. Measures. Strange, isn't it?), if I thought oscillators were self-destructive gongs waiting to be rung by a photon from the sun, if I knew so little about field theory that I believed a parasitic could melt the glass of a Chinese tube, than I would probably just throw something in and call it a done cure.

I'm not blessed with those features, and do not (through experience with pathological liars in my family) understand how to predict when someone else is lying. So I'm stuck, I just have to make actual measurements.

If you'd like to have a PA to measure, let me know. You hit the tar baby. I need to go away and do something more constuctive. You do not get to keep it though, hi.

73 Tom

1331. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: clarkjc@craft.camp.clarkson.edu
Message-ID: <5d3f6f$4nn@news.clarkson.edu>
Source record: 97734

: There's alot of things I'd like to buy from minicircuits, but YOU CAN'T.
: They won't sell small quantities of anything. They don't send the
: catalog, and they've got no distributors that will sell small quantities.

That's odd... I just ordered from MiniCircuits in August and I all I bought
was 2 SRA-1 DBM's. They had no problem with that order, and I even got a
free catalog.

--
John Clark (N3IFG) "Never trust an OS you don't have the source for."
clarkjc@craft.camp.clarkson.edu -- Unknown Linux God

1332. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970203015401.UAA00741@ladder01.news.aol.com>
Source record: 97735

In a message R. L. Measures writes:

<< Peter: Have you ever checked a tank L with a dipmeter for the presence
of
VHF resonances?

No. What would it prove? My dipmeter is the most unused item in the
shop.

>
>>>> I believe Tom Rauch has shown that the plate tuning capacitor has
very
>>>> low reactance at VHF, and is actually slightly inductive at those
>>>> frequencies. (earlier post by Bertini)

< As I recall, Tom Rauch found some internal VHF resonances. However,
this
< is nothing new since variable-capacitor resonances are discussed in the

< 32nd (1955) Edition of *The Radio Amateur Handbook*.

>...snip... For the tuning capacitor to be resonant at a given
>frequency, it would need both capacitive and inductive reactances.

< Do the tuning capacitor plates have inductance?

The question should be "do tuning capacitors have a parallel
resonance at VHF?"

>Given only it has a "slight" inductive reactance, its impedance
>at VHF is most likely very minimal.

< Quite true, Peter---unless the tune capacitor is resonant or near
< resonance. Before this discussion began, I hadn't given much thought
to
< how VHF voltage might be able to arc a tuning capacitor. Thanks to Mr.
< Rauch's measurements of a tune capacitor from an AL-80, I think I have
an
inking.
< Do you remember the problem I proposed of generating over 10,000vrms
from
< a 120v, 60Hz source with only one capacitor and one inductor?

Nothing new there, Rich... there is a whole new disipline based on that
principle. It's called switching power supplies.

< So why does the 10m bandswitch contact sometimes arc.? An open 10m
contact

< probably has around 1 pF. The typical 10m section of a tank L has
around
< 0.9uH. The series-resonant frequency is 170MHz. In an AL-80, this is
in
< the neighborhood of the anode circuit's resonance at 160MHz. Thanks to
Mr.
< Rauch's measurements, we know that the AL-80's tune capacitor has no
< resonances in that neighborhood. I have not heard of any case where an
< AL-80 tune capacitor allegedly arced.

Bingo!!!!! Of course not!! It is virtually a dead short at VHF! Sort of
kills
the possibility of VHF energy arcing the bandswitch.......

< However, I have heard of a number of
< cases where AL-80 10m bandswitch contacts mysteriously arced and
< evaporated. If you're interested, photos of same are available at
Figure
< 15 on my Web site.

The winds are a shifting. Last week, when I mentioned ten meters, you
went on to say this happened on 40 meters, not ten meters.

>>A question: Peter--If you were designing an HF amplfier, would you
want a
>>VHF parasitic oscillation suppressor that exhibited more (or less)
VHF-Rp
>>than another type of VHF suppressor?
>
>Rich, I would honestly want a suppressor that did not compromise
>the operating Q of the amplifier at HF frequencies.

< Did you accept someone's word that this was the case, or did you
calculate
< a typical tank Q reduction, based on Wes' ESR measurement for a Ni-Cr Ls
< suppressor at 30MHz (4.32 ohms) and/or at 10MHz (0.88 ohms)?

Rich, I am confused. You are marketing this product, and have been
for years. You mean that thanks to Wes' calculations you only now
have some idea of what they doing?

< the probable increase in harmonic output would be. I don't
< have a clue as to how to proceed. OTOH, I have heard of no cases where
a
< low VHF-Q suppressor caused increased TVI to channel 2 during 10m
< operation---which would, according to Wes' measurements, would
undoubtedly
< be THE worst-case. To date, I know of no instance where an FCC citation
< resulted.

Spectrum analyzer? They are fairly cheap.

< Mr. Rauch made the claim that a serious HF Q degradation would result
< from using a Ni-Cr VHF suppressor.

Yes, it should. While the impedance of your suppressor would change
to a lower value at HF due to a decreasing XL, the resistive component
of the wire remains constant -- the resistive element will absorb power
at HF. Why waste time silver plating tanks coils when we are going to
place resistors (nichrome or otherwise) in series? There is a difference
between loaded and unloaded Q...

< Mr. Rauch presented me with the following problem. F=160MHz: An L of
< 85nH is paralleled with 100 ohms. How does the VHF current divide?
< According to AC Circuit Analysis, the calculated current through the
85nH L
< is about 10% higher than the calculated current through the 100 ohm
< resistor. However, Mr. Rauch concluded that these calculations are
< invalid. Do you accept Mr. Rauch's conclusion?

Rich, the math and caculations have been gone over, and over, and
over....
Do you disagree with Rauch's math? Argue with him.

>I would select values of L, R and C (for the suppressor)
>that were effective at VHF, and had minimal effect at HF.
>That's where I would put my Q and RX meters to work.
>

< I haven't seen a VHF suppressor design that uses a C. What does this
< circuit look like?

Mr. Rauch described a suppressor using RCL components in an earlier
post. I did not retain a copy. I am sure Mr. Rauch would reply if asked
--
nicely:)

>I would also heed some of the other advice gathered in this thread,
>and provide arc-over electrodes and current limiting resistors
>in the plate supply.
>
< In the Sept. 1994 QST critique of the Jan. 1994 QST article "The Nearly
< Perfect Amplifier", my suggestion about using a peak fault-current
limiting
< resistor in the anode supply was pooh-poohed by the (self) 'recognized
< amplifier expert'.

I am surprised. I would use them regardless of Mr. Rauch's alleged
comments. I think you had a good idea there.

< An arc-over electrode sounds like a good idea, Peter. However, since
tune
< capacitors, as well as open bandswitch contacts seem to arc during some
< intermittent VHF parasitic oscillations, IMO, at least two
< arc-over/spark-gap electrodes are indicated. Adding a low-L low-ohm MOF
< resistor in series with each spark-gap might help to limit the peak

fault
< current. The Matsushita 3w-rated MOF resistors we use in our suppressor
< retrofit-kits might do the job. According to Wes, N7WS, the30 ohm units
< have around 9nH/0.009uH of internal L, and from my own tests I know that
< they have remarkable overload capacity.

The peak limiting resistance belongs in the plate supply feed. You refuse
to
accept the fact that a plate tuning capacitor can be effectively
a dead short at VHF, but readily assume that a Matsushita MOF is a pure
resistance, free of resonances at VHF?

Let's put one on a RX meter and see what it looks like at VHF first.

73, Peter

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1333. Re: Down East Microwave internet address?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <32F5B6F4.2651@mwt.net>
Source record: 97736

scott wrote:
>
> Anybody have a www address for down east microwave?
> --Scott--N0EDV--
>
> --
> Gotta Fly or
> Gonna Die !
> --Ask me about my
> Aeronca Super Chief--

Thanks to all who responded...you're LIFESAVERS!
--Scott, N0EDV--

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

1334. Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <32F54E46.4F11@tri.net>
Source record: 97737

Boy this discussion has been going on a long time and has degenerated.

I don't know Buzz personally, just met him at a CSVHF conference where he presented an excellent talk on using one of the Eimac tubes on 1296. He stayed up late several nights discussing tubes and amps in general with anyone having questions.

WB0DRL built several of the amps and actually had some CNC versions machined. Fried a couple of tubes, Buzz was right there with replacements and dissected the dead at the factory to help with the design. As I recall, he had several made with water cooled jackets to see what Pete could do with those (I suspect you have to be somewhere in the chain of command to get that done for Ham purposes).

Anyway, he is/was a great guy and if he happened to lurk here a while before joining the discussion, I suspect he is now under deep cover.

N0UU

1335. 16/1700 KCS IF xfmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: ampruss@hits.NET
Message-ID: <32F553DF.33FE@hits.net>
Source record: 97738

Greetings from the land of eternal summer;
Im looking for an old 1500/1700 Kcs. IF xfmer with can. Im building an old tube type ham brew regen. receiver with the regen in the IF. The were the supergainers of the 50s. Is there any help out there?
I have two part numbers;
Miller #612-W4 1600 Kcs.
Millen #62161 1700 Kcs.
Any help will be greatly appreciated. So will the young kids at the next local home brewers meeting next. At least I can give em a progress report. Im ok for a reasonable cost es postage.
72/73 Peter KH6CTQ

1336. WTB: Solid state Grid Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: techno@actcom.co.il.NOSPAM
Message-ID: <E50B78.8tv@nonexistent.com>
Source record: 97739
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi All,

We're looking for a Solid State Grid Dip Meter, either new or used (Millen unit prefered). Delivery is to Israel. Can anyone help?

When responding, please email directly in addition to posting here, since our news server isn't very up to date. Please note that you must edit the reply email address (remove the .NOSPAM postfix). This has been done in an attempt to reduce the amount of junk mail received here from automatic mailers. Thank you.

regards,
techno

1337. Re: Homebrew 12volt antenna rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <32F59C38.777F@wenzel.com>
Source record: 97740

I have an old "Archerotor" controller - probably from Radio Shack -
which you can have if you pay the shipping. It is dirty and the case is a
little bent but the insides look fine. I have no idea if it will work
with your rotator.

1338. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: philk5pc@connect.net
Message-ID: <5d3ue5$aa1@dallas1.connect.net>
Source record: 97741

In article <measures-ya02408000R0202971344300001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) says:
>
>.....snip
>
>>I would select values of L, R and C (for the suppressor)
>>that were effective at VHF, and had minimal effect at HF.
>>That's where I would put my Q and RX meters to work.
>>
>
>I haven't seen a VHF suppressor design that uses a C. What does this
>circuit look like?
>
>......snip

In an article in the January, 1974 issue of Ham Radio, W4QQ has a 4-1000A 5-band Kilowatt Linear that uses a suppressor consisting of:

A 20 pf ceramic capacitor (Centralab 852S) which is a mini-doorknob with axial leads in parallel with 4-470 ohm 2 watt resistors and 4 turns #12 wire, 1/2 inch diameter, resonated at 110 mhz. I built that amp project in 1981, and it has performed flawlessly ever since, with the original parts and tube.

(((73)))
Phil, K5PC

1339. Mod for Heathkit SB-220 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Rodger <skinner@paradise.net>
Message-ID: <32F57D09.63F0@paradise.net>
Source record: 97742

I'd like to add 160 meters to my Heath SB-220 linear. Does anyone know of an article, mod or anyone who does such mods? If so please drop me email. Thanks.
73

Rodger W4FM
skinner@paradise.net

1340. Dan's Small Parts Winter/Spring Specials

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5d454e$r15$2@zinger.callamer.com>
Source record: 97793

Dan has once again outdone himself with his Winter/Spring Specials!

Check out his Winter/Spring Specials Catalog on the Internet:

http://www.fix.net/dans.html

Enjoy,,,Jerry...K

1341. Re: 80m SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Deschastres / Donnadieu <donnastr@worldnet.fr>
Message-ID: <01bc11b3$2c80fbc0$LocalHost@Worldnet.sct.fr>
Source record: 97794

carl.ratcliffe3@virgin.net@virgin.net a crit dans l'article
<5d3c7p$af4@news3-gui.server.cableol.net>...
> Does anyone no where I can get a cicuit diagram for a good QRP SSB TX to
> build ?
>

You can find the description of an SSB transceiver for 80m in the french issue of CQ magazine. Average cost 100$!

issue #16 october 96 description and schematics,
issue #17 november 96 PCBs,
issue #18 december 96 coils and adjustments,
issue #19 january 97 mechanics.

Ask for stephanie de Oliveira, phone (33) 5 55 29 92 92, fax (33) 5 55 29 92 93
Address : ZI Tulle Est
Le Puy Pincon
BP 76
19002 TULLE CEDEX
France
I don't think they have an e-mail address.

73.

F1JSC donnastr@worldnet.fr

1342. Wanted data on Russian tube pls.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Istvan Zarnoczay <iz@tdk.dk>
Message-ID: <32F5ACBF.22F5@gatekeeeper.teledanmark.dk>
Source record: 97795

Hi out there,

Are there anybody who could give me some information on a Russian
tube called GU-43B
I'm interested in all avaible information about this device becouse I
have the tube but know nothing about it.

please send information to

iz@tdk.dk or
iza@post5.tele.dk

73 de OZ1EYZ

1343. 100.4 MHz xtal ? . Was: QRP CRYSTALS E-MAIL?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: CC015012@brownvm.brown.edu
Message-ID: <5d4bpl$il1@cocoa.brown.edu>
Source record: 97796

In article <kwWZpSBq008yEwXr@kanga.demon.co.uk>, Dick G0BPS
<Dick@kanga.demon.co.uk> said:

>I have stocks of qrp freq crystals.

I'm searching for a 100.4 MHz xtal or something that
can be multiplied to yield 100.4 MHz (= 89.7 + 10.7
I want to build a low-noise VCO to receive WGBM Boston
as cleanly as possible).

Advice anyone (I did save the discussion on low phase
noise VCOs - now I need a crystall :-)).

Thanks,
John

1344. Cleartone CM6500 PMR MODS?..

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Max Lock <g7uoz@uhars.herts.ac.uk>
Message-ID: <Pine.LNX.3.91.970203102057.18324A-100000@uhars.herts.ac.uk>
Source record: 97797
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Hi All,

Bought a Cleartone CM6500 PMR set yesterday, very cheaply too, just wondering if it's possible to mod the radio into the 70cm's band, and also where I can find any information to do this. Unfortunately, there is nothing obvious inside like a diode matrix or Eprom, so any help would be gratefully accepted.

Thanks in advance and 73's de G7UOZ, Max.

1345. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970203132000.IAA26479@ladder01.news.aol.com>
Source record: 97798

In article <measures-ya02408000R0202971344300001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>Quite true, Peter---unless the tune capacitor is resonant or near
>resonance. Before this discussion began, I hadn't given much thought to
>how VHF voltage might be able to arc a tuning capacitor. Thanks to Mr.
>Rauch's measurements of a tune capacitor from an AL-80, I think I have an
>inking.
.
Measures now comes out and admits he hadn't given much thought to how a VHF parasitic could cause an arc in a tuning capacitor. He just went right ahead and said it could for years and years, without even thinking about it.

Now, after YEARS of making his claims, he admits he is just beginning to think. He now has an "inking."

What is an inking? Peter, do they ink people at Belvue? Answer the question Peter.

Do you think Rich checked out other parts of his theories as well as the plate capacitor he admits never even thinking about?

I wonder if this has anything to do with the stuff he incorrectly posted from Born? And about Miklos job? And from Holtcamp on the 922? Or about the filament meters and variacs? Or those 500 watt 8877 grids? Or his cat and a popular perfume?

Do you suppose Rich never bothers to check anything out? Is it possible he just makes stuff up or thinks he hears something, and decides in his mind it's true enough to repeat as a fact before he even understands it?

73 Tom

1346. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <kVrKPAAT$Z9yEws2@ifwtech.demon.co.uk>
Source record: 97799

R. L. Measures wrote:
>>I would also heed some of the other advice gathered in this thread,
>>and provide arc-over electrodes and current limiting resistors
>>in the plate supply.
>>
>In the Sept. 1994 QST critique of the Jan. 1994 QST article "The Nearly
>Perfect Amplifier", my suggestion about using a peak fault-current limiting
>resistor in the anode supply was pooh-poohed by the (self) 'recognized
>amplifier expert'.
>

Let's look at what was actually printed.

Rich's suggestion to use a 10R resistor for up to 3kV was criticized because it isn't enough to make a significant difference to the internal resistance of the power supply. The specific point was that the ESR of the electrolytic capacitors is likely to be at least 10R, and then there's the RF choke and other series components.

I wasn't mentioned in QST, but Eimac Application Bulletin #17 recommends 50R for "small" transmitting tubes that run at about 2kV.

In other words, the criticism was not about the recommendation to use a resistor; the point was that 10R isn't high enough.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

1347. Re: FS:RF PARTS,EQUIPMENT,KITS.SURPLUS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Gabe Nemeth <gabe@bnr.ca>
Message-ID: <32F5ED26.7439@bnr.ca>
Source record: 97800

The stuff looks good. What will be your booth number at Dayton ?
Thanks, and '73

1348. 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: wb5rue@amsat.ORG
Message-ID: <01IEZ43E7V7W9ATXHC@ARWEN.UTHSCSA.EDU>
Source record: 97801

n7ory*@*primenet.com (Rob Neff) writes:

-<snip>
->
->Kevin, WB5RUE
->Those who are willing to give up liberties for safety's
->sake deserve neither liberty nor safety.
-
-I was going to reply with another lengthy post, but, since you
-obviously don't mean what you say, I'll leave this one alone. (for the
-most part)
-
-I find it funny that in one breath you tell Ted he's a hero for trying
-to shut people up, but at the same time you post a signature that says
-something quite different. So do we give up the our constitutional
-right to free speech so Ted can have a little safety? Or is that
-exempt from your interpretation?
-
-73
-
-Rob

I think you misunderstand me (or maybe I misunderstood Ted)
I took Ted to be one who was for free speech and all but who
also was for following the law. My interpretation of Ted's
position was that he was against anyone using equipment
to jam CB. It is ILLEGAL to jam anyone on any service.
If you mean that Ted's is trying to shut people up because
he doesn't want them to jam others then YES I agree with him.
Jamming is illegal. If you want the leftist-liberal spin on
jamming, it is just like censorship. You, by jamming someone,
are censoring what he is saying. This can be equated to
censoring text by blotting out portions. So, by being for the
"rights" of people to jam others then you are for censorship.
Kind of hypocritical, isn't it? But then most liberal positions
are. They are for free speech unless it offends them, they are
they are against discrimination unless it benefits them, they are
for higher taxes (for the "rich") but not for them.

Liberals measure their compassion by counting the number of people
they are helping. Conservatives measure their compassion by
counting the number of people who no longer need their help.

Anyway, enough of this off the subject stuff.

Kevin, WB5RUE

1349. FS: NOS and USED Tubes!! (cheap) LIST POSTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: sidener@crunch.nuc.umr.edu
Message-ID: <5d4ujq$ga3$2@news.cc.umr.edu>
Source record: 97802

I have the following tubes for sale they are in the New Old Stock (NOS) or USED (tested) condition.

This list is constantly being updated to if you don't see it now, I may get it later.

This list created 02/03/97

$3.00 minimum order please.

Please add $3.00 for shipping via priority mail.

Thanks,

Scott Sidener N0WFL
sidener@umr.edu

TYPE PRICE COND
1619 $8.10 NOS
1642 $3.60 NOS
0A2 $2.70 NOS
0Z4 $1.58 USED
0Z4G $1.58 USED
10CW5 $1.67 USED
10DE7 $2.12 USED
10GV8 $1.76 USED
12A8GT $3.02 NOS
12AD6 $0.90 USED
12AE6 $1.51 USED
12AT7 $2.68 USED
12AU6 $1.67 USED
12AU7 $2.03 USED
12AU7A $4.05 NOS
12AV6 $1.49 USED
12AV7 $2.50 USED
12AV7 $5.00 NOS
12AX7 $5.22 USED
12B4A $4.05 NOS
12BA6 $1.58 USED
12BE6 $1.71 USED
12BH7 $4.80 USED
12BH7A $9.59 NOS
12BL6 $0.95 USED
12BQ6GTB $2.16 NOS
12BY7A $3.99 USED
12BY7A $3.99 USED

12DQ6 $2.68 USED
12DZ6 $0.90 USED
12EK6 $0.90 USED
12F5GT $2.70 NOS
12GA6 $4.00 USED
12SA7GT $3.87 NOS
12SF7 $4.00 NOS
12SJ7 $3.24 NOS
12SL7GT $3.15 NOS
14AF $4.00 NOS
14C7 $4.00 NOS
15KY8A $4.20 NOS
1614 $4.00 USED
17AX3 $2.03 NOS
17BF11 $6.89 NOS
17JN6 $5.85 NOS
17JZ8 $4.00 USED
1A5G $3.47 NOS
1A7GT $2.48 NOS
1B3GT $2.03 USED
1BC2A $4.68 NOS
1C5GT $2.34 NOS
1DN5 $2.79 NOS
1H5GT $2.12 NOS
1J3 $5.22 NOS
1LD5 $4.00 NOS
1LH4 $2.66 NOS
1P5GT $3.11 NOS
1Q5GT $1.62 NOS
1U4 $3.29 NOS
1U5 $1.35 USED
21GY5 $3.51 NOS
21KQ6 $3.15 USED
22BW3 $3.65 NOS
22JF6 $4.39 USED
24LQ6 $4.00 NOS
25CD6 $4.00 NOS
25CK3 $3.51 NOS
25DN6 $3.42 NOS
2500000 $3.60 NOS
25EH5 $3.02 NOS
25F5 $3.60 NOS
25L6GT $4.19 NOS
25L6GT $2.10 USED
25Z6GT $4.05 NOS
274B $5.00 USED
27GB5 $5.85 NOS
2E+26 $5.40 NOS
31LR8 $3.60 NOS
32ET5 $1.80 NOS

33GT7 $4.50 NOS
33GY7A $8.10 NOS
33GY7A $8.10 NOS
34CE3 $3.42 NOS
34DG5 $4.00 NOS
35A5 $3.78 NOS
35A5 $1.89 USED
35B5 $1.80 NOS
35EH5 $2.79 NOS
35HB8 $4.00 NOS
35W4 $2.52 NOS
35Y4 $2.70 NOS
35Z3 $3.24 NOS
35Z5GT $3.56 NOS
36AM3A $4.00 NOS
36LW6 $10.71 NOS
38HE7 $8.87 NOS
3A3 $4.37 NOS
3A3A $4.37 NOS
3A3B $4.37 NOS
3A4 $3.24 NOS
3BU8 $1.24 USED
3BY6 $1.80 NOS
3CY5 $1.80 NOS
3DB3 $1.35 USED
3DC3 $8.10 NOS
3DG4 $5.40 NOS
3DT6 $1.26 USED
3Q5GT NOS
45Z3 $4.00 NOS
4833 $5.00 NOS
4AV6 $3.02 NOS
4BC8 $1.24 USED
4BL8 $2.61 NOS
4BS8 $4.00 NOS
4BU8 $2.84 NOS
4BU8 $2.84 NOS
4BZ6 $3.60 NOS
4BZ6 $1.80 USED
4BZ7 $2.97 NOS
4CB6 $3.33 NOS
4CB6 $1.67 USED
4CS6 $2.70 NOS
4DJ6 $3.60 NOS
4DK6 $3.33 NOS
4DT6 $1.74 USED
4EH7 $3.33 NOS
4EH7 $1.67 USED
4EJ7 $4.28 NOS
4EJ7 $2.14 USED

4EW6 $2.25 NOS
4GJ7 $4.91 NOS
4GK5 $3.60 NOS
4GM6 $2.25 NOS
4HA5 $3.15 NOS
4HM6 $4.68 NOS
4HS8 $2.03 NOS
4JC6 $4.68 NOS
4KE8 $3.60 NOS
4KT6 $4.91 NOS
50C5 $2.75 NOS
5642 $3.60 NOS
5703WA $7.20 NOS
5751 $8.19 NOS
5840 $10.80 NOS
5879 $9.00 NOS
5894B $40.50 NOS
5AQ5 $2.25 USED
5GS7 $5.67 NOS
5LJ8 $2.77 USED
5U4GB $5.56 USED
5Y3 $3.60 USED
5Y3 $7.20 NOS
5Z3 $4.95 NOS
5Z4 $2.14 USED
6005W $4.37 NOS
6205 NOS
6211 $3.60 NOS
6211A $3.60 NOS
6227 $40.50 NOS
6316 NOS
6829 $10.80 NOS
6948 NOS
6AC5GT $7.29 NOS
6AC7 $3.69 NOS
6AC7 $1.85 USED
6AD10 $4.05 USED
6AF4 $4.28 NOS
6AG5 $2.61 NOS
6AH6 $2.70 NOS
6AH6WA $2.70 NOS
6AL5 $1.13 USED
6AQ5 $3.42 NOS
6AS5 $2.61 NOS
6AS6 $3.83 NOS
6AS7G $7.74 NOS
6AU4GTA $4.55 NOS
6AU6 $2.05 USED
6AU6WC $4.10 NOS
6AW8 $2.04 USED

6AW8A $4.09 NOS
6AY3 $4.36 NOS
6B10 $5.18 NOS
6BA11 $4.41 NOS
6BA6 $1.58 USED
6BD6 $1.08 USED
6BE6 $1.47 USED
6BK4B $5.36 NOS
6BK5 $0.90 USED
6BQ5 $6.03 NOS
6BQ7A $2.41 USED
6BZ7 $4.82 NOS
6CG3 $2.93 USED
6CG7 $3.81 USED
6CL6 $4.55 NOS
6CM3 $4.59 NOS
6CM6 $1.94 USED
6CM7 $3.29 NOS
6CM8 $3.60 NOS
6CQ6 $4.00 NOS
6CQ8 $3.51 NOS
6CT7 $4.00 NOS
6CU5 $3.78 NOS
6CU7 $4.00 NOS
6CU8 $3.20 NOS
6CW5 $4.50 NOS
6CX8 $4.68 NOS
6CX8 $2.34 USED
6CY5 $5.31 NOS
6CY7 $2.61 NOS
6DB5 $1.80 NOS
6DC8 $3.74 NOS
6DE4 $3.15 NOS
6DE6 $2.21 NOS
6DE7 $4.82 NOS
6DJ8 $2.23 USED
6DK6 $3.38 NOS
6DL5 $4.95 NOS
6DM4 $1.80 NOS
6DN7 $4.46 NOS
6DQ5 $8.78 NOS
6DS4 $10.13 NOS
6DS5 $1.11 USED
6DT5 $2.21 NOS
6DW4 $4.10 NOS
6DX8 $4.23 NOS
6EA8 $4.95 NOS
6EB8 $2.73 USED
6EH5 $2.34 NOS
6EH7 $4.01 NOS

6ER5 $1.04 USED
6FH8 NOS
6FQ7 $3.81 USED
6GH8A $3.47 NOS
6HJ8 $2.34 NOS
6HR6 $4.50 NOS
6HS5 $8.96 NOS
6J5 $1.89 USED
6J7 $3.65 NOS
6J7 $1.83 USED
6JT8 $3.38 NOS
6K6GT $3.47 NOS
6K7 $1.89 USED
6K7G $1.89 USED
6K7GT $1.89 USED
6LQ8 $3.56 NOS
6LX8 $3.06 NOS
6LY8 $3.92 NOS
6MB8 $4.05 NOS
6MN8 $2.88 USED
6N7 $2.52 USED
6S4A $1.89 USED
6S7 $4.00 NOS
6S8GT $2.70 NOS
6SA7 $1.47 USED
6SF7 $1.76 USED
6SJ7 $3.15 NOS
6SK7 $3.38 NOS
6SK7 $1.69 USED
6SK7GT $1.69 USED
6T4 $1.80 NOS
6U10 $4.59 NOS
6U7 $1.44 USED
6V4 NOS
6V6 $3.15 USED
6V6GT $3.15 USED
6W6 $1.49 USED
6X4 $3.47 NOS
6X4 $1.74 USED
6X4WA $3.47 NOS
6X4WA $3.47 NOS
6X5 $2.19 USED
6Y6GA $4.50 NOS
7062 $4.05 USED
7408 $4.00 USED
7A4 $2.03 USED
7A4 $4.05 NOS
7A5 $1.80 USED
7A7 $1.42 USED
7A8 $2.84 NOS

7B5 $1.26 USED
7B6 $1.60 USED
7B7 $3.38 USED
7C5 $3.24 USED
7C6 $2.68 USED
7000000 $1.49 USED
7F7 $6.30 NOS
7Q7 $3.20 NOS
7Q7 $1.60 USED
7S7 $3.60 NOS
7Y4 $1.13 USED
8068 $18.00 USED
8121 $20.00 NOS
8121 $10.00 USED
85 NOS
8JV8 $2.39 USED
8LT8 $4.19 NOS
8LT8 $4.19 NOS
C3M NOS
EBF89 $1.87 USED
EDF89 $3.74 NOS
EF89 $4.00 USED
VT49 $4.00 NOS

1350. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0302970821320001@news.vcnet.com>
Source record: 97803

In article <19970203015401.UAA00741@ladder01.news.aol.com>,
commquart@aol.com wrote:

>
...snip...
> < Do you remember the problem I proposed of generating over 10,000vrms
> from
> < a 120v, 60Hz source with only one capacitor and one inductor?
>
> Nothing new there, Rich... there is a whole new disipline based on that
> principle. It's called switching power supplies.

The switching power supplies that I am familiar with switch DC at a 50KHz
or so rate into a toroidial transformer, whose secondary windings are
rectified, filtered, and sampled by a comparator that proportionally
controls the switcher to maintain the desired DC output voltages.
It seems to me that a closer analogy is the L-network. An L-network is
basically a series L/C circuit that is operated slightly off-resonance. In
the problem that used one L in series with one C to generate 10kV at 60Hz,
the two reactances were one ohm apart at 60Hz. Thus, with 120v @60Hz
applied, over 100A of current passed through L and C. Since the reactances
were approx. 100 ohms, the voltage across either reactance exceeded the
goal of 10kV.

> < So why does the 10m bandswitch contact sometimes arc.? An open 10m
> contact
> < probably has around 1 pF. The typical 10m section of a tank L has around
> < 0.9uH. The series-resonant frequency is 170MHz. In an AL-80, this is
>
> < in the neighborhood of the anode circuit's resonance at 160MHz. Thanks to
> < Mr. Rauch's measurements, we know that the AL-80's tune capacitor has no
> < resonances in that neighborhood. I have not heard of any case where an
> < AL-80 tune capacitor allegedly arced.
>
> Bingo!!!!! Of course not!! It is virtually a dead short at VHF! Sort of
> kills
> the possibility of VHF energy arcing the bandswitch.......

Sure, a circuit that is series-resonant is a virtual dead short, but ONLY
at the frequency of resonance. Is a circuit that is series-resonant at
170MHz a virtual dead-short at 160MHz? Not in my opinion. It seems to me
that this situation is similar to the example of generating 10kV from a
120v, 60Hz source with an almost series-resonant circuit. ....Please
double-check your bingo card before coming to the pay-window,
bingo-players.

> < However, I have heard of a number of
> < cases where AL-80 10m bandswitch contacts mysteriously arced and
> < evaporated. If you're interested, photos of same are available at
> Figure
> < 15 on my Web site.
>
> The winds are a shifting. Last week, when I mentioned ten meters, you
> went on to say this happened on 40 meters, not ten meters.

Different amplifers, Peter.
>
> < Did you accept someone's word that this was the case, or did you calculate
> < a typical tank Q reduction, based on Wes' ESR measurement for a Ni-Cr Ls
> < suppressor at 30MHz (4.32 ohms) and/or at 10MHz (0.88 ohms)?
>
> Rich, I am confused. You are marketing this product, and have been
> for years. You mean that thanks to Wes' calculations you only now
> have some idea of what they doing?

I talked about how VHF parallel-equivalent resistance (Rp) determined VHF
voltage gain in "Parasitics Revisited" (9/90-10/90 QST). I knew that Rp
decreased with Ni-Cr alloy conductors as frequency increased, but I did not
have the test equipment to make measurements at the frequencies where VHF
parasitic-oscillations typically take place. Seven years later, Wes
Stewart made the measurements that I needed when I wrote the manuscript.
>
> < Mr. Rauch made the claim that a serious HF Q degradation would result
> < from using a Ni-Cr VHF suppressor.
>
> Yes, it should. ...snip...

We have 4.32 ohms in series with 5pF (the anode-C of a 3-500Z) of the
total tune C of 5pF +15pF=20pF at 30MHz. At 30MHz, 5pF has about 1100 ohms
of reactance. How can 4.32 ohms of R in series with 1100 ohms of Xc cause
a 'serious HF Q degradation' when 75% of the HF tank current at 30MHz does
NOT pass through the 4.32 ohm resistance? Please show us the calculations,
Mr. Bertini and/or Mr. Rauch.

> < Mr. Rauch presented me with the following problem. F=160MHz: An L of
> < 85nH is paralleled with 100 ohms. How does the VHF current divide?
> < According to AC Circuit Analysis, the calculated current through the
> < 85nH L is about 10% higher than the calculated current through the 100 ohm
> < resistor. However, Mr. Rauch concluded that these calculations are
> < invalid. Do you accept Mr. Rauch's conclusion?
>
> Rich, the math and caculations have been gone over, and over, and
> over....
> Do you disagree with Rauch's math? Argue with him.
>
Mr. Rauch most likely did NO mathematical calculations, Peter. If he had,
he assuredly would not have given me a problem that disproved his
intransigent assertions that insignificant VHF current flows in Ls.

In the 9/94 QST (in regards to VHF suppressors) Mr. Rauch said:
---"The coil's reactance increases with frequency, and at VHF most of the signal path is through the resistor. It is plainly evident that the dominant component at VHF is the resistor, not the coil."---
Apparently, self-recognized 'experts' are reluctant to acknowledge mistakes they make.

So, Peter: Do you accept Mr. Rauch's statement regarding the VHF current in Ls as fact? If you do not accept it, then why do you accept Mr. Rauch's assertion that "...changing the resistance of the suppressor's coil radically affects the HF circuit Q." (9/94 QST)

IMO, any electronic engineer who rejects AC Circuit-Analysis, and instead solves such problems by intuition, quite probably does not have both oars in the water.

..snip...

BTW, I am still waiting for one of the naysayers to provide us with the values of a copper-wire suppressor that equals the performance of a suppressor made from resistance-wire. ..... The time has come to stand and deliver. What will it be--deliver or quiver?
---
e-mail copy to Mr. Peter Bertini, K1ZJH

--
--Rich-- ag6k, 805-386-3734

1351. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: frussle@erols.com
Message-ID: <32fb1a71.14839852@news.erols.com>
Source record: 97804

On 26 Jan 1997 12:32:10 +0800, henryt@perth.DIALix.oz.au (Henry Titchen) wrote:

> Hass anyone had any experience with making crystal sets using >germanium diodes for VHF bands? I am interested in knowing if it is >possible to use a germanium diode crystal radio to pickup airband signals.
> I have very vague memories of a kid at school owning a pen sized >airband receiver.
> If it is possible can I just use the standard crystal radio design but >alter the LC circuit to the frequencies of choice?

I suppose it is possible, but that airplane had better be very nearby. The problem, you see, is that most airplanes don't transmit with more than 10 watts --and that's using AM! Another problem is getting enough selectivity to seperate the signals. That's an easy thing to do with AM broadcast: the band is over several octaves wide. The aviation band, on the other hand, is quite difficult to make a reasonable TRF filter for...

Jake Brodsky, mailto:frussle@erols.com
PP ASEL IA, Cessna Cardinal N30946, Based @ MD24
Amateur Radio Station AB3A

1352. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0302971015390001@news.vcnet.com>
Source record: 97805

In article <5d3ue5$aa1@dallas1.connect.net>, philk5pc@connect.net (Phil Clements) wrote:

> In an article in the January, 1974 issue of Ham Radio, W4QQ has a 4-1000A
> 5-band Kilowatt Linear that uses a suppressor consisting of:
>
> A 20 pf ceramic capacitor (Centralab 852S) which is a mini-doorknob with
> axial leads in parallel with 4-470 ohm 2 watt resistors and 4 turns #12
> wire, 1/2 inch diameter, resonated at 110 mhz. I built that amp project
> in 1981, and it has performed flawlessly ever since, with the original parts
> and tube.
>
Interesting, Phil. Was the anode-circuit resonance in this amplifier also 110MHz? Did the author explain the purpose of the 20pF capacitor? How much DC anode voltage do you use? Does this amplifier/suppressor perform satisfactorily on 10m?

--
--Rich-- ag6k, 805-386-3734

1353. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5d5cdg$5h3@hpcvsnz.cv.hp.com>
Source record: 97806

Peter Parker (parkerp@pcug.org.au) wrote:

: Henry - yes it should be possible. The main limitation would be the
: extreme deafness of the receiver. You are right in that a crystal set for
: VHF is just the same as one for MF, but with a smaller tuned circuit
: (4-6 turns around a pencil and a 2-20pF trimmer should be about right for
: the air band - but remove the pencil after you've wound the coil).

: It is possible to increase the sensitivity of a crystal set by applying
: bias to the diode. Also some audio amplification (say using a 741 chip)
: will be useful.

Although bias is useful for making an AM detector more sensitive, I think you can do fine without it. HP makes "zero-bias video detector diodes" that are optimized just for this sort of thing. I find that I can detect RF on 2 meters down to around .2 millivolts with an unbiased detector, and the op amp I have following it isn't all that wonderful about drift. I think with a really good op amp (extremely low input bias current and extremely low drift) it would be possible to get down to some tens of microvolts. (I use this as a sniffer on fox hunts, and find I can "hear" a 1-watt transmitter from 1000 meters or more, if it's line of sight.) Listening to the demodulated output from an AM signal is easier, since you don't need to maintain DC stability. If you do want to use bias, be aware that there is an optimum...see the HP application notes on video detector diodes for more info. (I wouldn't use the 741 for any serious audio-type application...there are much lower noise amps available, and be sure to use something optimized for the source impedance the detector offers if you want best performance.) One serious problem will be that with careful design for _sensitivity_, you are likely to find you don't have good enough _selectivity_! A front end filter with two coupled resonators is likely to give a lot better results if you are in a high-RF area such as a major airport.

--
Cheers,
Tom
tomb@lsid.hp.com

1354. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: lhalliday@creo.bc.CA
Message-ID: <9701038549.AA854996462@mail2.creo.bc.ca>
Source record: 97807

Bob wrote about ordering from Mini-Circuits:

> That really helped alot. If you know where you can buy 1 - 2 pieces,
> let us all know. I've tried, and all they'll sell is an assortment,
> or 10 of the same devices. As far as the catalog goes, I've
> submitted my info several times, as well as live, in person at
> dayton. Have yet to see the designers catalog. That's the "reality"
> of the issue.

Huh? I get onesies and twosies of things all the time from
Mini-Circuits, and have stacks of documentation from them too.

They *do* have minimum orders, and they *do* have MOQs on things like
MMICs. So what? Either order them from somebody else, or order a pack
of (for example) MAR-6s and make yourself popular by giving the rest
away.

If you ask nicely, I've known them to waive their minimum order for
hams. But the additional processing involved affects the price of the
toys we buy, so why not get together with some friends and put toget
her a more substantial order? It doesn't take *that* many SBL-1s (or PO
S-150s, for that matter) to make 50 bucks.

Laura Halli
da
y VE7LDH "C'est une femme mutine, assez
lhalliday@cre
o.com elegante, grave et legere, ayant le
ve7ldh@amsat.
org sens du confort et du plaisir
Locator: CN89
mg en tout." - C. Deneuve

1355. NEED CURCUIT THAT WILL SUPPLY 12 VOLT DC PULSE BETWEEN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19970203200901.PAA15985@ladder01.news.aol.com>
Source record: 97808

Hi,

I looking to build a cercuit that can monitor a batteries voltage, and when that voltage falls below a predetermined voltage, in this case approximately 9 to 10 volts, will supply a pulsed 12 (or 9 or 10 volts) for a duration on 50 ms to 1 second. If any body can help me, or needs any more info regarding my needs for this cercuit, feel free to E-Mail me.

Thanx in Advance
Mike

HQ54@Aol.Com

1356. Re: Kenwood TM733A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: PDumbacher <paul.dumbacher@msfc.nasa.gov>
Message-ID: <01bc1219$b9989c00$da3c9e80@dumbapr.msfc.nasa.gov>
Source record: 97809

Really like it. If you act fast you can pick one up for less than $400. The replacement rig VM-7A costs $600. The 733 will do more than you want it to. It takes a little while to learn to program it, but for mobile operation it is very smooth. I do not think you will be disappointed. The new 7A is missing one very important feature of the 733 - MUTE. The 7A appears to be very popular except for that. MUTE will decrease audio in the non-control band -20dB if audio is in primary band. Very helpful feature if you casually monitor a freq while listening for a call on other band. You will hear everything on both sides of this fence, but for inexpensive mobile rig - this is it!!!
Paul
KC4YOB
fpate@vnet.ibm.com wrote in article
<5cle71$3o0@hil-news-svc-4.compuserve.com>...
> I am looking for info on the Kenwood TM733A dual bander mobil. Does
> anybody have one that can give me some feedback, Likes dislikes?
>
> Thanks
>
>

1357. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <K5BBkKA6TI9yEwqG@ifwtech.demon.co.uk>
Source record: 97810

R. L. Measures wrote:

>BTW, I am still waiting for one of the naysayers to provide us with the
>values of a copper-wire suppressor that equals the performance of a
>suppressor made from resistance-wire. ..... The time has come to stand
>and deliver.

Rich is referring to me; but I'm not a naysayer - I'm a skeptic.

This all arose from an off-newsgroup discussion after I'd plotted the N7WS measurements of the three different suppressors on graphs (that's two of Rich's NiCr models and a conventional one from W8JI).

The Q vs frequency graphs are plotted on a log-log scale to emphasize the ratios between the three different units.

>What will it be--deliver or quiver?

Neither.

As Wes, N7WS points out in his revised web pages (http://www.azstarnet.com/~n7ws):

"at VHF, there are only slight differences between the effective parameter values for the two types of networks."

All that I was saying to Rich was that if he wanted to make the conventional suppressor have *exactly* the same Q as one of his, at any desired frequency, he only needed to shift the whole curve up or down by a small amount (this being a useful property of the log scale).

I never did offer to "provide us with the values of a copper-wire suppressor that equals the performance of a suppressor made from resistance-wire" so Rich would have waited a long time for that!

Meanwhile Wes has already done what he asked, on his revised web page:

"Some mathematical manipulation can demonstrate that shunting the conventional suppressor with additional resistance will bring the curves into better alignment. An additional 250 ohm resistor in parallel with the network will cause the Rp curves to nearly overlap the nichrome curves above about 30 MHz. Below 30 MHz, the Rp of the adjusted conventional type will be higher than the Rp of the nichrome device."

So now Rich can cross this one off his list.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

1358. A Ham site to visit.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: murf@indigo.ie
Message-ID: <5d5lnf$fff@news.indigo.ie>
Source record: 97811
Cross-posted to: alt.radio.scanner.uk,uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,alt.ham-radio.packet

Hi there,

I have put a "Ham Radio" page on my personal homepage. It includes some hints and tips to do with our hobby. You are welcome to visit the site at

http://indigo.ie/~murf

If you have any other hints and tips regarding amateur radio, please email me with a view to putting them on my site with credit of course.

Alternativly, if you have any good ham pages that I could link to, then these too are most welcome.

73`s for now

Aidan EI5HW.

murf@indigo.ie

1359. Re: Two chip DSB exciter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: richardh@iinet.net.au
Message-ID: <5d5oa9$l06@opera.iinet.net.au>
Source record: 97812

Peter Parker <parkerp@pcug.org.au> wrote:

>Hello all - I'm wondering if anyone has tried building a two chip DSB
>exciter along the following lines:-

>1. 3.58 MHz ceramic resonator oscillator
> (made variable) - using part of CMOS chip

>2. Microphone amplifier - using part of CMOS chip - biased for linear
> operation

>3. Balanced modulator made from 4016 or 4066 switch - it would work by
>switching the audio at 3.58 MHz

>I remember building an experimental design a while ago, and got some
>results from it, but didn't take it any further. Adding extra components
>may make it useable for a phasing SSB generator.

>I have built audio amplifiers using the 4007 chip. I had a lot of success
>with them. They seem to have built in audio compression, and didn't draw
>a lot of current. Possibly this could be put to use in the transmit
>section, with the stage providing a degreee of audio compression that
>would improve readability but not contribute to distortion.

>Your thoughts please!

>73, Peter Vk1PK
Gday peter

I have thought about a more complex SSB circuit using SMD bits and the
polyphase system - one of the many projects I havent yet got around
to.
BTW I have received a shipment of SMD parts from USA. We are still
active over here in Perth
73
Richard
VK6BRO
richardh@iinet.net.au
http://www.iinet.net.au/~richardh

1360. Re: Wanted data on Russian tube pls.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: per olav voje johansen <perolav@axp1.pmddata.no>
Message-ID: <5d5m9i$qfc@alpha2.nipnett.no>
Source record: 97813

Hi !
I have tube data as well as scematic for HF amp using the GU-43b.
(I also have 2 new tubes and a socket for sale/ trade)

If interested in the data sheets pls e-mail me with adress and I will mail
a copy !

de Per, LA9DAA

1361. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5d5t8f$rmg@hpscit.sc.hp.com>
Source record: 97814

In article <5d2jk5$h5r@geraldo.cc.utexas.edu>,
Barry Newberger <bsn@fusion.ph.utexas.edu> wrote:
>I seem to recall a discussion (perhaps collateral to DDS using MSB) in
>which
>it was pointed out that it is advantageous to drive mixer circuits
>(maybe a particular
>class of mixer circuits, e.g. diode ring) using a square wave LO
>rather than
>a sine wave.
>
>
>Thanks,
>Barry Newberger

You see this written from time to time. I happen to disagree with this opinion, as a general matter. It sounds reasonable to drive mixers with a square wave since one is trying to switch the diodes on and off. The reality is that square waves do not go through transformers very well, so you should really stick with a sine wave in most cases. What really makes mixers happy (at least below 100 MHz.) is to be driving from a current source of sine wave.

Another problem with square wave drive is that if you don't make the duty cycle exactly 50%, you degrade the mixer performance. It's easier to make a distortionless sine wave (with a low pass filter) than a perfect square wave.

If someone has a square wave success story, post it here and I may breadboard it and A/B it with my favorite drive circuit.

Rick Karlquist, N6RK
rkarlqu@scd.hp.com

1362. Re: 80m SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: DENNYV <DENNYV@clarityconnect.com>
Message-ID: <32F6B0D3.3363@clarityconnect.com>
Source record: 97815

carl.ratcliffe3@virgin.net@virgin.net wrote:
>
> Does anyone no where I can get a cicuit diagram for a good QRP SSB TX to
> build ? Check out Small Wonder Labs. They have a nice single board ssb
Tranciever for $100. I just built the 20 meter version. My impression
is that it is a very good quality kit for that price, however it does
require a difinate experiance level in building. There is a web page
with pictures and a nice discription I have the address as
www.fixnet/~jparker/wmssb.htm. I don't think you could assemble the
parts to build the kit for much less...Denny AD3O

1363. Re: Down East Microwave internet address?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: JOHNWHITE@gnn.com
Message-ID: <5d5vpg$5u6@news-e2b.gnn.com>
Source record: 97816

www.downeastmicrowave.com

John KD4YRB

1364. Help with 2M amp - pin_tr.txt (1/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: JOHNWHITE@gnn.com
Message-ID: <5d5v2t$5t0@news-e2b.gnn.com>
Source record: 97817
Body handling: Inline uuencoded payload not displayed: pin_tr.txt

```
-------cut here-------CUT HERE-------PART (1/1)

[Inline uuencoded payload not displayed: pin_tr.txt]

-------cut here-------CUT HERE-------PART (1/1)
```

1365. Re: Timer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: jonz@rainbow.rmii.com
Message-ID: <5d5u4u$pr8$1@news1.rmi.net>
Source record: 97818

Roland Burgan (rburgan@up.net) wrote:
: I'm looking for a circuit to give an up/down timer cirucit
: that will time from 0 to 99 minutes, display (including elapsed
: time) on a LED display, have start/stop/reset, and, hopefullly
: have a direct keyboard time entry.

Except for the last (hopefully) item -- I think you're describing
a $25 Seiko watch.... <g>

73 Jonesy W3DHJ

--
SK

1366. kb8gun: F.S- MICROWAVE RADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: kb8gun@juno.COM
Message-ID: <19970203.010859.8039.2.kb8gun@juno.com>
Source record: 97819

--------- Begin forwarded message ----------
From: kb8gun
To: ham-homebrew@UCSD.EDU
Subject: F.S- MICROWAVE RADIO
Date: Tue, 28 Jan 1997 01:03:15 PST
Message-ID: <19970128.010343.8159.1.kb8gun@juno.com>

I have for sale or trade a 6ghz hot standby microwave radio. Its a
Farinon ss 6000 that was in service until replaced with spread spectrum
unit. tx freq 6665 rx freq 6785.
Make offer, U ship. send replies to: Ray Webb KB8GUN@JUNO.COM
330 Vine St.
Logan Ohio
43138

Phone - 614-774-7195 days
614-385-3413 nights
--------- End forwarded message ----------

1367. Re: 80m SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5d6739$g3p@news1.mnsinc.com>
Source record: 97820

Try some of the older ARRL Handbooks.

Maybe ask in r.r.a.boatanchors
or on the GLOWBUGS list.

"carl.ratcliffe3@virgin.net"@virgin.net whistled a happy tune like:

|>Does anyone no where I can get a cicuit diagram for a good QRP SSB TX to
|>build ?

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1368. older test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Chuck Schuler <cschuler@usaor.net>
Message-ID: <01bc1247.d1193780$2b8794ce@schuler>
Source record: 97821

Hi Hams and Experimenters:

I have two problems: a stuffed basement and an upcoming move.
I would like to sell a bunch of electronic/ham equipment to folks who
could come here and pick it up. Shipping is not an option at this
point in time.

If you could e-mail me or respond in some other reasonable fashion,
I will send you a list of the stuff and negotiable prices.

Thanks,

Chuck Schuler
W3MHQ

1369. Ham Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <32F6CB64.1915@cyberramp.net>
Source record: 97822

http://www.cyberramp.net/~rnewland

1370. Re: TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5d6733$g3p@news1.mnsinc.com>
Source record: 97823

GREAT Ian - we will be loooking forward to it.

Can you attach it as a binary file please?!

Ian Mitchell <ian.mitchell@research.utas.edu.au> whistled a happy tune like:

|>Gary Coffman wrote:
|>> Ok, that's not a reciprocating mixer since it uses an on-frequency
|>> LO. Could it be that the second diode is used for TR? Perhaps this
|>> is a single diode unbalanced mixer with the second diode DC biased
|>> to act as a Rx TR switch or overload protector. I can't really tell
|>> from your description how this circuit works.
|>>

|>Gary, I'll scan the circuit and post it tomorrow. I don't have the
|>patients for ASCII circuit drawing!

|>Ian

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com
Home of MEGALIST ham radio files, SWL info. etc. etc.

1371. Transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Tim Raffety <Tim_Raffety@Oxy.com>
Message-ID: <32F63DA1.697E@Oxy.com>
Source record: 97824

Anyone know of an aftermarket transverter for a Kenwood 940SAT to operate on 2 meters can be found?

Thanks!

1372. Pin diode tr/rc switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: Randy Alexander <alexan@teleport.com>
Message-ID: <32F6CBDA.565@teleport.com>
Source record: 97825

I would like to find a reference for pin diode tr/rc switches. I do not know how they work and would like to. Any help would be appreciated.
TNX Randy AB7QR

1373. WTB TWT Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: George Anderson <260anderson@msn.com>
Message-ID: <01bc1170$c20be4e0$cf112399@George.Monroe.edu>
Source record: 97826

Looking for Supply for Seimens RW289 Tube

1374. Re: older test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-03 00:00:00 UTC
From: dick@merlin.libelle.com
Message-ID: <dick-ya02408000R0302972218000001@news.zippo.com>
Source record: 97827

In article <01bc1247.d1193780$2b8794ce@schuler>, "Chuck Schuler"
<cschuler@usaor.net> wrote:

>I would like to sell a bunch of electronic/ham equipment to folks who
>could come here and pick it up.

Where is "here"?
--
Dick Flanagan W6OLD CFII Minden, Nevada
Visit http://wadg.greatbasin.net/siera/

1375. CB Mod. for 10 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: KaLiMaN <kaliman@multipro.com>
Message-ID: <01bc12a4$2e8780a0$64b278cf@multipro.com.kaliman>
Source record: 97643

I have heard you can modify some CB radio models for use on the HAM 10
meter band.
Can anyone tell me what models and what has to be done to use them.

mail to kaliman@multipro.com

Thanks in advance.
Kaliman

1376. TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: "Christian M. Arnaut Sr." <acetech@gatecom.com>
Message-ID: <01bc12aa$28e57d40$ad1157c6@acetech.gatecom.com>
Source record: 97644

Anyone have a schematic for a homebrew TNC? I remember reading about one in 73 a few years ago.

Thanks

Chris
N8TGC

1377. Request for Heathkit rotator controller info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Joe Scalet <jscalet@sound.net>
Message-ID: <32F749FB.503F@sound.net>
Source record: 97645

Does any one have a source code listing for the Heatkit computerised rotator controller HD/1750. I need to take out the delay/time out feature because my rotator (an ORION 2800) doesn't require a duty cycle limitation. I don't want to disassemble my controller untill I have a new prom/cpu programmed. With Heatkit gone some parts are made of unobtainium and I don't want to risk the cpu/eprom unnecessarily. Any info would be appreciated to email jscalet@sound.net tnx joe WK0G

1378. Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: pacyna@auratek.COM
Message-ID: <3.0.16.19970204101419.352718fe@galaxy.auratek.com>
Source record: 97646

Have been looking at a new active mixer from Analog Devices (AD831)

They call it a low distortion mixer. Following are some specifications.

+24 dBm 3rd order intercept
+10 dBm 1 dB Compression Point
-10 dBm LO drive

The LO input is through a high gain, low noise limiting amplifier that
converts the -10dBm LO input into a square wave.

The NE602A, also a Gilbert cell mixer, has -13dBm for a 3rd order intercept
and the 0 dBm at 1 dB compression.

Ed
W1AAZ

1379. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970204154300.KAA09483@ladder01.news.aol.com>
Source record: 97647

In article <measures-ya02408000R0302970821320001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>
> We have 4.32 ohms in series with 5pF (the anode-C of a 3-500Z) of the
>total tune C of 5pF +15pF=20pF at 30MHz. At 30MHz, 5pF has about 1100
ohms
>of reactance. How can 4.32 ohms of R in series with 1100 ohms of Xc
cause
>a 'serious HF Q degradation' when 75% of the HF tank current at 30MHz
does
>NOT pass through the 4.32 ohm resistance? Please show us the
calculations,
>Mr. Bertini and/or Mr. Rauch.

You have to watch out at every turn Peter, just like when he said claimed
I said using a resistor was a bad idea. Keep in mind he just says things.

The stuff above is a good example, Mr. Measures ignores several things.
Let me give you a hint to ask him about just one of them, the effects of
the series inductance in the path from the tank to the anode.

Arguing a complex circuit with five or ten major reactances should only
take a few months of time. It will take at least five exchanges of
spitting and hissing to get path inductance correct. Bet on it.

73 Tom

1380. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970204154300.KAA09489@ladder01.news.aol.com>
Source record: 97648

In article <K5BBkKA6Tl9yEwqG@ifwtech.demon.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> writes:

>
>Meanwhile Wes has already done what he asked, on his revised web page:
>
>"Some mathematical manipulation can demonstrate that shunting the
>conventional suppressor with additional resistance will bring the curves
>into better alignment. An additional 250 ohm resistor in parallel with
>the network will cause the Rp curves to nearly overlap the nichrome
>curves above about 30 MHz. Below 30 MHz, the Rp of the adjusted
>conventional type will be higher than the Rp of the nichrome device."
>
>So now Rich can cross this one off his list.

Mr. Measures magic nichrome suppressor is equal to a the Q a stock AL-80A suppressor with a 71 ohm resistor would have, instead of the 100 ohm resistor used.

Say, isn't that some improvement ?? Years of promoting how much lower the VHF Q is, and it's almost nothing.

The PA goes from a oscillating arcing nightmare, to a stable smooth perfect PA by adding an "invention" that lowers anode SYSTEM (look, I said system) VHF Q from about 3 to a new total of 2.9! Not only that, Measures SWORE he could measure that change clearly on his super dooper Q indicating GDO that is better than any network analyzer.

Rich, why not sell your customers a 68 ohm resistor for $50. It's a bigger improvement yet, so you should be able to charge even more $$$ for it! Maybe QST will run another article, describing how a change to a 68 ohm resistor will:

1.) Stop melting glass in Chinese tubes.
2.) Stop bandswitch arcing.
3.) Stop other tube failures like damaged, melted. bent or twisted grids or filaments.
4.) Stop meter failures.
5.) Stop plate choke failures.

ALL while making the PA notably easier to tune.

Perhaps someone in California is just having fun and at any moment is going to shout, "April fool"?

73 Tom

1381. Re: Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970204154400.KAA09496@ladder01.news.aol.com>
Source record: 97649

In article <32F54E46.4F11@tri.net>, stoskopf@tri.NET (Lawrence Stoskopf) writes:

>
>Anyway, he is/was a great guy and if he happened to lurk here a while
>before joining the discussion, I suspect he is now under deep cover.
>
>N0UU

Buzz received a post card from Measures that clearly indicated Measures was calling around checking on him. Measures told Buzz he never worked in the capacity he claims he did at Eimac.

Imagine what Buzz's past employers would think about some goof who has no business bothering them asking about what Buzz did when he worked there!

You can guess how happy Buzz is already about the calls to his employer.

73 Tom

1382. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970204154300.KAA09472@ladder01.news.aol.com>
Source record: 97650

In article <32f53900.153530860@news.airmail.net>, jfriley@airmail.net (J. Fred Riley) writes:

>
>I don't think the use of a current-limiting resistor was the subject
>of criticism. It was, rather, the type of resistor used. A
>current-limiting resistor is almost always a good idea. Using the
>wrong kind of resistor is almost always a bad idea. Using a resistor
>that's too "small" is sorta like using the low-voltage fuse in a HV
>line.
>
>

That's correct Fred. The non-surge rated resistor Measures suggested was a ten ohm 700 volt rated component.

FOr about two dollars more, the user could purchase a 35 ohm surge rated componet that would withstand fault impact without damage, and wouldn't arc internally from end to end.

The other problem was with Mr. Measures calculations. He assumed the ESR of the supplya and the entire poath was zero ohms in his example, when in fact it is much higher. In a typical PA like the AL-1200 the fault path ESR is about 12 ohms as is WITHOUT any resistor.

Adding a ten ohm resistor would lower fault current from 291 amperes to 159 amperes IF the resistor did not arc internally. Big deal.

Adding a correct style 35 ohm resistor would lower fault current to 75 amperes. That's a good improvement.

Adding the wrong type of 10 ohm resistor is a waste of time, unless the PA has a big oil filled cap, low resistance plate choke, and ypou are very lucky in a fault condition and the resistor does not arc internally.

Like in other areas, Measures clearly understood the point I made but chose to distort the data. It's a habit I guess.

73 Tom

1383. Re: 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb4.161129.16349@ke4zv.atl.ga.us>
Source record: 97651

In article <5d3272$t8h@news3-gui.server.cableol.net>
"carl.ratcliffe3@virgin.net"@virgin.net writes:
>I'm a new HAM and would like to build a portable 80m LSB Tx
>anyone got any good ideas ?

There are three basic ways to make a SSB transmitter. There is
the filter method, the phasing method, and the third method
(also called the Weaver method).

You can find examples of the filter method in almost every
modern commercial SSB radio. The phasing method found favor
in the early days, and it has recently made a comeback. Rick
Campbell's R2 and T2 use the phasing method, and a few DSP
based commercial radios do too, though it is well hidden in
the firmware. It is elegant and rather simple to implement,
but until recently it was hard to implement *correctly*.
The third method is also simpler to implement today than
in the past, but hasn't gained any real popularity.

The filter method requires superhet design, and a fairly
expensive filter. For a multiband rig, superhet doesn't
add much cost, but the filter does. The phasing method
can work directly on the desired frequency. This can
simplify design and cut costs, especially for a monoband
transceiver. You can even do the phasing at high level
and avoid the necessity of linear RF amplifiers to bring
the signal up to useful levels. With the filter method,
you have to do the SSB generation at low levels and follow
that with a chain of linear amplifiers. The hard part of
the phasing approach has been to generate precise quadrature
in the audio modulation.

That's been difficult because the audio spans a couple of
octaves, but all of it must be precisely phase shifted by
90 degrees. Complex RC networks were used in the old days.
B&W made a commercial phase shift network which was used in
many old designs. There have been a few later attempts to do
the phase shift with active filters, but complex RC networks
are still needed. Campbell's design uses such a network.

The reason that the phasing method has regained popularity is
that it is now trivial to get the necessary quadrature via a
Hilbert transform using DSP. With modern radios adopting DSP
for processing the received signal in transceivers, it is
logical to also use the DSP on transmit to develop the necessary
quadrature for SSB transmission. This is not expensive, only

a few extra lines of code, and the resulting radio can actually cost less than the filter method while having equal or superior performance.

I've been using part of the R2 design with an Analog Devices DSP evaluation kit to make a high performance receiver for arbitrary modulations. It would be trivial to apply the same approach to the T2 and yield a SSB transmitter with improved performance. I actually use a much simplified version of the T2 in conjunction with a sound card in a PC to make an arbitrary modulation data transmitter utilizing the phasing method. (A quardrature, also called I/Q, design can generate or demodulate *any* arbitrary modulation, AM, FM, FSK, PSK, QAM, etc. So it is a very powerful technique.)

>Where can I find a good circuit diagram ?

The Handbooks, either ARRL's or RSGB's handbooks, will have filter method designs suitable for your application, and the latest ARRL Handbook has Campbell's phasing design. There are also some kits available. Campbell's designs are sold by Kanga Kits. Filter method kits are sold by a few of the other QRP project suppliers.

Let me note here that QRP SSB usually isn't very effective on the 75m band. Due to the high atmospheric noise and the heavy QRM on this popular and crowded band, you usually need some power to be effective. I'd suggest that 100 watts be considered the comfortable minimum for SSB operation. You can sometimes use much less, but often you need even more power. So a QRP kit may not be the best way to go.

An interesting approach would be a modern high level phasing rig. This could all be done Class D, and would be very compact and efficient. (That would be very challenging for someone at your level of experience, but perhaps one of our more advanced builders might like to take it on.) Switch mode power FETs could be configured as the balanced mixers/PAs for the high level stage. Suitable devices for 75m are available inexpensively. This would be great for portable use due to the small size and high efficiency possible with Class D operation. Anybody interested?

Gary
--
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Lawrenceville, GA 30244 | |

1384. NEED HELP FEEDING AUDIO INTO REPEATER TXMTR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19970204173400.MAA14961@ladder01.news.aol.com>
Source record: 97652

Hi,

I have built a "Repeater Controller", that uses an audio transformer
and some other parts to step up the voltage in order to close a relay,
which keys the transmiter radio. I am just having a tough time getting
the audio in to the transmiting radio. It is either overdriving or
underdriving the circuit. Any help would be greatly appreciated. If you
need a schematic of the controler, I can E-Mail you a gif.

Thanx in Advance
Mike

HQ54@Aol.Com

1385. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb4.164113.16550@ke4zv.atl.ga.us>
Source record: 97653

In article <5d5t8f$rmg@hpscit.sc.hp.com> rkarlqu@scd.hp.com (Richard Karlquist) writes:
>In article <5d2jk5$h5r@geraldo.cc.utexas.edu>,
>Barry Newberger <bsn@fusion.ph.utexas.edu> wrote:
>>I seem to recall a discussion (perhaps collateral to DDS using MSB) in
>>which it was pointed out that it is advantageous to drive mixer circuits
>>(maybe a particular class of mixer circuits, e.g. diode ring) using a
>>square wave LO rather than a sine wave.
>
>You see this written from time to time. I happen to disagree with
>this opinion, as a general matter. It sounds reasonable to drive
>mixers with a square wave since one is trying to switch the diodes
>on and off. The reality is that square waves do not go through
>transformers very well, so you should really stick with a sine
>wave in most cases. What really makes mixers happy (at least
>below 100 MHz.) is to be driving from a current source of sine
>wave.

I think the answer to that particular problem is to not require
the square waves to go through transformers. I'd suggest using
FETs as the switch elements of the mixer, and drive the gates
directly (in opposing pairs of course).

>Another problem with square wave drive is that if you don't make
>the duty cycle exactly 50%, you degrade the mixer performance.
>It's easier to make a distortionless sine wave (with a low pass
>filter) than a perfect square wave.

That's a problem. Even 2% phase error can cause significant
degradation of performance. At first glance, using a 2x LO
and a flip-flop divider would seem the logical choice, but
most FFs tend to have a degree of timing jitter which makes
this a problem. With a digitally synthesized LO, however,
you can make the symmetry arbitrarily close to perfect by
increasing the number of synthesis steps. You can also use
a walking ring circuit with an even number of stages to
guarantee symmetry to an arbitrary degree.

This latter method also looks attractive as a way to get
quadrature signals over a fairly broad range of frequencies.

Gary
--
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Lawrenceville, GA 30244 | |

1386. 624 Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5d80dr$3tn@news.teleplex.net>
Source record: 97654

As most of you have heard , 624 Kits is no longer in business except for offering the 100 watt output 6 meter amplifier and a 6 meter receive converter.

I have a very large amount of leftover parts, PC Boards, crystals toroids ect that I wish to rid myself of. If you are interested as a club or individual please Email me for a list.

Pat Bunn
N4LTA

1387. inductance calculator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Dave Hockaday <wb4iuy@ipass.net>
Message-ID: <32F7AF07.50A@ipass.net>
Source record: 97655

Is there a good program out there for calculating the dimensions of strip and PC board inductors? Also looking for a filter design program that with templates/examples that will allow manipulation of component values.

Please email direct to wb4iuy@ipass.net
Thanks

1388. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970204201300.PAA23441@ladder01.news.aol.com>
Source record: 97656

In article <measures-ya02408000R0402970132530001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

> In other words, the arcing that destroyed the original bandswitch and
the
>replacement bandswitch in Rick May's AL-80 can not be explained by a load
>fault. The only thing that was altered after bandswitch #3 was the
VHF-Rp
>of the VHF suppressor in the AL-80. The original suppressor has an Rp of
>about 166 ohms at the anode resonant frequency of160MHz. The replacement
>suppressor has an Rp that is around 101 ohms at 160MHz. Since voltage
gain
>is essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain. //
>The e-mail address of Rick May is listed on my Web page if you need more
>answers.

What a large change! From 166 ohms to 101 ohms! No wonder the suppressor
cures everything from arcing tubes to exploded meters.

Seriously, the problem is Rich doesn't understand the system well enough
to realize the "large" change is diluted and the expected effects reversed
by the rest of the system.

A HIGHER impedance suppressor actually reduces the tendency to of a system
to oscillate much MORE than a lower impedance suppressor. Here's
why....and pay attention to this carefully because it will show how little
Measures understands the very thing he has become a guru of....

Measures claims above:
>of the VHF suppressor in the AL-80. The original suppressor has an Rp of
>about 166 ohms at the anode resonant frequency of160MHz. The replacement
>suppressor has an Rp that is around 101 ohms at 160MHz. Since voltage
gain
>is essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain. //

Here's the path:

tube-----L1-----sup-------L2--------XL------bandswitch
^
Plate tune

The tube is a time varying resistance in shunt with several pF of C (not
exactly the 5 pF of pure C measured in a four foot box with only a
vertical transmission line used in the Eimac data). From the tube to the
suppressor we have series L and shunt distributed C represented as L1
(meaning line 1) . From the suppressor to the tank we have series L and
shunt distributed C trepresented as L2 (or line 2).

From line two we have a fairly low reactance to ground, and then the path branches off to XL (the tank inductor) and the bandswitch.

At different frequencies the total impedance of this path varies widely. At lower frequencies the tank and tube impedances dominate, at higher frequencies the tube (including grid lead impedance), L1, L2, sup, and plate tune dominate.

Here's what we can all clearly see. If the suppressor is a LOW impedance compared to the entire path of the system it will have VERY little effect on Q or circuit loading. It only has a major effect when it's impedance is HIGH compared to the path impedance.

Using logic nearly anyone is capable of understanding, we can solve this problem by going to the extremes of impedance and looking at the system.
As a reminder, Measures claims above:
>of the VHF suppressor in the AL-80. The original suppressor has an Rp of
>about 166 ohms at the anode resonant frequency of160MHz. The replacement
>suppressor has an Rp that is around 101 ohms at 160MHz.

He "thinks" this lowers gain, because he considers it the ONLY element in the circuit. He considers it a direct connection in series with the anode to voltage source, and everthing else in the system is vanished from view!

Take Mr. Measures claim that a lower impedance helps to the extreme, and build a suppressor with the lowest possible parallel equivalent impedance.

That suppressor would be a short circuit. If we replace a conventional suppressor with a direct short the PA will be more stable, according to Mr. Measures logic, "Since voltage gain is essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain."
HE said that, not me. He said what amounts to just shorting the suppressor out will produce the lowest VHF gain and most stability!!!!!!!

Isn't that amazing? The guy who knows so much more than anyone else about suppressors and knows EVERYTHING everyone else does wrong argues clearly (in his own words) the best possible suppression comes from the lowest possible impedance suppressor.

That clearly means a direct short (NO suppressor at all) is the best suppressor, and a pure 1000 ohm resistance in series with the anode would INCREASE VHF gain!!!

Unreal!

Anyone with even the most elementary experience with audio amplifiers knows quite well that a LOW value anode to source resistor INCREASES high frequency response in the amplifier, while a high series resistance LOWERS the high frequency rsponse.

Mr. Measures, on the other hand, argues that his magic nichrome has a lower impedance, and thus LOWERS VHF gain! He clearly argues with less impedance, the PA is more stable. Exactly the opposite of what the most elementary common sense tells us happens!

Which is it Measures? Do we want a lower impedance, like your suppressors offer? Do we want a higher value of impedance like the 80A uses? Will an unstable amplifier be more stable with a zero impedance suppressor, or will adding turns (increasing the inductance and impedance) improve stabilty?

Does anyone out there use the Measures method of removing turns until the PA QUITS oscillating? All my life, I've done the opposite. If you look at the most unstable tubes, they ALL use the higher values of suppressor impedance. Those idiot designers.

Even W4QQ made a big mistake (according to Measures), because he parallel resonanted his suppressor..... guaranteeing maximum impedance at the parasitic frequency. I wonder why that worked, since it disagrees with the Measures theory of stability.

If you look carefully at that big bunny in the battery commercial....you'll see the springs on the drum are nichrome. At least I have an inking they are.

Rich, you demanded I discuss this "Since voltage gain is essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain." thing with you. You were right, we did need to talk about it. I had no idea you didn't understand circuit analysis related to gain. But I really think you need to figure out how the tuning capacitor works first, before you argue gain. Later on, in a year or two, we may be up to the point of discussing gain.

In the mean time, take your hi-fi amplifier and increase the load resistances through all the stages, that will really improve HF response. In the mean time, if you run across a PA that oscillates, lower the suppressors resistance and inductance!!! That will work too. (Seriously to anyone left reading this, don't do that. Such things only work if you live in a pathological science world.)

Rich, it's very clear you have no idea how suppressors work. You just say things.

73 Tom

1389. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Frank Erskine <frank@g3wte.demon.co.uk>
Message-ID: <y7ZBrDAcs39yEwtn@g3wte.demon.co.uk>
Source record: 97657
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

In article <5d7ald$9gc@news.ld.centuryinter.net>, mike rice
<m26@juno.com> writes
>I didn't get it right away. A digital spred must be one of the 900
>mhz portables used in homes and costing a good deal more than
>46-49 mhz equipment.

MilliHertz? Rather a low frequency!
--
Frank Erskine
Sunderland
http://www.g3wte.demon.co.uk/

1390. looking for eimac 4x600/yu-118

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Gary Longrie <longrie@mmace.nrl.navy.mil>
Message-ID: <32F74EC3.1B9@mmace.nrl.navy.mil>
Source record: 97658
Cross-posted to: rec.audio.tubes,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

hello to all

I am looking for eimac 4x6oo/yu-118 radial power tetrode.
Will buy several pairs if I can find them. email to me
with your particulars.

thanks

gary longrie
vacuum electronics branch
code 6840
naval research laboratory
washington dc 20375

longrie@mmace.nrl.navy.mil

_____end

1391. Re: VLF ferrite rod antenna questions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: hill@rowland.org
Message-ID: <5d89q8$49t@fridge-nf0.shore.net>
Source record: 97659
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Steven Swift at novatech@eskimo.com says...
>
> I know it's bad form to follow-up on your own article, but here's an
> approximately correct closed form solution.
>
> Let L=length of rod
> d=diameter of rod
> Um=material permeability
> Ue=effective permeability
>
> The following formula are almost right:
> set k = 0.022*exp(-0.039*L/d)
> then Ue = Um/(1+k*(Um-1))
>
> References: Chapter 4, "Communications Receivers," Rohde, Whitaker,
> Bucher and Chapter 4, "VLF Radio Engineering," Watt.

Did you ever compare these formulas with thos in Snelling's book "Soft Ferrites?" They look somewhat different. Snelling also has sets of measurements on various geometries and permeabilities.

--
Winfield Hill hill@rowland.org
Rowland Institute for Science
Cambridge, MA 02142

1392. 80m SSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: "carl.ratcliffe3@virgin.net"@virgin.net
Message-ID: <5d8963$pgq@news3-gui.server.cableol.net>
Source record: 97660

Anyone know where I can get good SSB QRP circuits on the net ?

1393. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970204231301.SAA03825@ladder01.news.aol.com>
Source record: 97661

> However, the typical filter capacitor in a typical 1500w amateur
> radio amplifier has about 10 ohms of ESR. How much current is 2800V/10
> ohms (more blah, blah -- snip, snip....)
>
> In the Sept. 1994 QST critique of the Jan. 1994 QST article "The Nearly
> Perfect Amplifier", my suggestion about using a peak fault-current
limiting
> resistor in the anode supply was pooh-poohed by the (self) 'recognized
> amplifier expert'.

?

Rich, I would rather discuss why you tried to BS me and this newsgroup
regarding the merits of using a peak fault-current limiting resistor
in the anode supply path.

You claimed that Mr. X pooh-poohed the idea. But, isn't it a
fact that Mr. X's concerns on this matter were instead directed
at your claims that a 10-ohm resistor with a 700-volt
rating would be adequate for the purpose?????

Weren't your original claims based on your assumption
that the plate supply had an ESR of zero ohms? Isn't a figure
of 16 ohms closer to reality, Rich? Or, are you
choosing to ignore the added resistance of the plate choke
and meter shunts? The winds are shifting again. Go check your
smoke detector batteries.

Why are you out-and-out misleading us, Rich?

> So why does the 10m bandswitch contact sometimes arc.?

Spiders? Dust balls/cat hairs?? Photons??? Go for it!!

> An open 10m contact
> probably has around 1 pF. The typical 10m section of a tank L has
around
> 0.9uH. The series-resonant frequency is 170MHz. In an AL-80, this is
in
> the neighborhood of the anode circuit's resonance at 160MHz. Thanks to
Mr.
> Rauch's measurements, we know that the AL-80's tune capacitor has no
> resonances in that neighborhood.

Yo ho, Rich!!! Hellooooooooo?

Are you adjusting reality to fit your opinions again?
Didn't Mr. Rauch ALSO show that the plate tune
capacitor had such a low value of XL that it would be
impossible to develop the levels of VHF you claim?
Isn't the tune capacitor shunting
the RF path to ground before the bandswitch? Is the gap
across between the rotor/stator plates that much further
apart than the the bandswitch contacts? Take the XL and the
DC resistance of the capacitor, calculate the impedance at
at 160 MHz, and tell me what the voltage drop will be. Don't
go on another tangent about non-existent resonances.
>

>>A question: Peter--If you were designing an HF amplfier, would you want
a
>>VHF parasitic oscillation suppressor that exhibited more (or less)
VHF-Rp
>>than another type of VHF suppressor?
>
Rich, I would honestly want a suppressor that did
not compromise the operating Q of the amplifier at
HF frequencies.

> Did you accept someone's word that this was the case, or did you
calculate
> a typical tank Q reduction, based on Wes' ESR measurement for a Ni-Cr Ls
> suppressor at 30MHz (4.32 ohms) and/or at 10MHz (0.88 ohms)? If you did
> the calculations, Peter, I would appreciate seeing how to do it, and how
to
> calculate what the probable increase in harmonic output would be. I
don't
> have a clue as to how to proceed.

I am sure the harmonic output relating to Q is the most
easily solved portion of the puzzle. Various handbooks show
computer modeled values for Pi and Pi-L networks for a variety
of tube load impedances and the harmonic suppression based
on the selected value of loaded Q.

I am not experienced in the design of RF power amplifiers.
But, I have given some thought to solving the reduction of loaded
Q in a the plate tank circuit based on the HF Q of the suppressor.
There is no simple solution to your question based on what you
presented. But then again, you chose to neglect numerous variables.
The effect of the tube plate lead inductance, the fact that the
tube is a varying resistor in operation, the reactance of the
plate blocking capacitor, interconnecting straps, grid
bypassing scheme -- all these and more would come into
the final equation in one form or another.

> blah, blah, snip >>>Do you accept Mr. Rauch's conclusion?

Rich, this is what I accept. I accept Wes' calculations of your suppressor. I accept both Mr. Rauch's and Ian Smith's observation that a conventional suppressor -- with slight adjustments -- can be made to be as effective at VHF as a suppressor wound with either rusty bailing wire or nichrome.

Rich, do you accept Wes's measurements as being accurate?
Mr. Rauch has stated from day-one that a simple adjustment would permit a conventional suppressor to perform as well as your nichrome wound suppressor. Now that Wes's data is available, others are reaching the same conclusion. Are they all part of a great conspiracy?

> I haven't seen a VHF suppressor design that uses a C. What does this
> circuit look like?

I believe Phil, K5PC, answered this a month or so back when I posed a query regarding the use of RCL components in suppressors. He pointed out that this was done by W4QQ in a 1974 Ham Radio project. I also understand that the "self-proclaimed" amplifier expert has used RCL suppressors in some of his Ameriton designs.
W4QQ was able to reduce what would have been a rather large value of XL by parallel resonating the suppressor to 110 MHz, the resonant frequency of the 4-1000. Tom has used fixed capacitors in series with the suppressor resistor to cancel the XL of that device. (series resonance) This eliminates RF voltage drop across the XL component of the resistor, allowing full dissipation of VHF energy in the resistor. Clear enough? Care to muddy the waters?

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1394. Receiver- kit for Weather Sat.'s

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: abom@iaehv.nl
Message-ID: <32f7bf9b.12338516@news.iaehv.nl>
Source record: 97662

Hallo, weather satellite- fans

Last year I developed a weather satellite receiver for receiving all
polar satellites. The receiver will be connected to the soundblaster
card in the computer. In combination with a shareware file beautiful
pictures can be received.

Because we had such a good results we intend to publish the complete
electronic design inclusive the print- layout on internet.

Some technical details.

* Manual tuning from 136- 139 MHz.
* Kepler compensated
* Squelched Loudspeaker output.
* Non- squelched soundblaster output.
* Signal strength indication.
* Very Sensitiv for weak signals (0.12 uV/ 12dB sinad)

When you are interested in rebuilding the receiver, please mail us.
At sufficient interest it will be possible for us to order
professional print boards and to supply the special components.
Further it will be possible to give technical support during building
the receiver.
When you are interested in building a low cost and a good performance
weather- receiver let us know.

Best regards,

A.Bom
Veldhoven
tel: +31 40 2539851
email: abom@iaehv.nl
email: pa0axb@amsat.org

1395. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5d8hl7$odj@hpscit.sc.hp.com>
Source record: 97663

In article <1997Feb4.164113.16550@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:

>>Another problem with square wave drive is that if you don't make
>>the duty cycle exactly 50%, you degrade the mixer performance.
>>It's easier to make a distortionless sine wave (with a low pass
>>filter) than a perfect square wave.
>
>That's a problem. Even 2% phase error can cause significant
>degradation of performance. At first glance, using a 2x LO
>and a flip-flop divider would seem the logical choice, but
>most FFs tend to have a degree of timing jitter which makes
>this a problem. With a digitally synthesized LO, however,
>you can make the symmetry arbitrarily close to perfect by
>increasing the number of synthesis steps. You can also use
>a walking ring circuit with an even number of stages to
>guarantee symmetry to an arbitrary degree.

This doesn't solve the problem of unequal rise and fall
times. The only way I know of to do that is to use two
flip flops operating 180 degrees out of phase driving
the mixer thru a combining transformer. But there you are
back to a transformer passing square waves again.

>Gary Coffman KE4ZV | You make it, | Due to provider problems

Rick Karlquist N6RK
rkarlqu@scd.hp.com

1396. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970204201335.13210A-100000@Ocean.CAM.ORG>
Source record: 97664

I remember an article in Elementary Electronics a quarter century ago describing a crystal set for the aircraft band. It was indeed just an LC circuit feeding a diode, a 1N82 if I remember correctly (which I thought was a schottky diode) and an audio amplifer feeding an earphone. The thing was promoted as being legal for use in an airplane, since it was only a diode detector, rather than a superheterodyne or superregnerative receiver, both of which radiate signals that could interfere with the aviation electronics.

They made the point that it was good enough to hear what was going on in the cockpit; the signals were strong enough for you to hear them. I guess that takes care of the selectivity problem that somebody else mentioned; you may hear all the airplane generated signals, but you're aren't going to receive a lot of traffic. As the plane came closer to an airport, you'd hear the transmissions from it. The article also mentioned being able to hear radar signals, which indicates the very wide selectivity of the thing. In fact, I think the lack of selectivity was promoted as an advantage, since you didn't have to worry about tuning it. Sort of like an early aero-band scanner.

Bill Hoisington, K1CLL, in his many articles 73 was always talking about diode receivers as a great means of checking gear for good modulation and weird feedback. He'd go into great detail on making good trf diode receivers for VHF. Look in back issues from about a quarter century ago.

Michael VE2BVW

On 26 Jan 1997 12:32:10 +0800, henryt@perth.DIALix.oz.au (Henry Titchen) wrote:

> Hass anyone had any experience with making crystal sets using
>germanium diodes for VHF bands? I am interested in knowing if it is
>possible to use a germanium diode crystal radio to pickup airband
signals.
> I have very vague memories of a kid at school owning a pen sized
>airband receiver.
> If it is possible can I just use the standard crystal radio design but
>alter the LC circuit to the frequencies of choice?

1397. Re: Newsgroup Wishlist

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: robert@kd3bj.ampr.org
Message-ID: <robert.855099618@kd3bj.ampr.org>
Source record: 97665
Cross-posted to:
rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,news.admin.hierarchies,news.groups

Ted <teddyb@die.spam.die> writes:

>This post was manually optimized for use with voice synthesyzer. Some
>items may appear to be misspelled to the sighted, but they have just
>been spelled more phoneticly.

>On Sunday, January twenty sixth 1997, Dana Yeomans wrote:

>hi there, i aggree with you, i am blind, and have to listen to the voice
>synthesyzer, and i wish they wouldn't post pictures on web sights. the fellow
>that invented netscape should have his but kicked, because it don't do the
>blind any good. so take care all from n4pge in griffin, georgia.

>My reply to Dana is as follows:

>May I suggest that you switch to a text based browser such as lynx?

>To use lynx, you would need an internet account called a unix shell
>because lynx is a unix program which you operate remotely using an
>ordinary emm ess doss based terminal program such as telix for windows
>which has the type of terminal emulations most compatable with lynx such
>as vee tee one oh two.

>Since lynx is purely text based you should have much less trouble from
>any pictures you would have encountered on web sites using a frame based
>browser such as netscape.

>Lynx is not very hard to learn. It has key press commands instead of
>the point and click icons so your voice synthesyzer will almost never
>find something that it can not read. The only graphic visual effect it
>has are the hyper text items which activate another you are ell if you
>highlight the hyper text by positioning your cursor over it with your
>down arrow or space bar and then hit your enter key. However, lynx can
>allow you to toggle it to display numbered choices instead, if the web
>page you are on allows it.

>I just thought that I should mention lynx to you in case you had never
>heard of it or did not know what lynx was. If I have not presumed
>incorrectly, your voice synthesyzer program probably works better when it
>encounters text than graphics. If so, then maybe my suggestion can help
>your situation.
>You can get a fair price on a unix shell account for twenty dollars
>per month with unlimited hours from a company called prime net.
>prime net is correctly spelled as one word.
>spelling is pea are eye emm ee enn ee tee

>The toll free number is for prime net is 1, 800, 4 6 3, 8 3 8 6

>Ted

And now for my addition

Thanks, Ted. I am sighted, but prefer lynx for many things. My
experience with graphical browsers is that they are fine for high speed
connections, but grat too it us grafix are a real pain. I am after
information, not someone else is idea of art. Maybe that is why I prefer
command driven systems to gooey interfaces.

Robert

signature lines follow, but may not come out well when heard.

--
Robert Garland NX3S @ N3ACL.PA.USA.NOAM
Hilltown Township Bucks County robert@kd3bj.ampr.org
Pennsylvania USA Grid FN20ii
"Ham Radio is a calling"

1398. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0402971738170001@news.vcnet.com>
Source record: 97666

In article <19970204154300.KAA09472@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <32f53900.153530860@news.airmail.net>, jfriley@airmail.net (J. Fred Riley) writes:
>
> >
> >I don't think the use of a current-limiting resistor was the subject
> >of criticism. It was, rather, the type of resistor used. A
> >current-limiting resistor is almost always a good idea. Using the
> >wrong kind of resistor is almost always a bad idea. Using a resistor
> >that's too "small" is sorta like using the low-voltage fuse in a HV
> >line.
> >
> >
>
> That's correct Fred. The non-surge rated resistor Measures suggested was a
> ten ohm 700 volt rated component.

Actually it's rated at 10 volts maximum--i.e., E=(R*P)^0.5 = 100^0.5=10v. However, job at hand is typically discharging a 25microfarad capacitor that is charged up to around 2800v. In round numbers, that's about 100 watt-seconds (a.k.a. joules). In the beginning, we used a cheaper 10 ohm 10w resistor, but they broke down in this application. We switched over to a 2-inch long, glass-coated design that seems to be able to handle the job without breaking down between the turns of resistance-wire. For 3kV or more, we recommend using two of them in series to keep the voltage gradient per turn within the capability the resistors.

> FOr about two dollars more, the user could purchase a 35 ohm surge rated
> componet that would withstand fault impact without damage, and wouldn't
> arc internally from end to end.

Cesivid quoted me a price of just under $10,000 for 1000 surge-rated units. Cesivid Co.'s telephone number is 716 286 7610.

>
> The other problem was with Mr. Measures calculations. He assumed the ESR
> of the supplya and the entire poath was zero ohms in his example, when in
> fact it is much higher. In a typical PA like the AL-1200 the fault path
> ESR is about 12 ohms as is WITHOUT any resistor.

The article says: "During a major glitch, the anode (plate) current meter is subjected to a current surge as the HV filter capacitors discharge. Such a current is several hundred peak amperes. Several thousand volts divided by 'zero ohms' is not several hundred amperes. Try dividing several thousand volts divided by 10 ohms and see what you get, Mr. Rauch.

The added10 ohm glitch resistor came later.

12 ohms seems pretty high. There must be lots of ESR in the AL-1200's filter capacitors. With 0.7a of ripple current, you could be dissipating plenty of heat in the electrolytic filter capacitors. Which capacitor manufacturer made them?

> Adding a ten ohm resistor would lower fault current from 291 amperes to
> 159 amperes IF the resistor did not arc internally. Big deal.

It is a big deal to us because we use 200a-maximum glitch protection diodes.

> Adding a correct style 35 ohm resistor would lower fault current to 75
> amperes. That's a good improvement.

True enough. But how low do we need to go? Svetlana recommends 10 ohms to 25 ohms for a 1500w tube. Would anybody like to guess whether or not Ameritron/MFJ amplifiers use a 'correct style' resistor?

> Adding the wrong type of 10 ohm resistor is a waste of time, unless the PA
> has a big oil filled cap, low resistance plate choke, and ypou are very
> lucky in a fault condition and the resistor does not arc internally.

The previous paragraph does not appear to make sense.

Where is Mr. Miklos?

BTW, Tom it looks like your spell-checker has developed some ESR.
---
e-mail copy to Mr. Tom Rauch

--
--Rich-- ag6k, 805-386-3734

1399. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.254.0203FB68@azstarnet.com>
Source record: 97667

In article <5d8s7o$sm6$1@news-s01.ny.us.ibm.net> subich@ibm.net (Joe Subich) writes:
>From: subich@ibm.net (Joe Subich)
>Subject: Re: good source for amplifier tips
>Date: 5 Feb 1997 02:45:12 GMT

[snip]

>*SO WHAT!* Even Wes Stewart, who made the measurements you are so
>fond of quoting now states that the supressors do not operate in the
>parallel mode (Rp is not significant) but rather operate as a SERIES
>component in a COMPLEX network which includes the tube output
>capacitance, the stray capacitance from the plate blocker to ground,
>the parasitic inductance in the plate blocker, stray reactances in
>the plate choke, etc.

Hold on there counselor. You are putting words in my mouth. I did not state
that suppressors do not operate in a parallel mode and that Rp is not
significant. Clearly, the way a suppressor is configured, it is a parallel
network. Equally clear is that it operates in series with the remainder of
the circuitry.

Every parallel network has an equivalent series one (an vice versa), which
when measured independently is indistinguishable from the other. This does
not mean that the equivalent networks behave the same when imbedded in another
network.

I offered to make the measurements as an unbiased third party. This is what I
do for a living. This does not mean that I don't have an opinion, just that I
try to keep my opinions from coloring my judgement; again part of my job.

I published the data for everyone to use in making his own judgement. Frankly,
I'm not personally convinced that extrapolating some isolated laboratory
measurements into a definitive statement about the relative "goodness" of a
particular circuit is good science. Sounds more like lawyerin' to me:)

[snip]

Respectfully,

N7WS

1400. Re: Pin diode tr/rc switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <32F81196.7CCE@imaxx.net>
Source record: 97668

Randy Alexander wrote:
>
> I would like to find a reference for pin diode tr/rc switches. I do not
> know how they work and would like to. Any help would be appreciated.
> TNX Randy AB7QR

A few good design references are:

PIN Diode Designers Handbook and Catalog by Unitrode Corp
#PD-500C Last known Phone # 617-861-6540

PIN Diode Designer Guide by Microwave Associates 1980
Last known Phone # 617-272-3000

--

Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net

1401. Re: NEED CURCUIT THAT WILL SUPPLY 12 VOLT DC PULSE BETWEEN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: miker <Nospam.mreiney@hevanet.com>
Message-ID: <32F8289C.3B12@hevanet.com>
Source record: 97669

HQ54 wrote:
>
> Hi,
>
> I looking to build a cercuit that can monitor a batteries voltage, and
> when that voltage falls below a predetermined voltage, in this case
> approximately 9 to 10 volts, will supply a pulsed 12 (or 9 or 10 volts)
> for a duration on 50 ms to 1 second. If any body can help me, or needs
> any more info regarding my needs for this cercuit, feel free to E-Mail me.
>
> Thanx in Advance
> Mike
>
> HQ54@Aol.Com
I suspect a lot of us could help, but we'd need a lot more input than
<paraphrasing>
"I need a circuit to sense some voltage then supply some voltage for
some time..."
--
To reply, remove "Nospam." from the return address.

1402. Re: Driving Mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5d856h$dcp@hpscit.sc.hp.com>
Source record: 97670

>Rick Karlquist wrote asking for a square-wave mixer driver success story.
>& Ed Pacyna provided a very interesting account of the theory behind such
>mixers.
>The story Rick wanted (with a very happy ending) may be found in QST for
>February of 1993 in the article "A High-Dynamic-Range MF/HF Receiver
>Front End." J. Makhinson uses square waves to switch FET switching

<snip>

> Dave KE9ED

Just to clarify my posting, I was referring to double balanced
diode mixers where the LO is injected thru a transformer. For
FET mixers or Gilbert multipliers, I agree that square wave drive
is better, IF YOU MAINTAIN 50% DUTY CYCLE.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

1403. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5d622c$9m8$1@news-s01.ny.us.ibm.net>
Source record: 97828

In message <measures-ya02408000R0102970417170001@news.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures) writes:
:>
:>
:>Do these wires run around the bandswitch? In every amplifier I have
:>seen, the bandswitch leads follow a direct route to the corresponding
:>tank inductor taps I have never seen a case of bandswitch contacts
:>arcing to anything but to open contacts, and to the rotor.
:>

Definitions of "around" include "running in all directions" and
"somewhat
close to" both of which would apply to nearly every bandswitch I have
ever seen. No legitimate amplifier builder would wrap leads from the
coil to the switch completely along the circumference of the switch as
you wold imply.

Yes, there are wires around the bandswitch in that there are wires
running in all directions from the switch.

:>
:>HF arcs are typically blue, not purple. HF arcs are unlikely to cause
:>interference to a particular TV channel. HF arcs are probably not going
:>to peg a VHF field strength meter in the same room. IMO, HF is unlikely
:>to masquerade as VHF on a spectrum analyzer.
:>

I don't know of many commercial amplifiers, particularly amplifiers by
manufacturers you have so regularly libeled, that would allow observing
the color of of any arc while operating.

An arc contains all manner of harmonics. Since you claim to have
measured
high-Q VHF resonances in the plate circuits of many commercial amlifiers
it is entirely possible that a high-Q resonance would allow the
radiation
of sufficient VHF energy to be detected on a particular TV channel or
peg
a sensitive VHF field strenght meter.

The only reported and documented observation by spectrum analyzer is
that
by Marvin Born on a nototiously unstable Create 3CX3000 amplifier ... an
amplifier that *YOU* have insisted on claiming (many times) was an
Ameritron AL-1500.

:>
:>You did not explain why a load fault was not subsequently discovered in
:>the antennas or feedlines. Why did the mysterious arcing cease after
:>the VHF-Rp of the VHF parasitic-oscillation suppressors was decreased?
:>

The problem need not be confined to the antennas and/or feedline. It
could also have been an antenna switch, the T/R relay, a coax cable, or
a lightning arrestor (or are you going to hide that story again?).

:>
:> Are X-rays and Gamma-rays charged particles, Joe?
:>

Not a subject of this discussion ... AT&T claim the solar event was not
the cause of the failure.

:>
:>Are you saying that geosynchronous satellites do not travel in and out
:>of Earth's shadow, Joe?
:>

Of course they do ... however, if this had been caused by a solar event
it would nost sretainly have also damaged other TV satellites of the
same
or similar design within a few degrees of T401. However, since all of
this flies in the face of your pseudo-science you will ignore it or
distort it as usual.

==========
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<subich@compuserve.com>
==========

1404. Re: TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Ian Mitchell <ian.mitchell@research.utas.edu.au>
Message-ID: <32F65F7D.5AC6@research.utas.edu.au>
Source record: 97829
Body handling: Binary attachment payload not displayed: ttltrans.gif

Gary Coffman wrote:
> Ok, that's not a reciprocating mixer since it uses an on-frequency
> LO. Could it be that the second diode is used for TR? Perhaps this
> is a single diode unbalanced mixer with the second diode DC biased
> to act as a Rx TR switch or overload protector. I can't really tell
> from your description how this circuit works.
>

Ok, here is the circuit in GIF format. Hope you get it ok.

While scanning the image I noticed that L2 is specified as 100uH, which
seems to large a value for a 40m receiver?

Cheers, Ian

[One or more binary attachments are retained only in the source text.]

1405. lowfer 1 watt xmtr. schematic wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: NNPW28A@prodigy.com
Message-ID: <5d637t$mgi@usenetp1.news.prodigy.com>
Source record: 97830

I would like to obtain a schematic diagram of a good clean lowfer one watt transmitter that can be operated in the 160 to 190 khz band with AM modulation capibilities. Or would possibly be willing to buy a "home brew" unit already built. Please advise by e-mail to NNPW28A@PRODIGY.COM.

1406. Re: need help with wire dipole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <5d64lb$72f@q.seanet.com>
Source record: 97831
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

cmoore@vegas.ch.intel.com (Cecil A. Moore~) wrote:

>In article <31B2801E.3B54@vertex.ucls.uchicago.edu>,
>Isaac Kohn <ikohn@vertex.ucls.uchicago.edu> wrote:

>>Cecil, I'd love to know how exactly you did that (cap. value, wiring).

>Hi Isaac, The thing that makes it all possible is a Ladder-Line
>Length Selector (no, I don't sell them). Using digital techniques,
>it is possible to use 'N' relays to obtain 2^N variable feedline
>lengths in increments of 'N'. I've found one foot increments to
>be about right. So with 5 relays, one can get 0-31 ft in increments
>of one foot. Varying the length of the ladder-line is the most
>effective matching technique I know. Using that technique, you
>can bring the current maximum point to the capacitor which will
>result in a purely resistive impedance of 50 ohms, 75 ohms, 200
>ohms, 300 ohms, or 450 ohms (take your choice) all within 0.1 WL
>of the current maximum. You can use *any* balun you have available.
>You can find the current maximum with a $15 Ladder-Lizard from
>TechnoLogic Concepts.

>I can't post my whole application note here. It is available from
>TechnoLogic Concepts, TLCdhconsult@delphi.com I don't get a
>penny from the publishing, I just want to spread the word.

>Note the implications: Ladder-line is less lossy and less
>expensive than coax. Using ladder-line allows for a low-loss
>all-band HF antenna except for the balun/tuner problem.

>But it is easy and advisable to achieve a match on the ladder-
>line side of the balun. It can be done with a single variable
>capacitor. You don't need a commercial antenna tuner at all!

>If I were an HF antenna tuner manufacturer, I would start
>designing a Z0-matched relay switching network cuz that's
>all that is needed besides a $10 variable capacitor to
>beat the socks off the presently commercially available
>configurations.

>73, Cecil, KG7BK, OOTC (not speaking for my employer)

Hi Cecil,

I noted your posting above last summer and was struck by how we have
similar intersets in this regard. I've built several of these, but in a
Coax implementation. I did this for the economy of size. I even chose the

same increments and length (1' X 32') but to suit a requirement of being within 1/8 wl of transforming an impedance to anywhere on a smith chart for frequencies above 7 MHz (if I recall, its been some years).

Mine have worked fine in rotating vectors (per Walt Maxwell's "Reflections") for presentation to my GenRad RF Bridge. I call my design my Binary Variable Transmission line (or BVT).

I would appreciate discussing this at length, public or private, so that I might resolve some puzzling aspects. I have a hunch you could help.

73's
Richard Clark, KB7QHC

1407. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: w1aaz@juno.COM
Message-ID: <19970203.212447.9223.0.w1aaz@juno.com>
Source record: 97832

>it was pointed out that it is advantageous to drive mixer circuits
>(maybe a particular class of mixer circuits, e.g. diode ring)
>using a square wave LO rather than a sine wave.

Good question. There seems to be a lot of literature concerning using mixers, except on this topic.

Here is my 2 cents and I hope others contribute additional input. thoughts.

1. In a doubly balanced diode ring mixer (diode quad) the IF port receives the RF signal with opposite polarity (i.e. 180 degree phase shift). When the switching action is square, the resulting IF spectrum consists only of the sum and difference of the RF and LO frequencies (RF and LO being suppressed in the IF output).

2. When one pair of diodes is forward current biased, the other pair is reverse voltage biased by the voltage drop of the forward pair. If the RF signal becomes comparable to the LO injection power, the switching times are a function of the RF as well as the LO signal level. These leads to signal compression and IMD. Using square wave vs sine wave injection minimizes the diode transition times, making the switching more independent of LO level.

3. Using digital dividers to generate the LO, can offer the following additional advantages.

Easily provides wide band LO in phase and quadrature (single signal DC receivers, additional side band suppression from product detector stages). For example, a twisted ring counter (2 D flip flops) divides the input frequency by 4 while providing the required 90 degree phase difference. Advanced CMOS (AC) logic works into the VHF reqion. However, the initial signal needs to be 4X the LO frequency. This can be used to advantage since any free running oscillator drift will be divided by 4 as well (synthesizer step size as well).

The addition of a digital divider to most sine wave oscillators can reduce phase noise as well .

Ed
W1AAZ

1408. Re: 27 mhz jammer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc1246$2485f220$0d0f2399@peter-s>
Source record: 97833

Ted <teddyb@die.spam.die> wrote in article
<Pine.BSF.3.91.970128234726.28256E-100000@prog1.caprica.com>...
> you vote, march and screem for:
>
> 1: more government

Hey!!! You guys!!! Cut this out!!!!

Act like gentlemen and you will be treated as such!

1409. Re: 150MHz VCO w/low phase noise?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc1245$7c71afc0$0d0f2399@peter-s>
Source record: 97834

Bob <pmw5@cornell.edu> wrote in article <32F55DF2.380E@cornell.edu>...
> That really helped alot. If you know where you can buy 1 - 2 pieces, let us all know.
> I've tried, and all they'll sell is an assortment, or 10 of the same devices. As far as
> the catalog goes, I've submitted my info several times, as well as live, in person at
> dayton. Have yet to see the designers catalog. That's the "reality" of the issue.
>

I don't know why you had trouble. Perhaps the person you spoke to was in a bad mood?

I never had any trouble buying onezees twozees with my credit card.

Give it another try or two.

I have a good sized box of their stuff, perhaps I will post a list in one or other of the for-sale
groups since the projects are long over...

...Peter

1410. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970204052500.AAA16975@ladder01.news.aol.com>
Source record: 97835

In article <5d3ue5$aa1@dallas1.connect.net>, philk5pc@connect.net (Phil Clements) writes:

> A 20 pf ceramic capacitor (Centralab 852S) which is a mini-doorknob with
> axial leads in parallel with 4-470 ohm 2 watt resistors and 4 turns #12
> wire, 1/2 inch diameter, resonated at 110 mhz. I built that amp project
> in 1981, and it has performed flawlessly ever since, with the original parts
> and tube.
>
> (((73)))
> Phil, K5PC

W4QQ is a smart man. He understands parasitics and parasitic suppressors.

The 4-1000 is a pretty unstable tube, so his method is a good one..

73 Tom

1411. Driving Mixers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: d.NOrdquest@juno.COM
Message-ID: <19970204.033629.7799.3.d.nordquest@juno.com>
Source record: 97836

--------- Begin forwarded message ----------
From: Mail Delivery Subsystem <postoffice@staff.juno.com>
To: d.nordquest@juno.com
Subject: Returned mail: User unknown
Date: Tue, 4 Feb 1997 03:22:06 -0500
Message-ID: <199702040822.DAA16407@x1.boston.juno.com>
Rick Karlquist wrote asking for a square-wave mixer driver success story.
& Ed Pacyna provided a very interesting account of the theory behind such
mixers.
The story Rick wanted (with a very happy ending) may be found in QST for
February of 1993 in the article "A High-Dynamic-Range MF/HF Receiver
Front End." J. Makhinson uses square waves to switch FET switching
mixers and obtains a third order intercept of up to +43dBm. Previously
the same author presented this circuitry in Communications Quarterly for
November 1990. There was a QST follow-up by another author several
months (perhaps exactly a year) after the 1993 article which showed how
to get an even better intercept figure by using higher-voltage square
waves to switch the mixers. Also, I recall a correction on transformer
phasing somewhere in between those issues.
A few years ago SPRAT had an article on using logic switches as mixers
and Electronics Design recently had such a circuit, but I am not sure if
the driving LO signals were square waves.
Dave KE9ED

--DAA16407.855044526/x1.boston.juno.com--

--------- End forwarded message ----------

1412. SNR improvement algorithms

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: Uli Schnaidt <uschnaid@ba-stuttgart.de>
Message-ID: <32F6FA7B.6E0F4329@ba-stuttgart.de>
Source record: 97837

Hi there!

I'm looking for any algorithm that improves the SNR.
Is there anything available? I'm especially interested in
algorithms that gives a improvement in Morse decoding.

If you have something please let me know by sending me a mail.

Thank you ver much,
Uli

1413. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0402970132530001@news.vcnet.com>
Source record: 97838

In article <5d622c$9m8$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) wrote:

> In message <measures-ya02408000R0102970417170001@news.vcnet.com> -
> measures@mail.vcnet.com (R. L. Measures) writes:
...snip...
>
> I don't know of many commercial amplifiers, particularly amplifiers by
> manufacturers you have so regularly libeled, that would allow observing
> the color of of any arc while operating.

Apparently you are unfamiliar with the definition of the word 'libel'---and you have never looked into the top of a Heath SB-220 amplifier.

...snip...
> :>You did not explain why a load fault was not subsequently discovered in
> :>the antennas or feedlines.

Sorry for the inadvertent omission, Mr. Subich. No load fault was subsequently discovered in the antennas or feedlines because there was no load fault in the antennas or feedlines.
In other words, the arcing that destroyed the original bandswitch and the replacement bandswitch in Rick May's AL-80 can not be explained by a load fault. The only thing that was altered after bandswitch #3 was the VHF-Rp of the VHF suppressor in the AL-80. The original suppressor has an Rp of about 166 ohms at the anode resonant frequency of160MHz. The replacement suppressor has an Rp that is around 101 ohms at 160MHz. Since voltage gain is essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain. //
The e-mail address of Rick May is listed on my Web page if you need more answers.

>Why did the mysterious arcing cease after
> :>the VHF-Rp of the VHF parasitic-oscillation suppressors was decreased?
> :>
>
> The problem need not be confined to the antennas and/or feedline. It
> could also have been an antenna switch, the T/R relay, a coax cable, or
> a lightning arrestor (or are you going to hide that story again?).
>
If this had been the case, then why didn't a problem show up when the Drake L4B was connected to the same load? If there was a problem with the things you listed, then why was there no apparent problem when the AL-80 was placed back in service with its new VHF suppressor?

> :> Are X-rays and Gamma-rays charged particles, Joe?
> :>

> Not a subject of this discussion ... snip...

You were the one who used the term 'charged particles', Mr. Subich.

.....Mr. Miklos, where are you?
---
e-mail copy to Mr. Subich

--
--Rich-- ag6k, 805-386-3734

1414. Help wanted: FT901D not WARC. Any experiences about adding 30 meters tx/rx to it.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: andrew@phicom.dungeon.com
Message-ID: <32f7340f.0@news.flexnet.net>
Source record: 97839

I have an FT901D without the WARC bands. I am hoping soon to take (and pass) my 5 wpm morse test for the UK Novice A licence. This gives gives me access to some of the 30 meter band.

My 901 has a 12 way band switch, ten bands are marked 160-10 (10 in four segments) + WWV/JJY (rx only ?) on 15 MHz. The XTAL unit has provision for 11 xtals, the last socket is not populated on mine.

I've calculated the required XTAL for heterodyne to lock up the VCO etc. and think I could get this going. Does anyone know if the rest of the rig will support this - i.e taps on PA coil, preselection, band trimmers etc.

The MHZ part of the display seems to be programmed rather than derived from the frequency. One of the 'unused' positions actually brings up 27MHz - a hang over from the FT101s with eleven meters perhaps ?
I might have to re-engineer this with some logic.

I don't mind sacrificing 15 megs, but ideally would put 10 megs on one of the unmarked positions.

I know I could buy a WARC 901 - or another rig, but I thought I'd try to sort the one I own - in the spirit of amateur radio !

Any suggestions or experiences would be helpfull - thanks for getting this far !

If this simply isn't feasible I'll give up gracefully now !

73
Andrew
G6ALB

1415. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: m26@juno.com
Message-ID: <5d7am2$9gc@news.ld.centuryinter.net>
Source record: 97840
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

T C P Wong <T.C.Wong@shef.ac.uk> wrote:

>Evan Platt wrote:
>>
>> If someone is standing next to them with a scanner for ither 46 or
>> cellular, yes, they will hear the entire conversation.
>>
>> "Mel Robinson" <mello@bconnex.net> wrote:
>>
>> >If I buy a digital spred spectrum phone, and I phone someone who takes the
>> >call on either a cell phone or a 46-49 mhz cordless, will the conversation
>> >be picked up by a scanner, eventhough I am sending a digital signal?
>> >If so, there is no such thing as a private conversation, until someone
>> >invents a pre-scanning device incorporated in the phone, that like call
>> >display tells you what type of phone you just connected too. There
>> >probably is a big market for such a device....If anyone markets such a
>> >device after to-day's date be prepared to share Revenues with me.
>> ==
>> To reply vie e-mail, reply to eplatt@wco.com.
>> Sorry for the inconvience, but spammers will pull your name without
>> your permission from postings, sending unsolicited e-mail!

>Hi,

>Sorry about my limited knowledge. I thought a spread spectrum phone uses
>digital code division multiple access (CDMA). The continous voice
>conversation was being first Pulse code converted then, depends on the
>current instantaneous psuedo noise signal, each divided part digital
>voice signal was modulated using shift keying method and so each part
>have a different shift key frequency. The only way to decode the
>information is when the receiving hand set to run the psuedo noise
>sequence simultaneously.
>So I am a bit unsure , and would most wish to know, how a analogue
>scanner can intercept the conversion.
>Information on this subject is most appreciated

>Patrick

>
>--
>Dr. Patrick Wong
>Radar and Commumincation Group
>Department of Electrical and Electronic Engineering
>The University of Sheffield, UK.
>Tel.- +44-114-2825582

>Fax.- +44-114-2722097
>E-mail.- t.c.wong@sheffield.ac.uk

Patrick, you're not getting it. This man can have all the security in the world on his own phone, but if he talks to a portable or cellular without such security, then he is on the air for any cheap scanner owner, anyway.

Mike Rice
mrice@centuryinter.net

1416. Re: Digital

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: m26@juno.com
Message-ID: <5d7ald$9gc@news.ld.centuryinter.net>
Source record: 97841
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner

laird@pier.ecn.purdue.edu (Kyler Laird) wrote:

>>>If I buy a digital spred spectrum phone, and I phone someone who takes the
>>>call on either a cell phone or a 46-49 mhz cordless, will the conversation
>>>be picked up by a scanner, eventhough I am sending a digital signal?
>>>If so, there is no such thing as a private conversation, until someone
>>>invents a pre-scanning device incorporated in the phone, that like call
>>>display tells you what type of phone you just connected too. There
>>>probably is a big market for such a device....If anyone markets such a
>>>device after to-day's date be prepared to share Revenues with me.

>Similarly, if I am using landline ISDN phone to call a
>local radio station, will everyone in the whole damn
>county be able to hear me when the station decides to
>put me "on the air"?

>Duh...

>--kyler

I didn't get it right away. A digital spred must be one of the 900
mhz portables used in homes and costing a good deal more than
46-49 mhz equipment. The radio station analogy is the correct one.
What does it matter what kind of security you have on YOUR phone (900
mhz),
when you are talking to one (46-49 mhz) that is on the air and
accessible with
a simple police scanner. I am waiting for the day, when someone
hooks a board, two simple CD players, and a microphone to his portable
and begins doing a radio show for the neighborhood. I have a friend
who calls me on his portable from Sacramento, while I am on a home
portable. We very often do a show that woud make any dj in the six to
ten a.m. slot sit up and take notice!

Mike Rice
mrice@centuryinter.net

1417. FS: HP141T Spectrum Analyzer (0-1200mHz)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-04 00:00:00 UTC
From: dallen@melpar.esys.com
Message-ID: <5d7g9v$5pg@fcserv1.fcd.esys.com>
Source record: 97842
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

This is a real-time analog spectrum analyzer which covers 100kHz to 1200mHz with a variable persistence CRT. The RF section is a 8554L and the IF section is a 8552A. This is a piece of quality HP equipment which sold new for over $12,000. It is in working condition and the manuals are included. I'll start the bidding at $250 plus Mail Box Center packing and shipping charges. Bidders from the 48 states only please. Offers will be accepted until next Friday 2/14. The unit is in no.VA (ZIP 20170) and the shipping weight is about 75lbs. Please forward all questions and offers to my home at: radiodale@dclink.com

Thank you,
Dale

1418. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0502971115470001@news.vcnet.com>
Source record: 97593

In article <5d8s7o$sm6$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) wrote:

> In message <measures-ya02408000R0402970132530001@news.vcnet.com> -
> measures@mail.vcnet.com (R. L. Measures) writes:
> :>
> :>Apparently you are unfamiliar with the definition of the word
> :>'libel'
>
> As a member of the Fifth Estate, I am most certainly familiar with
> the concept of libel and can assure you that publication (including
> posting on the internet) of charges such as you make may very well
> be considered libel. I'm suprised that Messers Erhorn, Henry,
> Collins, et al. haven't considered legal action. Since none of them
> are "public figures" in the legal sense, they do not have the burden
> of proving malice ...
>
Apparently, being a member of Fifth Estate will do little to improve one's legal acumen.

According to American Heritage Dictionary: "name-drop"
To mention casually the names of illustrious or famous people in order to imply that one is on familiar terms with them, intended as a means of self-promotion.

I published a photograph of a burned bandswitch that was removed from an ETO amplifier. Are you suggesting that---like the "fake" photo of the Bruno Magli shoes---this photo was also fake? Would you like to speculate on whether or not this bandswitch would be introduced as evidence in the event that Mr. Erhorn sued me for libel?
Regarding the formula on page 13.13 in the *Radio Amateur's Handbook*, do you believe that the maximum RF current in an 8877 amplifier's DC blocking capacitor is 46 amperes rms when the tube is operating at 4kV and 1a?
>
> :> The only thing that was altered after bandswitch #3 was the VHF-Rp
> :>of the VHF suppressor in the AL-80.
>
> Are you absolutely certain that every other portion of the system was
> unchanged? Are you certain that a different jumper cable or antenna
> switch was not used? Are you certain that rewiring the anode circuit
> didn't result in some minor (but significant) change to a TR relay?
>
I must confess that I did not fly to Colorado and check these things for myself, Mr. Subich. I'm not 'absolutely certain' that Rick May even exists

because I have never met him face to face. Hmmmmm. Are you absolutely certain that Rich Measures is writing this, Joe? If Rick May said that nothing else was changed, this was probably the case---even though he is married to my sister.....not. Rick's experience with an AL-80 is not unique. Sure AL-80s don't eat as many bandswitches as TL-922s, but they do eat them on occasion.
During my 1990 phone conversation with Mr. Rauch, he insisted that AL-80 bandswitch failures were attributed to bad operators, and/or cheap coax, and/or bad antennas. I don't think so.
Mr. Rauch told us that Mr. Miklos was an "R+D engineering manager". Eimac's personnel department says otherwise. Mr. Rauch said that Mr. Miklos would appear on this Newsgroup in January.
>
> :>The original suppressor has an Rp of about 166 ohms at the anode
> :>resonant frequency of160MHz. The replacement suppressor has an
> :>Rp that is around 101 ohms at 160MHz. Since voltage gain is
> :>essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain.
>
> *SO WHAT!* Even Wes Stewart, who made the measurements you are so
> fond of quoting now states that the supressors do not operate in the
> parallel mode (Rp is not significant) ...snip...

I believe that everything in the VHF-resonant anode circuit's signal path makes some degree of difference, but some things more than others.. Except within the city limits of Conyers, GA, U.S.A., roughly half of the VHF current flows through Rs and half of the VHF current flows through Ls. IMO, that is not something that should be dismissed out of hand, even by a self-recognized amplifier expert. Those who say that the suppressor does not count probably should not be using a suppressor.in the first place. The next time you talk to an AL-1500 owner, ask him/her if an 8877 failed during the 12 month warranty period. To the best of my knowledge, the AL-1500 is the only 8877 amplifier that does not use a VHF parasitic-oscillation suppressor.

> N7WS further states on his web page:
>
> "Some mathematical manipulation can demonstrate that shunting
> the conventional suppressor with additional resistance will
> bring the curves into better alignment. An additional 250 ohm
> resistor in parallel with the network will cause the Rp curves
> to nearly overlap the nichrome curves above about 30 MHz. Below
> 30 MHz, the Rp of the adjusted conventional type will be higher
> than the Rp of the nichrome device."
>
> Perhaps you can explain why adding a 250 Ohm resistor in parallel
> with a conventional supressor would eliminate VHF parasitics?
>
100 ohms in parallel with 250 ohms = 71 ohms. Decreasing Rs from 100 ohms to 71 ohms reduces the parallel-equivalent resistance (Rp) at VHF. Why not try using a 1 ohm Rs and see how the parallel-equivalent calculation for Rp comes out at 100MHz, Joe? Post the results, and we'll all have a look.

For a refresher course in parallel-equivalency, you might try the
VHF-suppressor article in the March, 1989 issue of QST magazine.

In our low VHF Q parasitic-oscillation suppressor for 3-500Zs, we use two
Matsushita 100 ohm MOF resistors in parallel, so Rs is 50 ohms, not 100
ohms. The low VHF Q suppressor that Wes, N7WS, measured had one Matsushita
100 ohm MOF resistor. Presumably Wes, used 100 ohms instead of 50 ohms to
preclude a stenorian cries of FOUL from the Rauchian encampment.
Using the same value of Rp, 100 ohms, at 100MHz, Mr. Rauch's suppressor
produced over 60% more Rp than did the Ni-Cr-Fe alloy suppressor. Since
VHF voltage amplification is basically Ae=Rp*Mu, the question is: does one
want more VHF Ae or less VHF Ae in one's amplifier?

Does it make sense to use silver or copper conductors in the design of an
electrical circuit that supposed to dampen regeneration?
---
e-mail copy to Mr. Subich

--
--Rich-- ag6k, 805-386-3734

1419. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: pacyna@auratek.COM
Message-ID: <3.0.16.19970205135430.2e2faa02@galaxy.auratek.com>
Source record: 97594

>You can also use a walking ring circuit with an even
>number of stages to guarantee symmetry to an arbitrary
>degree.

>This latter method also looks attractive as a way to get
>quadrature signals over a fairly broad range of frequencies.

I built a 75M SSB transceiver using the Campbell R2/T2 circuits. The LO was a free running 15 - 16MHz oscillator. I used a Johnson divider (also know as a twisted ring or walking ring circuit) to generate the I and Q signals. The advantages of this approach were:

The 15 - 16Mhz was divided by 4 to get 3.75 - 4.0Mhz. The final LO drift (long, short, 10 degree C heat rise) was never more than 20Hz. The oscillator was designed for low drift characteristics (used FET current limiting, air wound inductors etc.).

Since the oscillator not run at the same operating frequency of Rx and Tx, many of the problems with direct conversion (DC) rigs were not problematic.

This approach generated the necessary Rx / Tx wide band I and Q signals (nice for multi band and large QSY excursions) without requiring power splitters. The side band suppression was excellent (barely audible on a S9+ + + signal).

Ed
W1AAZ

1420. URL for Ant. building

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: "R.A." <caveman@megsinet.net>
Message-ID: <32F9078A.3A41@megsinet.net>
Source record: 97595

Is there any home pages for ant. building,
To help newer hams understand how they work, 10 - 14 year olds.

thanks Ron N9OMP e-Mail caveman@megsinet.net

1421. subscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <32F906AA.12C8@aade.com>
Source record: 97596

```
subscribe
```

1422. Re:80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: Jim <jstrohm@texas.net>
Message-ID: <5davp5$db7@newsgate.sps.mot.com>
Source record: 97597

It's a whole lot easier to work 55 DX countries on QRP 75 phone from
1-land than from 5-land, where I live.

However, since I've worked Alaska on QRP 75 phone, and have worked
dozens of stateside QRP stations with higher power, I agree that
you _CAN_ have success with low power on 75.

But lemme tell ya, it's a lot like being a mouse on the floor
of the prehistorc jungle, with the dinosaurs stomping and
stalking through the palm trees....

N6OTQ

1423. Re: help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: John Harper <j..harper@worldnet.att.net>
Message-ID: <32F90DD9.2C35@worldnet.att.net>
Source record: 97598

Hi Scott,

I spent 10 years in the Submarine Service (USS Barb SSN-596) and regret to tell you that almost all sub communications are encrypted. The only open communications you could hope to hear would be between an arriving or departing sub and its associated tug boats on the standard marine freqs, namely 156.650 or 156.800 Mhz.

Also, 98% of the encrypted sub comms take place on VHF/UHF via satellite. Claims made by manufacturers of VLF receivers claiming to be able to receive submarines are just hype. Don't let this deter you from pursuing a hobby in radio though - there's plenty of other exciting stuff out there. Oh, there is one way you could monitor sub comms - join the Navy and volunteer for sub duty! It really is (was) an adventure!

John Harper
AA5YX/2

Diback wrote:

>
> I am 15v years old, and I realy enjoy radio. I am quite active
> listening to the military on shortwave, local police and fire on vhf/uhf,
> and I'm studeing for my HAM licence. What I would realy like to get into
> next, is reception of U.S. navy submarine communications on the VLF band.
> If any one out there knows where I can obtain plans to build a VLF
> reciever capable of recieving the freqs. that sub bases transmit data on,
> I would realy appreciate it. Also, if you could help me with what type of
> RTTY system is used (ARQ, SITOR, etc.) I would be much indebted to you!
> Thanks,
> Scott
> (to reply, just click respond!)

1424. Modifications 4 Yasue FT-8000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: James Peterson <n3wiw@clark.net>
Message-ID: <32F94BFA.767B@clark.net>
Source record: 97599

Does any one know how or were to find out how to modify the FT-8000 to
do Mars (wideband transmit).

1425. Mods for Heathkit HR-10???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: avrial@ix.netcom.com
Message-ID: <32f911c4.501971@nntp.ix.netcom.com>
Source record: 97600

Hi, does anyone have any mods for this receiver? Thanks in advance.Rob. avrial@ix.netcom.com

1426. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.255.01D1E6B5@azstarnet.com>
Source record: 97601

In article <5dambulon3@nadine.teleport.com> w7el@teleport.com (Roy Lewallen) writes:
>From: w7el@teleport.com (Roy Lewallen)
>Subject: Re: good source for amplifier tips
>Date: Wed, 05 Feb 97 19:16:11 GMT

[SNIP]

>As written, this could cause people to reach wrong conclusions.

Yes it could.

>Every parallel network has an equivalent one (and vice versa) which is
>indistinguishable ONLY AT A SINGLE FREQUENCY. This qualification is very
>important. If you have, for example, a parallel network, you get a
>different series equivalent circuit at each frequency. So you can't just
>replace one with the other, then do your analysis at a different frequency.
>For analysis at other than a single frequency, you have to use the correct
>network, not an "equivalent", or else find and use a different "equivalent"
>at each frequency.

True. I should have so stated. It gets dangerous when one mixes
constant reactance values with actual component values. If fixed reactance
values are used for all calculations, then the frequency doesn't matter. When
we use real component values, the frequency certainly makes a difference.

>The equivalent networks DO behave the same when embedded in another network
>-- but again, only at a single frequency.

Correct again. This is where I went back to real components.

I've got to stop writing this stuff after midnight. As you first noted, this
is a real tar baby.

>Roy Lewallen, W7EL

N7WS

1427. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: Kevin Muenzler <"muenzlerk@uthscsa.dcci.com"@dcci.com>
Message-ID: <5dbeov$lea@news3.realtime.net>
Source record: 97602
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

John Noel wrote:
>
> I have neighbors who play loud music. Is their a way to jam their
> electronic equipment, e.g., CD player, to keep them from working? Would
> a transmitter of some sort work? Any help would be appreciated.
>
> John
There really is no LEGAL way to jam their equipment. The only thing
that you could hope to do is cause severe RFI but then it would mean
that your equipment is not operating within accepted parameters.
Your best bet is to TALK to your neighbors. Be neighborly! It sure
can avoid problems.

Kevin, WB5RUE

1428. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0502971807350001@news.vcnet.com>
Source record: 97603

In article <19970205000900.TAA07121@ladder01.news.aol.com>,
commquart@aol.com wrote:

> > IMO, any electronic engineer who rejects AC Circuit-Analysis, and
> instead
> > solves such problems by intuition, quite probably does not have both
> oars
> > in the water.
>
> How's the water, Rich?

I am not the person who dismissed the solution to the 100 ohm Rs, 85nH Ls,
F=160MHz problem. I calculated the answers according to standard AC
Circuit-Analysis. These answers were summarily rejected by Mr. Rauch, who
apparently solves such problems by intuition.

> BTW, I am still waiting for one of the naysayers to provide us with the
> values of a copper-wire suppressor that equals the performance of a
> suppressor made from resistance-wire. ..... The time has come to stand
> and deliver. What will it be--deliver or quiver?
>
> Tom showed you how and why months ago. Ian White reached the
> same conclusion based on measurements you endorse...

Apparently I missed it, Peter. What are the values of Ls and Rs?

--
--Rich-- ag6k, 805-386-3734

1429. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0502971814530001@news.vcnet.com>
Source record: 97604

In article <19970205012200.UAA11218@ladder01.news.aol.com>,
commquart@aol.com wrote:

> In article <measures-ya02408000R0302971015390001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
...snip...
--
> while
> on the other hand where those measurements allow others to
> show that they compromise tank Q on ten-meters, we should assume
> those facts to be of no consequence?
>
Who are the 'others' who have shown what 4.32 ohms of R in series with 1100
ohms of anode Xc does to harmonic suppression at 30MHz?

--
--Rich-- ag6k, 805-386-3734

1430. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: cobra295@ix.netcom.com
Message-ID: <5daolg$17m@dfw-ixnews11.ix.netcom.com>
Source record: 97605
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

It's a possibility to get into the speakers with large amounts of
power on HF bands, etc.. however, I think the easier route would
be to file a noise complaint.

John Noel <jhn5012@tntech.edu> wrote:

>I have neighbors who play loud music. Is their a way to jam their
>electronic equipment, e.g., CD player, to keep them from working? Would
>a transmitter of some sort work? Any help would be appreciated.

> John

1431. Re: help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierE572xn.8DL@netcom.com>
Source record: 97606

in <19970205004301.TAA09168@ladder01.news.aol.com>,
: Diback (diback@aol.com) wrote:
: I am 15v years old, and I realy enjoy radio. I am quite active
: listening to the military on shortwave, local police and fire on vhf/uhf,
: and I'm studeing for my HAM licence. What I would realy like to get into
: next, is reception of U.S. navy submarine communications on the VLF band.
: If any one out there knows where I can obtain plans to build a VLF
: reciever capable of recieving the freqs. that sub bases transmit data on,
: I would realy appreciate it. Also, if you could help me with what type of
: RTTY system is used (ARQ, SITOR, etc.) I would be much indebted to you!

Look into a VLF converter. There have been several in the last 15 years or so in the hobby magazines, or some of the equipment companies make or made them (Palomar, MFJ, Heathkit used to). These shift the 0-500 kHz range of frequencies up to (usually) 3.5-4 Mhz.

One suggestion is to read the series on VLF in Radio-Electronics magazine in 1983 by Burhans. Several article during that year on VLF loops, longwire tuners, and a converter.

There are a couple of signals I've read of or heard that the US Navy uses. One is the system in Michigan and Wisconsin that operates in the 60-70 Hz range, and is .0625 baud phase shift keyed. 16 seconds per bit, at least that's what I remember from an article in Popular Science. That's the one they use to get to the submarines under the surface.

There's another system that they run (or ran, I'm not sure if it's still going) that runs in the 25 kHz range. The signal is MSK (minimal shift keying) FSK in the low (50?) baud range and is encrypted beyond any ability that an amateur could come up with. One example of a transmitter site is Jim Creek, Washington, in the mountains northeast of Seattle. The antenna is a toploaded vertical over a thousand feet long, with the support structure being the mountains on either side of the valley the transmitter site is in. The various SWL hobby lists give the transmitter power as 300 kilowatts at 24.8 kHz. There's a similar site in Maine.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

1432. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970205000900.TAA07121@ladder01.news.aol.com>
Source record: 97671

> IMO, any electronic engineer who rejects AC Circuit-Analysis, and
instead
> solves such problems by intuition, quite probably does not have both
oars
> in the water.

How's the water, Rich?

BTW, I am still waiting for one of the naysayers to provide us with the values of a copper-wire suppressor that equals the performance of a suppressor made from resistance-wire. ..... The time has come to stand and deliver. What will it be--deliver or quiver?

Tom showed you how and why months ago. Ian White reached the same conclusion based on measurements you endorse...

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1433. help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: diback@aol.com
Message-ID: <19970205004301.TAA09168@ladder01.news.aol.com>
Source record: 97672

I am 15v years old, and I realy enjoy radio. I am quite active
listening to the military on shortwave, local police and fire on vhf/uhf,
and I'm studeing for my HAM licence. What I would realy like to get into
next, is reception of U.S. navy submarine communications on the VLF band.
If any one out there knows where I can obtain plans to build a VLF
reciever capable of recieving the freqs. that sub bases transmit data on,
I would realy appreciate it. Also, if you could help me with what type of
RTTY system is used (ARQ, SITOR, etc.) I would be much indebted to you!
Thanks,
Scott
(to reply, just click respond!)

1434. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970205012200.UAA11218@ladder01.news.aol.com>
Source record: 97673

In article <measures-ya02408000R0302971015390001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>
>> A 20 pf ceramic capacitor (Centralab 852S) which is a mini-doorknob
with
>> axial leads in parallel with 4-470 ohm 2 watt resistors and 4 turns
#12
>> wire, 1/2 inch diameter, resonated at 110 mhz. I built that amp
project
>> in 1981, and it has performed flawlessly ever since, with the original
>parts
>> and tube.
>>
> Interesting, Phil. Was the anode-circuit resonance in this amplifier
also
>110MHz? Did the author explain the purpose of the 20pF capacitor? How
>much DC anode voltage do you use? Does this amplifier/suppressor perform
>satisfactorily on 10m?
>
>--
>--Rich-- ag6k, 805-386-3734
>

Rich

The suppressor is at best a compromise between VHF and HF performance.
The designer must keep the inductance at a minimum, otherwise the
designed loaded Q of the HF tank will be compromised. The higher
the plate resonance, the smaller the inductor maybe made and still be
effective at VHF. Most modern tubes have resonances in the area of
160 or 180 MHz I believe. But, the 4-1000 has
a plate resonance at 110-MHz. Rather than using a large value of L in
the suppressor (and comprising 10 meters) the designer opted to use
a rather small value of L and parallel resonanted the suppressor
LC components at 110 MHz.

At 110-MHz, where Xc and Xl cancel, only the suppressor resistor
is in the path for VHF energy. The coil and capacitor are resonant, and
present a very high impedance path for VHF. An ideal situation. Look at
the
series circuit equivalent, with L, C, and R in series. L and C
reactances cancel, the impedance is determined by the value of
R.

Would you rather use a clever scheme like this in a 4-1000 design,
or would you opt for a suppressor made with nichrome windings,
and compromise the ten-meter tank Q?

Rich, why do you ask us to accept your claims at face value,
despite the fact that Wes's measurements show that nichrome
suppressors offer negliable improvement over conventional designs --
while
on the other hand where those measurements allow others to
show that they compromise tank Q on ten-meters, we should assume
those facts to be of no consequence?

You have admitted in this forum that until Wes undertook some
basic and fundamental measurements of your suppressors you had
no idea how they actually performed -- despite having marketed them
for the past 13 years..

You have admitted that you do not own a Q-meter, RX meter, Network
analyzer or spectrum analyzer. But, through good engineering and science
(and a crystal ball or two??) you have all the answers using a dipmeter
and by watching pretty arcs. Observations based on random occurences,
in uncontrolled environments combined with an infinate number of variables
was not acceptable science when I went to school. But, perhaps the
sciences are more liberal these days..

You have also admitted that you have no idea how to calculate
the effect of suppressors on the loaded Q of a HF tank coil. Where
is your credibility? What happened to good engineering and science?

When an industry recognized, practicing engineer questions
your findings, or posts his views, why is he
misquoted, subjected to obscurantism,
and vilified? I have been following this thread in the hopes of
learning and honing my own limited skills. I tried to keep an open
mind, being careful not to involve personalities or questioning
financial motives. I don't have all of the answers, but as the smoke
slowly clears I think I can pretty well determined who does.

73

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1435. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5d8s7o$sm6$1@news-s01.ny.us.ibm.net>
Source record: 97674

In message <measures-ya02408000R0402970132530001@news.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures) writes:
:>
:>Apparently you are unfamiliar with the definition of the word
:>'libel'

As a member of the Fifth Estate, I am most certainly familiar with the concept of libel and can assure you that publication (including posting on the internet) of charges such as you make may very well be considered libel. I'm suprised that Messers Erhorn, Henry, Collins, et al. haven't considered legal action. Since none of them are "public figures" in the legal sense, they do not have the burden of proving malice ...

Much of what you have claimed has been proven false by third parties. You post as fact information you know to be untrue (Marvin Born's alleged AL-1500). You asssign impure motives to anyone who dares to disagree with you. And you ridicule anyone who shows the errors in your pseudo-science.

:>---and you have never looked into the top of a Heath SB-220
:>amplifier.

Yes. Since it consists of a double case for shielding, has a fairly bright set of tube filaments (though certainly not bright enough to read the newspaper), and has a fairly pronounced redish-orange glow from the plates at normal power output ... no person of normal vision and color perception is going to be able to tell with any certainty the difference between a blue and pruple arc -- particularly an unexpected and transient arc.

:> The only thing that was altered after bandswitch #3 was the VHF-Rp
:>of the VHF suppressor in the AL-80.

Are you absolutely certain that every other portion of the system was unchanged? Are you certain that a different jumper cable or antenna switch was not used? Are you certain that rewiring the anode circuit didn't result in some minor (but significant) change to a TR relay?

:>The original suppressor has an Rp of about 166 ohms at the anode
:>resonant frequency of160MHz. The replacement suppressor has an
:>Rp that is around 101 ohms at 160MHz. Since voltage gain is
:>essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain.

SO WHAT! Even Wes Stewart, who made the measurements you are so fond of quoting now states that the supressors do not operate in the parallel mode (Rp is not significant) but rather operate as a SERIES

component in a COMPLEX network which includes the tube output capacitance, the stray capacitance from the plate blocker to ground, the parasitic inductance in the plate blocker, stray reactances in the plate choke, etc.

N7WS further states on his web page:

"Some mathematical manipulation can demonstrate that shunting the conventional suppressor with additional resistance will bring the curves into better alignment. An additional 250 ohm resistor in parallel with the network will cause the Rp curves to nearly overlap the nichrome curves above about 30 MHz. Below 30 MHz, the Rp of the adjusted conventional type will be higher than the Rp of the nichrome device."

Perhaps you can explain why adding a 250 Ohm resistor in parallel with a conventional supressor would eliminate VHF parasitics?

==========
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<subich@compuserve.com>
==========

1436. Re: Newsgroup Wishlist

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: jcombs@kih.net
Message-ID: <5d8rcv$7cr@dbtsvr2.dbtech.net>
Source record: 97675
Cross-posted to:
rec.radio.amateur.antennas,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,news.admin.hierarchies,news.groups

On 1997-01-29 Pine.LNX.3.91.970126221123.12355B-100000@keystone.intergate.net said:
>X-Sender: teddyb@prog1.caprica.com
>Newsgroups: rec.radio.amateur.antennas,rec.radio.amateur.homebrew,
>rec.radio.amateur.equipment,news.admin.hierarchies,news.groups
>This post was manually optimized for use with voice synthesyzer.
>Some items may appear to be misspelled to the sighted, but they
>have just been spelled more phoneticly.
>On Sunday, January twenty sixth 1997, Dana Yeomans wrote:
>hi there, i aggree with you, i am blind, and have to listen to the
>voice synthesyzer, and i wish they wouldn't post pictures on web
>sights. the fellow that invented netscape should have his but
>kicked, because it don't do the blind any good. so take care all
>from n4pge in griffin, georgia.
>My reply to Dana is as follows:
>May I suggest that you switch to a text based browser such as lynx?
>To use lynx, you would need an internet account called a unix shell
>because lynx is a unix program which you operate remotely using an
>ordinary emm ess doss based terminal program such as telix for
>windows which has the type of terminal emulations most compatable
>with lynx such as vee tee one oh two.
>Since lynx is purely text based you should have much less trouble
>from any pictures you would have encountered on web sites using a
>frame based browser such as netscape.
>Lynx is not very hard to learn. It has key press commands instead of
>the point and click icons so your voice synthesyzer will almost
>never find something that it can not read. The only graphic visual
>effect it has are the hyper text items which activate another you
>are ell if you highlight the hyper text by positioning your cursor
>over it with your down arrow or space bar and then hit your enter
>key. However, lynx can allow you to toggle it to display numbered
>choices instead, if the web page you are on allows it.
>I just thought that I should mention lynx to you in case you had
>never heard of it or did not know what lynx was. If I have not
>presumed incorrectly, your voice synthesyzer program probably works
>better when it encounters text than graphics. If so, then maybe my
>suggestion can help your situation.
>You can get a fair price on a unix shell account for twenty dollars
>per month with unlimited hours from a company called prime net.
>prime net is correctly spelled as one word.
>spelling is pea are eye emm ee enn ee tee
>The toll free number is for prime net is 1, 800, 4 6 3, 8 3 8 6
>I am not with prime net only because I got a better deal from a

>smaller company that only serves southern california.
>Good luck Dana and seventy three.
>Signed
>Ted
>The following is a short warning that I put in my posts.
>Warning to spammers.
>The email address in my From header is incorrect.
>The correct address is teddyb@caprica.com
>Spelling phoneticly:
>tee ee dee dee why bee
>at
>see aee pea are eye see aee
>It was changed to defeat systems that automaticly
>abuse email by sending unwanted advertizements.
>My Email is neither a newsgroup or a public forum.
>I do NOT want any advertizing via Email. Who ever
>sends unsolicited advertizing via Email risks prompt
>cancelation of their internet service without refund
>and possible prosecution for harrassment and/or fraud.
>End of warning to email advertizers.
I would also add to this the suggestion that anyone interested check out nettamer it is a dos based ppp program which does everything in a text format through your already existing dial up account. Check it out at people.delphi.com/davidcolston or e-mail me for more info I use it and love it.

Net-Tamer V 1.08 - Test Drive

1437. Re: TTL Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: Ian Mitchell <ian.mitchell@research.utas.edu.au>
Message-ID: <32F817FA.3813@research.utas.edu.au>
Source record: 97676
Body handling: Binary attachment payload not displayed: TEST1.gif

Brian Carling G3XLQ/AF4K wrote:
>
> GREAT Ian - we will be loooking forward to it.
>
> Can you attach it as a binary file please?!
>
> Ian Mitchell <ian.mitchell@research.utas.edu.au> whistled a happy tune like:
>
> |>Gary Coffman wrote:
> |>> Ok, that's not a reciprocating mixer since it uses an on-frequency
> |>> LO. Could it be that the second diode is used for TR? Perhaps this
> |>> is a single diode unbalanced mixer with the second diode DC biased
> |>> to act as a Rx TR switch or overload protector. I can't really tell
> |>> from your description how this circuit works.
> |>>
>
> |>Gary, I'll scan the circuit and post it tomorrow. I don't have the
> |>patients for ASCII circuit drawing!
>
> |>Ian
>
> 73 from Bry (((Amateur Radio G3XLQ / AF4K)))
> http://www.mnsinc.com/bry/
> E-mail: bry@mnsinc.com
> Home of MEGALIST ham radio files, SWL info. etc. etc.

Ok, I've sent it already but our news server went down, so here it is
again. Also I've noticed the inductor in the tuned circuit is specified
as 100uH which seems to large for a 40m receiver?

Ian

[One or more binary attachments are retained only in the source text.]

1438. Help on AM1365/URT amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: Marty Reynolds' <marty@aa4rm.radio.org>
Message-ID: <32F82C45.4FF7@aa4rm.radio.org>
Source record: 97677

It's a 200-400 mhz dual 4CX300 amp. built by Mansen Labs
perhaps 20 yr.s back.

A friend believes he read about it in CQ about 10 yr.s ago.

Anyone on the newsgroup know how / where to look - search engines
turn up zip & Ham magiazines don't yet seem to have their article
lists "on-line."

Thanks,

Marty AA4RM

1439. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: philk5pc@connect.net
Message-ID: <5d9a28$q5h@dallas1.connect.net>
Source record: 97678

In article <32f36a75.35084118@news.airmail.net>, jfriley@airmail.net (J. Fred Riley) says:
>
>measures@mail.vcnet.com (R. L. Measures) wrote:
>>HF arcs are typically blue, not purple.
>This ought to be carved in stone somewhere.
>
>
At what frequency does the arc change from blue to purple? How about
the good old white arcs we see in the springtime?

(((73)))
Phil, K5PC
>Fred, W8OY
>
>JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

1440. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: philk5pc@connect.net
Message-ID: <5d9b4o$q5h@dallas1.connect.net>
Source record: 97679

In article <19970205012200.UAA11218@ladder01.news.aol.com>, commquart@aol.com says:
>
>In article <measures-ya02408000R0302971015390001@news.vcnet.com>,
>measures@mail.vcnet.com (R. L. Measures) writes:
>
>>
Sorry Rich, the article below was apparantly to me but I don't have
access to it on the newsgroup! (Doesn't appear) Will answer your
questions now.
>>>
>> Interesting, Phil. Was the anode-circuit resonance in this amplifier
>also
>>110MHz?

Yes, it has been a well established fact for the 4-1000A...

Did the author explain the purpose of the 20pF capacitor?

No, he didn't, but it is to resonate the coil and resistors @ 110 mhz

How much DC anode voltage do you use? Does this amplifier/suppressor perform
>>satisfactorily on 10m?
>>
>> I use 6000 volts on the anode. It was the first suppressor that I found to
be successful on 10m in the late 70's @ 1500 watts without using a big
Glowbar resistor as R in a suppressor.

(((73)))
Phil, K5PC

1441. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199702050846.AAA01640@mail.ucsd.edu>
Source record: 97680

```
unsub ham-homebrew
```

1442. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3302393f.2230753143@news.sci.fi>
Source record: 97681

rkarlqu@scd.hp.com (Richard Karlquist) wrote:

>In article <1997Feb4.164113.16550@ke4zv.atl.ga.us>,
>Gary Coffman <gary@ke4zv.atl.ga.us> wrote:
>
>>>Another problem with square wave drive is that if you don't make
>>>the duty cycle exactly 50%, you degrade the mixer performance.
>>>It's easier to make a distortionless sine wave (with a low pass
>>>filter) than a perfect square wave.
>>
>>That's a problem. Even 2% phase error can cause significant
>>degradation of performance. At first glance, using a 2x LO
>>and a flip-flop divider would seem the logical choice, but
>>most FFs tend to have a degree of timing jitter which makes
>>this a problem. With a digitally synthesized LO, however,
>>you can make the symmetry arbitrarily close to perfect by
>>increasing the number of synthesis steps. You can also use
>>a walking ring circuit with an even number of stages to
>>guarantee symmetry to an arbitrary degree.
>
>
>This doesn't solve the problem of unequal rise and fall
>times. The only way I know of to do that is to use two
>flip flops operating 180 degrees out of phase driving
>the mixer thru a combining transformer. But there you are
>back to a transformer passing square waves again.

Some logic families are notorious for having quite different current sourcing and sinking capability. When driving large capacitive loads, this will result in different rise and fall times. Flip-flops are problematic in many ways. Some have internally feedbacks taken directly from the output pins, reducing the fan-out capability. A heavy capacitive load at the output could even cause erratic operations due to the internal feedbacks. As a general rule, never use a flip-flop as a line driver (or mixer driver) directly.

A +7 dBm mixer (5 mW) requires 0.5 V and 10 mA rms driving power and some logic families have problems supplying 10 - 15 mA.

A buffer with low input capacitance and symmetrical output impedance would reduce the timing jitter problem.

ECL flip-flops and buffers are designed for the transmission line environment and have other desirable characteristics (non saturating outputs, low output voltage swing, high current output). ECL works at low frequencies, even if it would be strange to find ECL chips in a 1

MHz environment :-)

>>Gary Coffman KE4ZV | You make it, | Due to provider problems
>
>
>Rick Karlquist N6RK
>rkarlqu@scd.hp.com

Paul Keinanen OH3LWR

1443. WTB 3CX3000A7 pull out

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: teckserv@nai.net
Message-ID: <5d9s49$s8q@a3bsrv.nai.net>
Source record: 97682

Looking for a 3CX3000A7 pull out in good condition for radio project.
Email John at: teckserv@ct2.nai.net

Thanks

1444. Re: help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: Rolf Mathson <rmathiso@ix.netcom.com>
Message-ID: <32F88444.340A@ix.netcom.com>
Source record: 97683

Diback wrote:
>
> I am 15v years old, and I realy enjoy radio. I am quite active
> listening to the military on shortwave, local police and fire on vhf/uhf,
> and I'm studeing for my HAM licence. What I would realy like to get into
> next, is reception of U.S. navy submarine communications on the VLF band.
> If any one out there knows where I can obtain plans to build a VLF
> reciever capable of recieving the freqs. that sub bases transmit data on,
> I would realy appreciate it. Also, if you could help me with what type of
> RTTY system is used (ARQ, SITOR, etc.) I would be much indebted to you!
> Thanks,
> Scott
> (to reply, just click respond!)

Try http://www-pw.physics.uiowa.edu/mcgreevy/

Regards,
Rolf

1445. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <IPrhJEAfSD+yEww6@ifwtech.demon.co.uk>
Source record: 97684

R. L. Measures wrote:

>12 ohms seems pretty high. There must be lots of ESR in the AL-1200's
>filter capacitors. With 0.7a of ripple current, you could be dissipating
>plenty of heat in the electrolytic filter capacitors. Which capacitor
>manufacturer made them?
>
In a stack of eight capacitors, that's an ESR of 1.5R each - for
300-400V units that looks pretty normal.

>> Adding a ten ohm resistor would lower fault current from 291 amperes to
>> 159 amperes IF the resistor did not arc internally. Big deal.
>
>It is a big deal to us because we use 200a-maximum glitch protection diodes.
>

Are you seriously recommending diodes with a surge rating of only 200A
to handle a surge of up to 159A? Those diodes are safety-critical
components - not just equipment safety but human safety too. For the
little extra cost of fitting a higher-rated component, I would never
trust a surge rating where safety is involved.

As a basic safety precaution I would limit the maximum possible surge
current to a much lower value (such as 40A - see below) and choose the
protection diodes on the basis of their CONTINUOUS current rating. Then
I can be sure that those safety diodes will hang in there until a fuse
or breaker blows.

>> Adding a correct style 35 ohm resistor would lower fault current to 75
>> amperes. That's a good improvement.
>
>True enough. But how low do we need to go? Svetlana recommends 10 ohms to
>25 ohms for a 1500w tube.

Eimac recommends 50R for a 2kV supply, so that even the surge current
cannot possibly exceed 40A. I'll go with Eimac.

When it comes to safety with HV supplies, there's no such thing as
overkill.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

1446. Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: John Noel <jhn5012@tntech.edu>
Message-ID: <32F8B927.F24@tntech.edu>
Source record: 97685
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

I have neighbors who play loud music. Is their a way to jam their electronic equipment, e.g., CD player, to keep them from working? Would a transmitter of some sort work? Any help would be appreciated.

John

1447. TI 'C50

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: Doug
Message-ID: <32F89CA0.41C6@gesg98.geo.census.gov>
Source record: 97686
Cross-posted to: rec.radio,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb,rec.radio.scanner

I have a C50 question. According ot the boot load section of the
databook, it says that their are several methods of loading an external
program in to internal memory, however if you look at the schematic
for the cheap-O kit, the bus is not set for the 8-bit parallel load
at FFFF (uses *BR,*DS at reset).

Is it possible that the 27C256 has the appropriate bits set?

Doug

---
sailing's an adventure, enjoy the ride!

1448. Re: help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc138f$bd7a6f20$18c0e1ce@cstevens.usr.com>
Source record: 97687

I hate to put a damper on your interest, but I believe that you'll find it very difficult to monitor the US Navy submarine transmissions at VLF ... those transmissions are HEAVILY coded, both for security and for error correction to allow reception under the worst of conditions ... I doubt that you'll have much success in making heads or tails of any bits that are flying about in that part of the spectrum.

This is NOT to discourage your interest in radio, but simply to caution you to set realistic expectations about whay you may or may not be able to receive before you embark on a project that may involve considerable effort. There are a lot of interesting things to listen to at VLF ... you might check out the "Lowfer's Page" and other links you'll find there ...

Try: http://members.aol.com/lwcanews/index.html

Carl

Diback <diback@aol.com> wrote in article
<19970205004301.TAA09168@ladder01.news.aol.com>...
> I am 15v years old, and I realy enjoy radio. I am quite active
> listening to the military on shortwave, local police and fire on
vhf/uhf,
> and I'm studeing for my HAM licence. What I would realy like to get into
> next, is reception of U.S. navy submarine communications on the VLF band.

> If any one out there knows where I can obtain plans to build a VLF
> reciever capable of recieving the freqs. that sub bases transmit data on,
> I would realy appreciate it. Also, if you could help me with what type
of
> RTTY system is used (ARQ, SITOR, etc.) I would be much indebted to you!
> Thanks,
> Scott
> (to reply, just click respond!)
>

1449. AADE L/C Meter II-B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: rmote@rain.org
Message-ID: <5dah21$do8$1@news.rain.org>
Source record: 97688

Just got my L/C Meter II-B from Almost All Digital Electronics yesterday, and it went together quite nicely. Finally -- a meter that updates fast enough to follow a variable cap or roller inductor that's being turned! And approximately 1% (of *reading*, not full scale!) accuracy ain't bad either, for an $89 kit. Neighbor KC6BLI had one, and after seeing it work I just *had* to have one for myself. It won't replace the old B&K LCR meter for large chokes and electrolytics, but it'll run rings around the B&K when measuring RF components. Neil Heckt has done an outstanding job on this little kit, and I understand he's working on more (like a nifty little microwattmeter).

On the downside, he uses a clear plastic sheet with adhesive backing as the front panel label and dial "window". 'BLI and I both cut off the top portion over the display opening and replaced it with microscope slides held in place with jewelers' cement -- works FB. Enlarging the hole in the case also improved readability of the display at the more extreme angles, but is hard to do neatly (i.e., straight, smooth edges). Didn't bother me much, as I was more interested in functionality.

Although the display will read .01 pF to 1 uF, the real bottom end for decent accuracy is more like a couple pF. Not a real problem, as most garden-variety components only go down to a couple pF anyway. All in all, a very nice little unit, at a darned good price for what it does.

If you're interested, contact Neil at <neil@aade.com> or:
Almost All Digital Electronics
1412 Elm St. S.E.
Auburn, WA 98092
(206) 351-9316

Disclaimer: I have no association with AADE other than as a new customer. Your mileage may vary, but *I'm* tickled pink!

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

1450. Q:Where to get SCA Adapter Circuits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: tmahanna@ziplink.net
Message-ID: <5dai24$2lk$1@zip1.ziplink.net>
Source record: 97689

I want to modify my radio to receive SCA. Where can I get a cheap kit/circuit? Thanks.

-Tom

1451. Re:80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: pacyna@auratek.COM
Message-ID: <3.0.16.19970205132317.28c7c212@galaxy.auratek.com>
Source record: 97690

>gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>Let me note here that QRP SSB usually isn't very effective on
>the 75m band. Due to the high atmospheric noise and the heavy
>QRM on this popular and crowded band, you usually need some
>power to be effective. I'd suggest that 100 watts be considered
>the comfortable minimum for SSB operation. You can sometimes use
>much less, but often you need even more power. So a QRP kit may
>not be the best way to go.

I would disagree. Last winter I build a 75M SSB QRP transceiver. It used the filter method for sideband suppression and was built on a PCB 4" x 6". The output was 10W PEP. Over a 4 month period I worked 55 countries using a 102' inverted V, 45' at the apex, fed with ladder line. On several occasions, I disconnected the final and maintained contact with the driver (250mW). I spent no more than 4 or 5 hours per week, between 5PM and 10PM EST working DX on this band.

The difference between 100W and 10W is only 10dB. On state side QSO's folks didn't seem to care much if I was S9 +10dB (and not S9 +20dB).

Ed
W1AAZ

1452. Re: 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: maroof@cybersys.net
Message-ID: <5da2ogjnm1@post.servtech.com>
Source record: 97691

In article <1997Feb4.161129.16349@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>In article <5d3272$t8h@news3-gui.server.cableol.net>
> "carl.ratcliffe3@virgin.net"@virgin.net writes:
>>I'm a new HAM and would like to build a portable 80m LSB Tx
>>anyone got any good ideas ?
>
>There are three basic ways to make a SSB transmitter. There is
>the filter method, the phasing method, and the third method
>(also called the Weaver method).
>

Can you explane how 3KHz+ voice bandwidth is available at the output even when

it passes through a 1.8KHz LP filter after the fisrt Qmodulation? I've been trying to understand it for some time but crunching long equations is no fun.

Can you give a comparision of performance of Tx/Rx made in the three mthods? Also, maybe you could help me build my rig I'm planning for the 20M band.

Maroof H. Choudhury
maroof@triton.kaifnet.com

Maroof H. Choudhury
maroof@triton.kaifnet.com

1453. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-05 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5dambulon3@nadine.teleport.com>
Source record: 97692

In article <n7ws.254.0203FB68@azstarnet.com>,
n7ws@azstarnet.com (Wes Stewart) wrote:

>Hold on there counselor. You are putting words in my mouth. I did not
state
>that suppressors do not operate in a parallel mode and that Rp is not
>significant. Clearly, the way a suppressor is configured, it is a
parallel
>network. Equally clear is that it operates in series with the remainder
of
>the circuitry.
>
>Every parallel network has an equivalent series one (an vice versa), which
>when measured independently is indistinguishable from the other. This
does
>not mean that the equivalent networks behave the same when imbedded in
another
>network.

As written, this could cause people to reach wrong conclusions.

Every parallel network has an equivalent one (and vice versa) which is indistinguishable ONLY AT A SINGLE FREQUENCY. This qualification is very important. If you have, for example, a parallel network, you get a different series equivalent circuit at each frequency. So you can't just replace one with the other, then do your analysis at a different frequency. For analysis at other than a single frequency, you have to use the correct network, not an "equivalent", or else find and use a different "equivalent" at each frequency.

The equivalent networks DO behave the same when embedded in another network -- but again, only at a single frequency.

Roy Lewallen, W7EL

1454. Re: testing inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: Warren Bates <waboo@cltr.uq.oz.au>
Message-ID: <32F8FEC2.3303@cltr.uq.oz.au>
Source record: 97607

Hi there. In response to your question on how to identify the inductor you have you could simply place a large capacitor with a known value across it (solder of clips will do). The capacitor could be a ceramic non polarized 100pf type. Then place a Signal Generator across the parallel circuit you have formed with the L and C. Across this place a CRO. Keep the earth leads common at one end of the parallel LC. The CRO has little loading or detuning effect on the tuned circuit. Observe the waveform on the CRO and when the frequency you are applying matches the resonant frequency of the LC circuit there will be a noticable increase in amplitude of the waveform on the CRO.

Pick a starting point of 1 MHz but be prepared to go lower and higher. There will be one frequency where the amplitude is maximum.

As you know the capacitor value (100pf) and you can calculate XC (capacitive reactance) XC = 1 0VER 2 PIE F you now know that XL = XC at resonance. Transpose XL back to L and there you have it.

Sounds difficult? it's not.

That's the best way I can think of.

cheers

wab

1455. WTB: SB-220 Knobs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: John Lockhart <jlockj@minn.net>
Message-ID: <01bc13c3$fcb67e20$327cc6cd@default>
Source record: 97608

Looking for two of the large Tune/Load knobs for
my SB-220.

Thanks,

John W0DC
St. Paul, Minnesota

1456. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970206013400.UAA08893@ladder01.news.aol.com>
Source record: 97609

In article <5d9a28$q5h@dallas1.connect.net>, philk5pc@connect.net (Phil Clements) writes:

>>
> At what frequency does the arc change from blue to purple? How about
> the good old white arcs we see in the springtime?
>
>

I've looked all through my books. I can't find that either. My spark plug wires arc blue, as does my 160 meter mobile antenna coil. Maybe my IC-706 or MSD car ignition are putting out UHF parasitics?

Or maybe this is just something someone just said, without having facts. Was the person that started this color thing a reliable source noted for accuracy?

73 Tom

1457. Help !!! for the Mitrek Motorola radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: va2prc@mediom.qc.ca
Message-ID: <5dbfhb$r21$2@wagner.spc.videotron.ca>
Source record: 97610

I would like to have any information and instruction manuel for the mitrek radio. I have 2 mitrek radio in the High band with 30W output in the consolette box with the power supply.
I have a ploblem, because my manual is just for the 40/60/75/110Watts VHF radio.It's the same manual for my radio ??? The model number doesn't appear in my manuel and the orther number to !!! I would like to build a repeater with this radio in the 2 meter band. Any information please contact me via email at: va2prc@mediom.qc.ca or by News.

Mitrek Motorola Radio VHF in the Hi Band
Model No: XL43JJB1100BM
Type: JJHA
Power output: 30W
1-4 frequency
Chassis Number:HLD1002APR
P.A. number:HLD4012A6PR

Thanks for any informations !

Yves Parent (VA2PRC)

1458. Heathkit HW-101/SB-102/HP-23A Connector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: mdonohue@renc.igs.net
Message-ID: <32f9232d.9496333@news.igs.net>
Source record: 97611
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi:
Friend of mine has just bought a HW-101 with a HP-23A Power Supply
but it came without the power connector. Does anyone know the Cinch
Jones equivalent for this power connector. I believe the HW-101 and
SB-102 series uses the same connector. Any help would be greatly
appreciated.

73 De Mike
VE3DMJ

1459. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: Ian Gill <ian@minidata.co.nz>
Message-ID: <01bc13e1$6dd6e320$LocalHost@ian1>
Source record: 97612
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Kevin said:

Your best bet is to TALK to your neighbors. Be neighborly! It sure
> can avoid problems.

The best time to talk to music lovers, especially ones given to shaving
their heads and wearing swastika armbands, is early morning, say 6.30 am.

1460. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970206041000.XAA16778@ladder01.news.aol.com>
Source record: 97613

In article <measures-ya02408000R0502971814530001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>Who are the 'others' who have shown what 4.32 ohms of R in series with
1100
>ohms of anode Xc does to harmonic suppression at 30MHz?
>
>

Rich, your figures are meaningless. There is no way to calculate
the reduction of the tank Q with the information you are supplying.
Haven't you been following this thread?? Didn't Tom and others just
recently post what is really involved in making those
measurements?

Perhaps your ISP provider is having problems with the newsgroups and
you are missing some important posts. Might I suggest you try using
WWW.DejaNews.Com to research earlier material
posted in this thread.

Best 73

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1461. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc13f1$0bd229e0$16102399@peter-s>
Source record: 97614
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ian Gill <ian@minidata.co.nz> wrote in article
<01bc13e1$6dd6e320$LocalHost@ian1>...
> Kevin said:
>
> Your best bet is to TALK to your neighbors. Be neighborly! It sure
> > can avoid problems.
>
> The best time to talk to music lovers, especially ones given to shaving
> their heads and wearing swastika armbands, is early morning, say 6.30 am.
>

Hmmm. Maybe they would get the hint? Either that or they would firebomb
your home.

Perhaps they need to be tested as dummy loads for a 25 kW 2.45 GHz amp?

Actually, I have (accidently, really) found that 100 Watts on 450 MHz quite
nicely
disrupts most consumer electronics within about 40 feet. Including the VCR
taping
my wife's soaps...

1462. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0602970328350001@news.vcnet.com>
Source record: 97615

In article <5d9b4o$q5h@dallas1.connect.net>, philk5pc@connect.net (Phil Clements) wrote:

> In article <19970205012200.UAA11218@ladder01.news.aol.com>, commquart@aol.com says:
> >
> >In article <measures-ya02408000R0302971015390001@news.vcnet.com>,
> >measures@mail.vcnet.com (R. L. Measures) writes:
> >
> >>
> Sorry Rich, the article below was apparantly to me but I don't have
> access to it on the newsgroup! (Doesn't appear) Will answer your
> questions now.
> >>>
> >> Interesting, Phil. Was the anode-circuit resonance in this amplifier
> >also
> >>110MHz?
>
> Yes, it has been a well established fact for the 4-1000A...
>
> Did the author explain the purpose of the 20pF capacitor?

The anode-resonance is somewhat dependant on the amount of external L that is connected to the anode. Since the anode-C is around 9pF for a 4-1000A/8166, 220nH would create a resonance at 110MHz.

> No, he didn't, but it is to resonate the coil and resistors @ 110 mhz
>
True enough if Ls is 110nH. However, a 110nH Ls is going to produce a substantial voltage drop at 29MHz due the anode-C of 9pF---which, at 29MHz, has about 600 ohms of reactance. At 6kVDC, the AC anode voltage would be a bit over 3600Vrms. Thus, the current through Ls/Rs would be about 6Arms at 29MHz. IMO, this would dictate that Rs be rather robust, lest it combust.

>
> How much DC anode voltage do you use? Does this amplifier/suppressor perform
> >>satisfactorily on 10m?
> >>
> >> I use 6000 volts on the anode. It was the first suppressor that I found to
> be successful on 10m in the late 70's @ 1500 watts without using a big
> Glowbar resistor as R in a suppressor.
>
Thanks.
It's an interesting idea, Phil. I wonder why none of the amplifier

manufacturers are using the technique---especially Ameritron since Mr. Rauch gave W4QQ high marks. On the other hand, I see that W4QQ is not on Mr. Rauch's recognized (and self-recognized) Amplifier Experts List in the 9/94 issue of QST magazine.

---

e-mail copy to Mr. Clements

--

--Rich-- ag6k, 805-386-3734

1463. Top 10 Mistakes with a Digital Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0602970617320001@wd1v.mv.com>
Source record: 97616

If you are getting ready to use a digital storage oscilloscope (DSO), you should consider the most common mistakes made trying to use them.

The Top 10 Most Common Mistakes Using a DSO

* Believing you don't have the time to learn how to master your DSO.

* Starting a session after someone else has used the DSO and not first doing a default reset or going to a known front panel status.

* Undersampling the waveform as a wider time is attempted to be viewed with too short of memory DSO.

* Looking at too small an area of time so the view seldom includes the views of causes AND effects.

* Not getting and reading all of the DSO application notes that address your project.

* Squeezing 4 traces on a single grid and using the volts/div. control to bring each waveform to a little less than 25% of full scale and thus throwing away 2 orders of magnitude of resolution and accuracy.

* Taking only 1 measurement and believing "the truth is known" instead of using persistence, histograms, statistics, etc. to let the scope show what is changing over time. Similar to NOT using FFTs to see what is changing in the frequency spectrum.

* Using a passive probe and trying to measure a high frequency and/or load sensitive circuit.

* Not using the scope's built-in measurements and using cursors or counting grid squares for every measurement.

* Not speaking with others in your company or team that use your model DSO and getting their techniques, front panel set-ups, remote control software ideas, etc. An informal users group can be an incredible asset and save you a lot of time.

Digital Scope.FAQ Main Menu
(in order of appearance)

* WELCOME! This FAQ Welcomes YOU
* DSO INDUSTRY TRENDS Whats happening in DSO technology this year?
* DSO FORM FACTORS What types of DSOs are there?
* PRIMARY DSO FUNCTIONS What can DSOs actually do?
* COMMON MISTAKES How can I really mess it up with a DSO?
* COMPARISONS How can I best compare various models?

* DSO APPLICATIONS What are the most common DSO applications?
* ADCs What speed do I really need on each channel?
* BANDWIDTH & TRIGGER What numbers & functions are right?
* ARCHIVAL & MEMORY How fast, how deep, & can I get more?
* DISPLAYS What am I really looking at?
* MEASUREMENTS How much is my signal changing over time?
* DIGITAL SIGNAL PROCESSING How can I obtain more useful data?
* DEMOS & PURCHASING How can I see & get the DSO I really need?

IF... you want the complete version
of this Digital Scope.FAQ file sent
to you automatically as an
ATTACHED TEXT FILE <40 k TEXT File>.

send me (john@wd1v.mv.com).....
an EMAIL where the subject contains
the text "subscribe scope.faq".....

or

go to my Home Page.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1464. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <32fbc058.2707013@eskinews.eskimo.com>
Source record: 97617

Does anyone know WHY grids are gold-plated? If evaporation of gold is a potential problem, why not just make them from a high-temperature metal such as tungsten and be done with it? Obviously, there has to be some advantage, but what?

73, Bill W7TI
wrt@eskimo.com

1465. Re: Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0602970426030001@news.vcnet.com>
Source record: 97618

In article <32F54E46.4F11@tri.net>, stoskopf@tri.net wrote:

> Boy this discussion has been going on a long time and has degenerated.

Amen, Larry. Some of the recent posts do seem to be a bit puerile. Sorta reminds me of some of the hair-pulls I used to see in first and second grade.

> I don't know Buzz personally, just met him at a CSVHF conference where
> he presented an excellent talk on using one of the Eimac tubes on 1296.
> He stayed up late several nights discussing tubes and amps in general
> with anyone having questions.
>
> WB0DRL built several of the amps and actually had some CNC versions
> machined. Fried a couple of tubes, Buzz was right there with
> replacements and dissected the dead at the factory to help with the
> design. As I recall, he had several made with water cooled jackets to
> see what Pete could do with those (I suspect you have to be somewhere in
> the chain of command to get that done for Ham purposes).
>
> Anyway, he is/was a great guy and if he happened to lurk here a while
> before joining the discussion, I suspect he is now under deep cover.
>
> N0UU

I was hoping Mr. Miklos would show up, as proffered by Mr. Rauch, but January came and went along with my hopes. Based on the information I received from the Eimac/Salt Lake personnel department, Mr. Rauch, either knowingly or unknowingly, made misrepresentations about Mr. Miklos' job title and area of responsibility when Miklos was employed by Eimac. I should think that Mr. Miklos would be eager to appear and set the record about his CV straight. Perhaps he doesn't want to embarrass his friend, Mr. Rauch.

RE: Miklos' dissecting and analyzing dead tubes: Mr. Rauch has repeatedly said that analyzing dead tubes is absolutely, positively, 100% impossible.

cheers

--
--Rich-- ag6k, 805-386-3734

1466. Re: Pin diode tr/rc switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: dmoorman@interaccess.com
Message-ID: <dmoorman-0602970703550001@d188.dialnet1.interaccess.com>
Source record: 97619

>Randy Alexander wrote:
>>
>> I would like to find a reference for pin diode tr/rc switches. I do not
>> know how they work and would like to. Any help would be appreciated.
>> TNX Randy AB7QR

For several years there was a PIN diode T/R switch in the ARRL Handbook.
I don't know if it is in the current editions.

Dave

--
Dave Moorman Be big, don't belittle.
Downers Grove
Illinois, USA
http://homepage.interaccess.com/~dmoorman/DavesPage.html

1467. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0602970538390001@news.vcnet.com>
Source record: 97620

In article <19970206041000.XAA16778@ladder01.news.aol.com>,
commquart@aol.com wrote:

> In article <measures-ya02408000R0502971814530001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
> >Who are the 'others' who have shown what 4.32 ohms of R in series with
> 1100
> >ohms of anode Xc does to harmonic suppression at 30MHz?
> >
> >
>
> Rich, your figures are meaningless. There is no way to calculate
> the reduction of the tank Q with the information you are supplying.
> Haven't you been following this thread?? Didn't Tom and others just
> recently post what is really involved in making those
> measurements?

The figures are not mine. The figures are from Wes' measurements, from
Eimac's specs for the 3-500Z, and from worldwide-accepted (except in
Conyers, Georgia, U.S.A.) AC Circuit-Analysis calculations.
Since no one seems to be able to calculate how Wes' measured value of ESR
(4.32 ohms) for Ls/Rs would affect the harmonic output of a 30MHz signal,
and no one has apparently measured the harmonic output of an amplifier that
uses a Ni-Cr-Fe alloy VHF suppressor, how are we to know if the sky is
really falling, Peter?

> Perhaps your ISP provider is having problems with the newsgroups and
> you are missing some important posts. Might I suggest you try using
> WWW.DejaNews.Com to research earlier material
> posted in this thread.
>
Thanks for the tip, Peter.

On the vcnet news server, I am currently seeing 11 posts by Mr. Rauch
between 1/29 and the present. I currently see 7 posts by yourself in
February. How does this compare with what you see on your news server?.
---
e-mail copy to Mr. Bertini.

--
--Rich-- ag6k, 805-386-3734

1468. Re: Heathkit HW-101/SB-102/HP-23A Connector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5dcp2u$dr2@sf18.dseg.ti.com>
Source record: 97621
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The Heath rigs don't use a Cinch-Jones connector, they use octal-type
connectors (but the 11-pin model, rather than 8-pin). Which one does
your friend need, the male or the female (or both)? I may have extras
that I could spare for him.

73 de K5DH

In article <32f9232d.9496333@news.igs.net>, mdonohue@renc.igs.net says...
>
>Hi:
> Friend of mine has just bought a HW-101 with a HP-23A Power Supply
>but it came without the power connector. Does anyone know the Cinch
>Jones equivalent for this power connector. I believe the HW-101 and
>SB-102 series uses the same connector. Any help would be greatly
>appreciated.
>
>73 De Mike
>VE3DMJ
>

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

1469. Need schematic for a single conversion 10 meter RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: dselwa@qualcomm.com
Message-ID: <5dcpm5$504$1@thefuture.qualcomm.com>
Source record: 97622

I need a schematic or kit for a good 10 meter single conversion receiver.
There some for 40 and 20 but I can't find one for 10.

Dennis Selwa W6EH

1470. Help with power supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: OSTERTAGK@SNYCORVA.CORTLAND.EDU
Message-ID: <01IF3AVSDHVG00ACOI@SNYCORVA.CORTLAND.EDU>
Source record: 97623

I'm a new ham, and trying to learn more about electronics. I just finished building the 13.8v 5A power supply detailed in the ARRL handbook. Learned a lot, but I need some help. I had wanted to use the above for powering a mobile rig indoors, but failed to look before I leaped- it requires at least 10 A's! So I guess I will try to modify this one, or build another. I want to look at using a couple of pass transistors with this one to see if I could make that work (with an obviously bigger transformer! I'm looking for a 18-25v 20Amp transformer if anyone has one for sale...).

Anyway, I would like to see if someone would be willing to correspond with me offlist for detailed discussions and perhaps passing schematics back and forth. If interested, please email at the address below. Thanks,

Keith Ostertag, N3KXZ
ostertagk@snycorva.cortland.edu

1471. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: Rump Ranger <Gay_Internet@See.colon.enter.pound.pound.pound.pound>
Message-ID: <32F9EB94.1410@See.colon.enter.pound.pound.pound.pound>
Source record: 97624
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ian Gill wrote:
>
> Kevin said:
>
> Your best bet is to TALK to your neighbors. Be neighborly! It sure
> > can avoid problems.
>
> The best time to talk to music lovers, especially ones given to shaving
> their heads and wearing swastika armbands, is early morning, say 6.30 am.

The best way to handel that is take your huge speakers with the 13 inch CV's in them and turn them around facing the wall that they live behind (provided it's an apartment) and set your timer for one hour after you leave, crank up that bad boy, get some really offensive rap CD from Death Row and set it to go off just before you get home from work and that should take care of that! :)

1472. HP1817A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: mramos@originet.COM.BR
Message-ID: <199702061549.NAA28922@netra01.origin.com.br>
Source record: 97625

Hi all!
I'm lookin for information on HP1817A RF sampler. I got a surplus unit
on it's c. case, but no more info at all, even at HP homepage.
Any Idea?

Best regards:

Marcus Ramos(PY3CRX)
<mramos@originet.com.br>

1473. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0602970755420001@news.vcnet.com>
Source record: 97626

In article <32fbc058.2707013@eskinews.eskimo.com>, wrt@eskimo.com (Bill Turner) wrote:

> Does anyone know WHY grids are gold-plated? If evaporation of gold is a
> potential problem, why not just make them from a high-temperature metal such
> as tungsten and be done with it? Obviously, there has to be some advantage,
> but what?
>
> 73, Bill W7TI
> wrt@eskimo.com

Gold has low emissivity. Thus, when the grid heats up from the flow of normal grid current, primary electron-emission from the grid is minimal. Also, gold conveniently has a high boiling point---and, as an added bonus, gold helps to reduce the ESR of the grid. ESR becomes progressively more important as the frequency increases. The 8877's anode-to-grid C is 10pF. At 250MHz, 10pF has a reactance of 65 ohms. When operated from a 4000v anode supply, an 8877 has about 2700Vrms at the anode. Thus, I-grid (rms-ac)=2700V/65 ohms = 41.5A-rms, or about 0.43A-rms for each of the 96 grid wires. Due to skin-effect, 0.43A-rms @ 250MHz is a considerable amount of current for a wire whose circumferance is only about 1.1mm. Thus, if the 8877's grid wires were not gold-plated, serious grid heating would probably result at such frequencies.

RE: Gold-evaporation: In the last batch of kaput 8877s I received from Lon Cottingham, K5JV, two of the three 8877s contained condensed gold particles/'melt-balls'.
However, I do not believe that gold-evaporation is likely in HF amplifiers if the VHF-Rp (parallel-equivalent R) of the VHF-resonant anode circuit is made as low as is practicable. To explain: since voltage amplification (Ae) is basically Mu*Rp, if the VHF-Rp is relatively low, VHF-Ae is also relatively low---which should reduce the likelyhood of VHF-regeneration. However, none of the foregoing applies in one area of the State of Georgia.

Placing the tune capacitor close to the anode in order to increase the anode resonant frequency also contributes to VHF stability. Fortunately, this applies throughout Georgia.

For more information, try Dick Erhorn's Chapter 13 in the 1995--1997 Editions of the *Radio Amateur's Handbook*. If you don't have a copy yet, the soft-cover version is available from the ARRL for $44, inc. UPS. ground-delivery
---
e-mail copy to Mr. Turner

--
--Rich-- ag6k, 805-386-3734

1474. HF diode receivers (was VHF crystal diode receivers)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: edbu@sepia.wv.tek.com
Message-ID: <5dd38fINN2k2@sepia.wv.tek.com>
Source record: 97627

I was interested in Henry Titchens question about building a
diode detector aircraft band receiver, and had similar thoughts
about using them for HF bands.

So my question is this:
Has anyone successfully built and used a germanuim crystal receiver
on the HF bands for QSO's recently? If so, how do you keep out the
local AM radio stations without compromising sensitivity? Is picking
up code without a side tone oscillator practical?

I know that this is not a new question, and many might wonder why on
Earth a person would waste their time on this. I find that I still
have the same enthusiasm in the hobby that I had as a kid, and enjoy
all facets of the hobby: QRP-SSB, fast scan TV, packet, homebuilt
duplexer design, etc. I also collect antique radios, and have thought
of operating a 1920's-1930's vintage station one of these days.
(receiving your signal well on 1st and 2nd harmonic) ;^).
Picking up a signal without a battery has always fascinated me.

Thanks,
Ed Burress
KC7GFX

1475. Re: FS: HP141T Spectrum Analyzer (0-1200mHz)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: jim@rst-engr.com
Message-ID: <32f914c3.8077380@news.gv.net>
Source record: 97628
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

dallen@melpar.esys.com (Dale Allen)
shared these priceless pearls of wisdom:

->This is a real-time analog spectrum analyzer

Ok, fellers, this is the same guy that had a Boonton 250 RX meter last week. Doing a onesy-twosie sale on an occasional basis is one thing. My suspect is that this is going to become the weekly auction thing.

Besides, what's this auction crap. Put up a price. First one to meet it buys it.

Jim

Jim Weir VP Engineering | You bet your sweet patootie I speak for the
RST Engineering | company -- and I'm damned proud to do so.
Grass Valley CA 95945 | Airport: O17 (Grass Valley Intentional Airpatch)
http://www.rst-engr.com | AR Adv WB6BHI--FCC 1st phone---C-182A N73CQ
jim@rst-engr.com | Comm'l/CFI-Airplane/Glider-A&P-FAA Counselor

1476. Re: Need schematic for a single conversion 10 meter RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5dd3bo$p9m@sf18.dseg.ti.com>
Source record: 97629

What's your application? You could use a converted SSB CB radio. They
are single-conversion superhet receivers, typically with a crystal filter
in the i-f with about a 3 KHz bandwidth.

- Dean, K5DH

In article <5dcpm5$504$1@thefuture.qualcomm.com>, dselwa@qualcomm.com says...
>
> I need a schematic or kit for a good 10 meter single conversion receiver
>.
> There some for 40 and 20 but I can't find one for 10.
>
> Dennis Selwa W6EH

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

1477. --- SOFTWARE COLLECTION FOR $100 ---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: aszx <aszx@mailmasher.com>
Message-ID: <199702061821.KAA22944@mailmasher.com>
Source record: 97630
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

We sell full CD's with many software applications for $100.

For detail Email to collection@emails.com

write on the subject "INFO - (the newsgroup name that you saw the adv.)"

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collection@emails.com
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1478. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb6.175433.27521@ke4zv.atl.ga.us>
Source record: 97631
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <32F8B927.F24@tntech.edu> John Noel <jhn5012@tntech.edu> writes:
>
>I have neighbors who play loud music. Is their a way to jam their
>electronic equipment, e.g., CD player, to keep them from working? Would
>a transmitter of some sort work? Any help would be appreciated.
>
> John

It is perhaps possible that you could generate sufficient RFI to
interfere with the operation of their stereo (as well as every other
consumer electronic appliance within a wide radius), but besides being
illegal, it would be stupid. Either they, and the rest of your neighbors,
would come over and beat your butt, or they'd just add some simple RFI
suppressors to their stereo and turn it up louder.

It will be much better to deal with the problem in a legal fashion.
If you can't come to an amicable agreement with them, and they really
are playing the music so loud as to be a public nuisance, then file
a complaint with the local police for violation of the local noise
ordinances (almost every community has one). If for some reason your
community doesn't have a noise ordinance, file a civil suit directly.

If you don't wish to involve the law for some reason, then I suggest
you invest in a cheap pair of hearing protectors, available from any
industrial safety equipment supplier, or a shooting supplies outlet.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1479. Re: FS: HP141T Spectrum Analyzer (0-1200mHz)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: Lars Arvidsson <arvid@plea.se>
Message-ID: <32FAADA3.447F@plea.se>
Source record: 97632
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Jim Weir wrote:
> dallen@melpar.esys.com (Dale Allen)
> shared these priceless pearls of wisdom:
> ->This is a real-time analog spectrum analyzer
> Ok, fellers, this is the same guy that had a Boonton 250 RX meter last
> week. Doing a onesy-twosie sale on an occasional basis is one thing. My
> suspect is that this is going to become the weekly auction thing.

The 141T is just a display section, and a box for the RF and IF modules.
What RF and IF sections does it have?
Is it 0-1200MHz then the RF section ought to be 8554B, and the IF section perhaps
a 8552A.
I got a full assembly here right in front of me...got it for free at my job...ericsson.
I like it!
//Lars SM4RZW

1480. Re: Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0602971145460001@news.vcnet.com>
Source record: 97633

In article <19970204154400.KAA09496@ladder01.news.aol.com>, w8jitom@aol.com wrote:

> In article <32F54E46.4F11@tri.net>, stoskopf@tri.NET (Lawrence Stoskopf)
> writes:
>
> >
> >Anyway, he is/was a great guy and if he happened to lurk here a while
> >before joining the discussion, I suspect he is now under deep cover.
> >
> >N0UU
>
> Buzz received a post card from Measures that clearly indicated Measures
> was calling around checking on him. Measures told Buzz he never worked in
> the capacity he claims he did at Eimac.

The postcard informed Mr. Miklos that someone on this newsgroup proffered a version of Mr. Miklos' job description at Eimac that was different from that in the Eimac personnel department records.

> Imagine what Buzz's past employers would think about some goof who has no
> business bothering them asking about what Buzz did when he worked there!
>
> You can guess how happy Buzz is already about the calls to his employer.

I did not telephone the Siemens Co., Mr. Rauch.
>
BTW, Tom, I could not care less who telephones, or otherwise contacts, my former employers.

--
--Rich-- ag6k, 805-386-3734

1481. Re: testing inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: miker <Nospam.mreiney@hevanet.com>
Message-ID: <32FA41EB.28A8@hevanet.com>
Source record: 97634

Actually, the test circuit described below can have a significant
effect on the measurement.
If you have the typical ham scope with a typical 10x probe, the probe
itself can add up to 20pf. If you use coax to connect the scope
or the signal generator, add 30pf/foot.

So, use a bigger capacitor if possible.
Put a big resistor in series with both the generator and the scope.
I use 100K, but you may have to use less depending on your scope and
generator.

Or skip the scope and use a grid dipper to determine the resonant
frequency.
miker

Warren Bates wrote:
>
> Hi there. In response to your question on how to identify the inductor
> you have you could simply place a large capacitor with a known value
> across it (solder of clips will do). The capacitor could be a ceramic
> non polarized 100pf type. Then place a Signal Generator across the
> parallel circuit you have formed with the L and C. Across this place a
> CRO. Keep the earth leads common at one end of the parallel LC. The CRO
> has little loading or detuning effect on the tuned circuit. Observe the
> waveform on the CRO and when the frequency you are applying matches the
> resonant frequency of the LC circuit there will be a noticable increase
> in amplitude of the waveform on the CRO.
>
> Pick a starting point of 1 MHz but be prepared to go lower and higher.
> There will be one frequency where the amplitude is maximum.
>
> As you know the capacitor value (100pf) and you can calculate XC (
> capacitive reactance) XC = 1 0VER 2 PIE F you now know that XL = XC at
> resonance. Transpose XL back to L and there you have it.
>
> Sounds difficult? it's not.
>
> That's the best way I can think of.
>
> cheers
>
> wab

--
To reply, remove "Nospam." from the return address.

1482. Re: HP1817A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: Burt Lang <burt@rocler.qc.ca>
Message-ID: <32F9FA52.2C80@rocler.qc.ca>
Source record: 97635

Marcus Ramos wrote:
>
> Hi all!
> I'm lookin for information on HP1817A RF sampler. I got a surplus unit
> on it's c. case, but no more info at all, even at HP homepage.
> Any Idea?
>
> Best regards:
>
> Marcus Ramos(PY3CRX)
> <mramos@originet.com.br>

It is used with the 1815 TDR plugin to create a 28 ps Time Domain
Reflectometer system. It is useless alone and requires the 1815, an
1106B tunnel diode mount, the interconnecting cable and a 180 series
mainframe to be used.

Burt Lang, VE2BMQ

1483. Re: --- SOFTWARE COLLECTION FOR $100 ---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: dgf@netcom.com
Message-ID: <dgfE57Bnx.D4r@netcom.com>
Source record: 97636
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <199702061821.KAA22944@mailmasher.com> aszx <aszx@mailmasher.com> writes:
>
>We sell full CD's with many software applications for $100.

These CDs are $12-15 each in Asia, retail in stores. Then often contain
beta versions and other stuff that's obsolete before you get it.

1484. FS 2N2222 TO-18's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: DENNYV <DENNYV@clarityconnect.com>
Message-ID: <32FA8FBE.379A@clarityconnect.com>
Source record: 97637

I still have a quantity of TO-18 Metal case 2N2222 transistors for sale as follows 25 for $5 ppd; 50 for $9 ppd. and 100 for $15 ppd my address is Dennis Voorhees
712 North Elmer Ave
Sayre, PA 18840-1840
Please drop me an e-mail before you send money, so that I can be sure to cover your order...Thanks and 73 Denny AD3O

1485. Re: help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: faunt@netcom16.netcom.com
Message-ID: <FAUNT.97Feb6153201@netcom16.netcom.com>
Source record: 97638

Actually, there's most of a VLF converter described in the March 97
Popular Electronics, that can be built on the board described in the
same authors article on the NE602 in the February 97 Electronics Now.
There's a lack of description of the coils that could be remedied, possibly
by sending mail to carrjj@aol.com.
73, doug

1486. Re: help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970206204523.2616A-100000@Stratus.CAM.ORG>
Source record: 97639

But I thought the point of using VLF for communicating with subs was that
those low frequencies (provided the power was high enough) could penetrate
into the ocean so the submerged subs could receive messages. You want
to have some means of reaching the subs without them having to surface.

I seem to recall reading something about how the communciation was very
slow because even at high power it was hard to get the signals through.
So it was a terribly weak signal at the sub, rather like moonbounce
signals.

When the sub receives the transmission, then they can surface if need
requires it and conditions allow it.

I don't think there is any way that the submarines would transmit on
VLF, since they would need very large antennas and probably high power
to get the signal out.

I assume that shortwave may have been used years ago, since there
weren't satellites and they did want range. But VHF/UHF with satellites
now has the advantage of a reliable link, and one that is harder
to listen in on.

MIchael VE2BVW

On Wed, 5 Feb 1997, John Harper wrote:

>
> Also, 98% of the encrypted sub comms take place on VHF/UHF via satellite.
> Claims made by manufacturers of VLF receivers claiming to be able to
> receive submarines are just hype. Don't let this deter you from pursuing
> a hobby in radio though - there's plenty of other exciting stuff out there.
> Oh, there is one way you could monitor sub comms - join the Navy and
> volunteer for sub duty! It really is (was) an adventure!

1487. Re: 16/1700 KCS IF xfmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-06 00:00:00 UTC
From: jeffd@coriolis.com
Message-ID: <5ddrrf$2i1e$1@news.goodnet.com>
Source record: 97640

ampruss@hits.NET (Peter L. Demmer) wrote:

>Greetings from the land of eternal summer;
>Im looking for an old 1500/1700 Kcs. IF xfmer with can. Im building an
>old tube type ham brew regen. receiver with the regen in the IF. The
>were the supergainers of the 50s. Is there any help out there?
>I have two part numbers;
>Miller #612-W4 1600 Kcs.
>Millen #62161 1700 Kcs.
>Any help will be greatly appreciated. So will the young kids at the
>next local home brewers meeting next. At least I can give em a progress
>report. Im ok for a reasonable cost es postage.
>72/73 Peter KH6CTQ

I've thought about this a lot. It's unclear what equipment used those IFs, but these days it might be "cruel" to scrap a radio of that vintage for its IF cans than try to piece it together again as a historical artifact.

My suggestion is this, which is something I have hoped to try for some time: Create your own IF transformer using two windings of fine wire on a toroid, and a pair of Arco ceramic trimcaps on either side. It won't *look* like an IF transformer, but it should work reasonably well as one, especially if you can keep the Q high. You lose the ability to control the degree of coupling with a movable slug, but you can tune the notch with the independent trimmers and play tricks with the bandwidth that way.

If anyone else has tried this, please speak up. It's on my project list, but the list is kind of long right now.

--73--

--Jeff Duntemann KG7JF
Scottsdale, Arizona

1488. Re: 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970207061751.21241B-100000@supreme>
Source record: 97543

On Tue, 4 Feb 1997, Gary Coffman wrote:

>
> Let me note here that QRP SSB usually isn't very effective on
> the 75m band. Due to the high atmospheric noise and the heavy
> QRM on this popular and crowded band, you usually need some
> power to be effective. I'd suggest that 100 watts be considered
> the comfortable minimum for SSB operation. You can sometimes use
> much less, but often you need even more power. So a QRP kit may
> not be the best way to go.

Having done some experiments with QRP SSB/DSB on 80 metres, I'd agree that there appears to be a threshold power below which 80% of 80m SSB contacts are not really successful/a battle with QRN, etc. Sure you can make contacts below this threshold, but it is hard going, and successful contacts where you're not repeating everything are few.

Above the threshold, it becomes more a matter of 80% of contacts being successful, and operating becomes more enjoyable.

From my own experiences a power of 1 watt DSB on 80m is probably below this threshold most of the time. However, 5 watts SSB will almost certainly be above it (Note that QRP is anything less than 10w SSB). Thus QRP SSB is definitely possible (and practical) on 80m, and I'd disagree with Gary that 100w be considered a practical minimum.

My furthest contacts with 2-3w SSB on 80m have been close to 2500km, but contacts of anywhere up to 1000km are quite practical on a fairly regular basis provided static levels aren't too high. However during such times, 100 watt stations have a battle, and many turn off.

73,

Peter Parker VK1PK

1489. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5ddtkm$23lk$1@news-s01.ny.us.ibm.net>
Source record: 97544

In message <measures-ya02408000R0502971115470001@news.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures) writes:
:>
:>------
:>According to American Heritage Dictionary: "name-drop"
:> To mention casually the names of illustrious or famous people in order :>to imply that
one is on familiar terms with them, intended as a means of
:>self-promotion.
:>------

"Name-drop" is not the issue here ...

Webster's New World Dictionary of the American Language: libel (n)
any written or printed statement ... tending to expose a person to
public ridicule or contempt or to injure his reputation in any way.

You have regularly implied that various commercial amplifier builders
are ripping off amateurs with inferior product.

Your claims do not hold up when examined by a network analyzer ...

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<subich@compuserve.com>
==

1490. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970207010900.UAA29701@ladder01.news.aol.com>
Source record: 97545

In article <measures-ya02408000R0502971807350001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>I am not the person who dismissed the solution to the 100 ohm Rs, 85nH
Ls,
>F=160MHz problem. I calculated the answers according to standard AC
>Circuit-Analysis. These answers were summarily rejected by Mr. Rauch,
who
>apparently solves such problems by intuition.

It would be nice if you showed fault in my analysis of your claim a low Rp
results in more stability, instead of launching into another lie.

Rich, you plainly claimed this:

In article <measures-ya02408000R0402970132530001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:
> In other words, the arcing that destroyed the original bandswitch and
the
>replacement bandswitch in Rick May's AL-80 can not be explained by a load
>fault. The only thing that was altered after bandswitch #3 was the
VHF-Rp
>of the VHF suppressor in the AL-80. The original suppressor has an Rp of
>about 166 ohms at the anode resonant frequency of160MHz. The replacement
>suppressor has an Rp that is around 101 ohms at 160MHz. Since voltage
gain
>is essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain. //

You are plainly saying a lower Rp suppressor reduces gain, and citing that
as an example why your nichrome works miracles.

A month ago it was Q, you even advertise it very plainly as a low Q cure.
Now you change your fire-chant from muttering low-Q low-Q to muttering Rp
Rp.

If a lower Rp suppressor results in more stability, the ultimate low Rp in
a suppressor would occur with a short. The highest Rp and most unstable
suppressor would be an open.

According to your theory, if we connect a 5000 ohm resistor in series with
the anode it would make the PA less stable than with a zero ohms series
resistor. According to your theory, removing all suppressors from all
equipment, and replacing them with shorts, will result in maximum
stability.

Rich, do you wish to correct your statement? Or does it stand? I'll bet
some follower's faces are redder than a glowing 3-500Z anode. Can anyone

with real world PA experience support Rich's theory? If we replace a series resistance with a dead short at the tube's anode connection point, does stabilty improve as Richard claims?

In article <measures-ya02408000R0502971814530001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>Who are the 'others' who have shown what 4.32 ohms of R in series with 1100
>ohms of anode Xc does to harmonic suppression at 30MHz?

Measures law of simplification of circuits:
A complex circuit can be understood by picking two random parameters that give the desired answer and ignoring all others

73 Tom

1491. Re: HF diode receivers (was VHF crystal diode receivers)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: jgarver@ichips.intel.com
Message-ID: <5ddth4$4hu@news.jf.intel.com>
Source record: 97546

In article <5dd38fINN2k2@sepia.wv.tek.com>,

>Has anyone successfully built and used a germanuim crystal receiver
>on the HF bands for QSO's recently? If so, how do you keep out the
>local AM radio stations without compromising sensitivity? Is picking
>up code without a side tone oscillator practical?
>KC7GFX

Not recently, but as a kid I built a shortwave crystal set. It only received the stronger stations in the 31 meter band but I didn't any trouble with local broadcast interference. I kinda got it to work on shortwave by accident but I remember that there was a book at the library on building crystal sets that had all kinds of complex, multi-coil designs to improve selectivity. Would be a collector item now along with the the black bakelite crystal sets with cat whisker and Galena rock that my Dad used to bring home for me.

Jim K7YO

--
jgarver@ichips.intel.com K7YO I don't speak for Intel

1492. HW-101/SB102/HP23-A Connector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: r-paschal@worldnet.ATt.NET
Message-ID: <19970207035955.AAA24192@LOCALNAME>
Source record: 97547

Michael, If, by "Connector", you mean the cable that connects the HW-101 to the power supply -- As I recall, this is a cable with an 11 Pin plug on each end. *IF* this is correct your friend may be able to build a cable without too much trouble. I see in the All Electronics Winter 1996/1997 Cataloq page 19 they show: 11 Pin Plug - Amphenol #86CP-11 - Standard 11 Pin plug. 1.2" overall dia. CAT# PL-ll $1.00 each.

I don't know that I've ever bought anything from this supplier and I don't know that this is the right plug but it might be worth a try if you don't have a better shot.

All Electronics Phones:
Order - 1-800-826-5432
Customer Service and Information (818)904-0524
FAX (818) 781-2653

I think I have some info on the HP-23A out in the garage. I can probably locate it without too much trouble if you think it would help.

73
Bob AA0MC

1493. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Ian Gill <ian@minidata.co.nz>
Message-ID: <01bc14d1$9fde5600$LocalHost@ian1>
Source record: 97548
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> > Your best bet is to TALK to your neighbors. Be neighborly! It sure
> > > can avoid problems.
> >
> > The best time to talk to music lovers, especially ones given to shaving
> > their heads and wearing swastika armbands, is early morning, say 6.30
am.
>
> The best way to handel that is take your huge speakers with the 13 inch
> CV's in them and turn them around facing the wall that they live behind
> (provided it's an apartment) and set your timer for one hour after you
> leave, crank up that bad boy, get some really offensive rap CD from Death

> Row and set it to go off just before you get home from work and that
> should take care of that! :)

Yes, that's good, soften them up a bit, then go and talk neighbourly to
them.

1494. radio transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: wgantner@t0.or.at
Message-ID: <wgantner-ya023080000702971244300001@news.Austria.EU.net>
Source record: 97549
Cross-posted to: alt.radio,alt.radio.free,alt.radio.pirate,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for a very poor radio FM transmitter.
It should (has to) send inside a building (500m2), or less.

I live in Vienna, Austria, Europe.
If you know addresses where to order please reply to
------- wgantner@t0.or.at -------------------------.

thank you in advance

1495. Re: Apology

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: kf4dte@aol.com
Message-ID: <19970207114701.GAA20647@ladder01.news.aol.com>
Source record: 97550

gentlemen (and ladies),
two words, LIGHTEN UP! guess none of the persons
grilling this ladie have ever made a mistake. most of them sound like they
NEED a beer.

73 de kf4dte
mike prevatt

1496. Re: help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: rapuppa@lightspeed.net
Message-ID: <32fb1257.9837729@news.lightspeed.net>
Source record: 97551
Body handling: HTML body converted to readable text

On 5 Feb 1997 00:43:47 GMT, diback@aol.com (Diback) wrote:

<< I am 15v years old, and I realy enjoy radio. I am quite active
<

1497. List Of Stamp Applications [970207]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: cj@hth.com
Message-ID: <32faa0fa.2549319@news.buller.se>
Source record: 97552
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
Since the L.O.S.A is getting bigger I only post the index of
applications to the newsgroups and you can download the complete
L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 Whats is L.O.S.A all about ?
--------------------------------

I started to compile L.O.S.A because I know there are lots of great
ideas and many problems that are solved with the BASIC Stamp and the
main purpose of this list is to get an idea of what other people are
using their BASIC Stamps for and maybe get some inspiration or hints.

1.1 How can I contribute to this list ?
---------------------------------------

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 List of contributions
-------------------------

> = Indicates a new or updated application since last time.

# 001 Robo-Cat
# 002 Logic Rudder
# 003 Interfacing MAX186 8 channel 12bit A/D
# 004 Scrolling LED Sign
# 005 Tone Decoder
# 006 Pager
# 007 HexWalker Mobile Robot
# 008 Robo Bug
# 009 EXPBOT Robot controlled by Stamp
```

010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector
044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule
054 PIC Debugger
055 DS1820 Temp Sensor
>
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
059 Wind speed and wind direction measurement device

060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
>## 065 Compass Interface for Navigation
>## 066 Truck + ? identification
>## 067 Meteoreological Station
>## 068 Stamp Controls Electronic Tester for flex circuits
>## 069 Game Timer

Regards,

/Christer

```
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

1498. Over drive problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: pff@bfs.uwm.edu
Message-ID: <pff.30.0011D00F@bfs.uwm.edu>
Source record: 97553

Hi,
I would appreciate any help with a overdrive problem I have. I built several amplifiers using mosfets. These devices only require a few watts drive to get max output. I am driving the amp with my ts430 which put out 100 watts. If I overdrive just a hair I blow the transistor. I have blown 4 now at $180 a piece. I need a complete protection circuit for this amp. I got the amp design from motorola. It works fine but is bare bones. No protection circuitry, no filters and no ALC just the amp. Does anyone know where I can get schematics for these circuits I seek that will be usable with my amp? Thanks.

1499. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970207143001.JAA24893@ladder01.news.aol.com>
Source record: 97554

In article <measures-ya02408000R0602970755420001@news.vcnet.com>,

>In article <32fbc058.2707013@eskinews.eskimo.com>, wrt@eskimo.com (Bill
>Turner) wrote:
>
> Does anyone know WHY grids are gold-plated? If evaporation of gold is a
> potential problem, why not just make them from a high-temperature metal
>such
> as tungsten and be done with it? Obviously, there has to be some
>advantage,
> but what?

The grids are made from tungsten or other high temperature materials Bill.
The gold is necessary to prevent poisoning of the grid by cathode
materials as they migrate from the cathode.

The gold is generally used only in a metal oxide cathode tube. In a
conventional directly heated tube, the grid is almost always not plated.
When the grid is not plated, grid dissipation is MUCH higher. That's
because the grid can be run much hotter without the very soft low melting
point gold getiing hot and contaminating the tube. If the gold gets hot,
or is hit hard by electrons, it evaporates (it can do that without even
"melting") and deposits on the cathode and other places where it ruins the
tube.

Conductivity has nothing at all to do with it, the gold is put there
simply because without gold the grid of a MOX cathode tube would quickly
be ruined by contamination.
Gold is a necessary but troublesome evil.

73 Tom

1500. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0702970726430001@news.vcnet.com>
Source record: 97555

In article <19970207010900.UAA29701@ladder01.news.aol.com>, w8jitom@aol.com
wrote:

> In article <measures-ya02408000R0502971807350001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
...snip...
> It would be nice if you showed fault in my analysis of your claim a low Rp
> results in more stability, instead of launching into another lie.
>
If your 'amplifier expert' analysis determined that the voltage
amplification of a triode is basically NOT equal to Mu*R, this discussion
has reached impasse.
---
e-mail copy to Mr. Rauch

--
--Rich-- ag6k, 805-386-3734

1501. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0702970709050001@news.vcnet.com>
Source record: 97556

In article <5ddtkm$23lk$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) wrote:

> In message <measures-ya02408000R0502971115470001@news.vcnet.com> -
> measures@mail.vcnet.com (R. L. Measures) writes:
> :>
> :>------
> :>According to American Heritage Dictionary: "name-drop"
> :> To mention casually the names of illustrious or famous people in order
:>to imply that one is on familiar terms with them, intended as a means of
> :>self-promotion.
> :>------
>
> "Name-drop" is not the issue here ...

True enough, Joe, but some of the paticipants in this discussion used this ploy.

> Webster's New World Dictionary of the American Language: libel (n)
> any written or printed statement ... tending to expose a person to
> public ridicule or contempt or to injure his reputation in any way.
>
Bzzzzzzzzzzt. ....
My copy of the Webster's New World Dictionary says: LIBEL n. 1. Any false and malicious written or printed statement..... The key ingredient in the definition of the word LIBEL is the word FALSE. It appears that you adjusted the defination, Mr. Subich. ....BTW, is that a bullet hole in the toe of your left shoe?

For example: The 8877 has a maximum filament voltage rating of 5.25v. If I state that a certain 8877 amplifier manufacturer applies 5.90v to the filament of the 8877 when the amplifier is operated from 240.0v mains---and the actual filament voltage is 5.0 volts, then the statement is libelous. However, if the filament voltage measures 5.90v, the statement that the filament voltage is 5.90v is not libelous---even though the manufacturer's reputation was damaged by the disclosure of such information.

Let's say that YOU bought such an amplifier, Joe. When you measured the filament voltage, it was 5.90v. However, when you telephoned the manufacturer and voiced concern, you were told that 5.90v was perfectly harmless to the 8877, and that it might be best to leave the engineering to recognized amplifier experts.

...snip...
---
e-mail copy to Mr. Subich

--
--Rich-- ag6k, 805-386-3734

1502. Re: help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: John Harper <j..harper@worldnet.att.net>
Message-ID: <32FB4B9A.7B62@worldnet.att.net>
Source record: 97557

Michael Black wrote:
>
> But I thought the point of using VLF for communicating with subs was that
> those low frequencies (provided the power was high enough) could penetrate
> into the ocean so the submerged subs could receive messages. You want
> to have some means of reaching the subs without them having to surface.

You are correct about VLF freqs penetrating salt water but subs don't have to "surface" to receive satellite comms. They go to periscope depth (typically about 60-65 feet) and expose 3 or 4 feet of periscope. A little known fact is that periscopes contain far more antennas/LNA electronics than optics. To make things efficient, trips to PD are usually scheduled so that several chores can be taken care of simultaneously, for example the reception of a NavSat or GPS satellite fix and the blowing overboard of sanitary tanks and garbage. This is more efficiently done at PD due to the lesser amount of air needed to overcome water pressure than if we were deeper.
>
> I seem to recall reading something about how the communciation was very
> slow because even at high power it was hard to get the signals through.
> So it was a terribly weak signal at the sub, rather like moonbounce
> signals.

Correct. Submarines have 2 VLF antennas - a loop, shaped like a big football and a long wire that can be reeled out several thousand feet. To receive with either, we have to slow down and often manuever the boat to obtain best signal strength. This is a very slow process due to our speed and the length of the wire. About the only time VLF is the top choice is when its the only choice - under the polar ice.
>
>
>
> I don't think there is any way that the submarines would transmit on
> VLF, since they would need very large antennas and probably high power
> to get the signal out.

Correct.
>
> I assume that shortwave may have been used years ago, since there
> weren't satellites and they did want range. But VHF/UHF with satellites
> now has the advantage of a reliable link, and one that is harder
> to listen in on.
>
> MIchael VE2BVW

>
> John Harper
AA5YX/2

1503. Need Moto RPT mod info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: n1ddzrjc@aol.com
Message-ID: <19970207154601.KAA27583@ladder01.news.aol.com>
Source record: 97558

Hi

Found a pretty nice looking MCR-100 UHF repeater made by Motorola, with the service manual and duplexers for a decent sounding price. The service manual leaves a lot to be desired by way of information on the controller board functions and no info at all is given on reprogramming.

Called Motorola's many numbers and so far have not had, nor do I think fair to expect, much luck getting info on this unit. The people I have managed to talk with don't recognize this model.

It appears to be a 25 watt, 5MHz split repeater with a programmable controller board that has several telephone type ports on it. I can't determine if there is a CW id'er, or DTMF capability.

Does anybody have familiarity with the MCR 100 repeater? I'm looking to have it reprogrammed to replace the flaky tube UHF repeater that we have now. I guess that we'd be interested in any source, Boston area preferred, for additional accessores and upgrades as well as reprogramming if I can't do it myself.

This looks like a pretty good quality unit that might be a good place to begin assembling a more robust repeater system around.

Appreciate any comments.

Bob Crowley

1504. Re: List Of Stamp Applications [970207]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: "Jeffery B. Wood" <jbwood@pacifier.com>
Message-ID: <01bc1516$f6c990c0$1438a3ce@jbwood>
Source record: 97559
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Christer Johansson <cj@hth.com> wrote in article
<32faa0fa.2549319@news.buller.se>...
> Since the L.O.S.A is getting bigger I only post the index of
> applications to the newsgroups and you can download the complete
> L.O.S.A from the following places...

I keep seeing references to "BASIC stamp" but what is it?

--
Jeffery B. Wood KB7MQA
jbwood@pacifier.com
knickknack@juno.com

1505. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: aa744@james.freenet.hamilton.on.ca
Message-ID: <5dfptt$697@james.freenet.hamilton.on.ca>
Source record: 97560
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> >I have neighbors who play loud music. Is their a way to jam their
> >electronic equipment, e.g., CD player, to keep them from working? Would
> >a transmitter of some sort work? Any help would be appreciated.
> >
> > John

> It is perhaps possible that you could generate sufficient RFI to
> interfere with the operation of their stereo (as well as every other
> consumer electronic appliance within a wide radius), but besides being
> illegal, it would be stupid. Either they, and the rest of your neighbors,
> would come over and beat your butt, or they'd just add some simple RFI
> suppressors to their stereo and turn it up louder.

> It will be much better to deal with the problem in a legal fashion.
> If you can't come to an amicable agreement with them, and they really
> are playing the music so loud as to be a public nuisance, then file
> a complaint with the local police for violation of the local noise
> ordinances (almost every community has one). If for some reason your
> community doesn't have a noise ordinance, file a civil suit directly.

> If you don't wish to involve the law for some reason, then I suggest
> you invest in a cheap pair of hearing protectors, available from any
> industrial safety equipment supplier, or a shooting supplies outlet.

> Gary
OH NO Gary,,,,,don't send him to a "shooting supplies store"!!!! YIKES
73
Fred
VE3-FCX

1506. Re: HF diode receivers (was VHF crystal diode receivers)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5dfuql$p97@hpcvsnz.cv.hp.com>
Source record: 97561

Ed Burress (edbu@sepia.wv.tek.com) wrote:
: So my question is this:
: Has anyone successfully built and used a germanuim crystal receiver
: on the HF bands for QSO's recently? If so, how do you keep out the
: local AM radio stations without compromising sensitivity? Is picking
: up code without a side tone oscillator practical?

Hey, you said "question." Isn't that supposed to be singular?? I count at least three explicit ones there! ;-)

First, I haven't done it recently.

Second, you better plan on a good filter...if you can get a loaded Q of 300 and unloaded Q of 600, which I think is possible, though not easy, you would have 3dB loss and a bandwidth on 4MHz of about 13kHz at the 3dB points. That's really not too shabby. It gives you over 40dB attenuation a megahertz away from the resonator center frequency. (The actual design of a filter I'd use in such a "crystal radio" would be more complicated than a single resonator, but I just wanted to suggest those numbers as a starting point, that it would be conceivable to do something like this.)

I can tell you that for extra credit in a graduate level circuits class I took long ago, I built a TRF receiver with a filter designed to receive an AM station 120 miles away in the presence of a local station 50kHz away; it worked, though rejection of the local station was not perfect. It was basically the filter, a single RF amplifier, a detector, and an audio amplifier. It illustrated that the paper designs we did for the class really did work, but that there were also parasitic resistances and reactances we might not have considered on paper.

Finally, what you'd pick up with a CW signal is a changing DC level at the output of the detector. Unless you amplified that and drove a telegraph sounder with it, I don't think it would be very practical. If you add a sidetone oscillator, you have, essentially, a direct-conversion receiver, where the sidetone oscillator is the local oscillator and the diode becomes an unbalanced mixer. I'd make it a little more complicated and use a double-balanced diode ring mixer instead...or at least a couple diodes in one of the single-balanced mixer circuits found in the ARRL Handbook. Oh, and SSB without the sidetone is probably totally unrealistic...as if the CW wasn't. (Though the CW is certainly possible for stations that put more than a few millivolts of RF into your antenna.)

--
Cheers,
Tom

tomb@lsid.hp.com

1507. PCMCIA receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: PublicSafety <publicsafety@earthlink.net>
Message-ID: <01bc152b$9d3674a0$5d002399@safety>
Source record: 97562

Does anyone know of a company who makes a PCMCIA receiver (scanner) ?
please email me publicsafety@earthlink.net

1508. Re: HF diode receivers (was VHF crystal diode receivers)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5dg29r$p97@hpcvsnz.cv.hp.com>
Source record: 97563

Ed Burress (edbu@sepia.wv.tek.com) wrote:
: Is picking up code without a side tone oscillator practical?

To what I wrote in a followup posted a little while ago, I'd add
that in the days of spark transmitters, the signal was really
"MCW" -- amplitude modulated CW. So you could pick it up on
something like a simple crystal detector OK without a sidetone
oscillator. Perhaps you'd like to suggest a return to spark
transmitters along with crystal radios... maybe we could get the FCC and
other regulatory bodies around the world to set aside one day when
spark transmissions would be allowed for a few hours... ;-)
(Just so long as the emissions outside the ham bands were properly
attenuated... ;-) ;-)

--
Cheers,
Tom
tomb@lsid.hp.com

1509. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb7.202602.3328@ke4zv.atl.ga.us>
Source record: 97564

In article wrt@eskimo.com (Bill Turner) writes:
>
>Does anyone know WHY grids are gold-plated? If evaporation of gold is a
>potential problem, why not just make them from a high-temperature metal such
>as tungsten and be done with it? Obviously, there has to be some advantage,
>but what?

That's a good question, Bill. The underlayment for the grid is a tungsten alloy, and that's a pretty poor conductor for a metal, so skin resistance would be rather high if it were bare. One would think that silver plate would be used, or even a copper plate, but they may be too reactive with the getter (and other things). Gold is fairly corrosion resistant as well as a fairly good conductor. It also plates easily. Besides, you know you can always charge more for gold plated hardware. :-)

But the main reason appears to be to reduce primary grid emission. In a tube with an oxide cathode, barium evaporates from the cathode over time, and can bond to the grid. This increases grid emission due to the low work function of barium (that's why it is used on the cathode, to increase emission). Barium doesn't bond readily with gold, which is primarily why gold is used to plate the grid in tubes with an oxide cathode.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1510. Mocom-70, Need Help!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: evincent@mediom.qc.ca
Message-ID: <5dg4ph$10h$2@wagner.spc.videotron.ca>
Source record: 97565

Hello, I have 2 mocom 70, hi split,30 watts, and I would like to build a repeter with that.

Anybody can tell me if it's a good idea or have any hint for my project.

Thank's in advence.

Eric Vincent VE2VXT
evincent@mediom.qc.ca
QTH Quebec City.

1511. Re: List Of Stamp Applications [970207]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Brian Hicks <weirdo@schools.tec.mn.us>
Message-ID: <32FB9FE6.4883@schools.tec.mn.us>
Source record: 97566
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Jeffery B. Wood wrote:
>
> Christer Johansson <cj@hth.com> wrote in article
> <32faa0fa.2549319@news.buller.se>...
> > Since the L.O.S.A is getting bigger I only post the index of
> > applications to the newsgroups and you can download the complete
> > L.O.S.A from the following places...
>
> I keep seeing references to "BASIC stamp" but what is it?

The BASIC stamp is a microcontroller that can be programmed in a
modified BASIC programming language. They are popular because they are
cheap, small, and easy to program.

If you want more information I suggest you go to
http://www.parallaxinc.com
--

-Weirdo, <http://www.millcomm.com/~danhicks/weird/index.html>
~ ~
O O
oOOo--_/--oOOo

1512. Re: List Of Stamp Applications [970207]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Rick Rowland <see3peoh@ix.netcom.com>
Message-ID: <32FBA46D.195D@ix.netcom.com>
Source record: 97567
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Jeffery B. Wood wrote:
>
> Christer Johansson <cj@hth.com> wrote in article
> <32faa0fa.2549319@news.buller.se>...
> > Since the L.O.S.A is getting bigger I only post the index of
> > applications to the newsgroups and you can download the complete
> > L.O.S.A from the following places...
>
> I keep seeing references to "BASIC stamp" but what is it?
>
> --
> Jeffery B. Wood KB7MQA
> jbwood@pacifier.com
> knickknack@juno.com
Visit:
http://www.parallaxinc.com

1513. Re: HF diode receivers (was VHF crystal diode receivers)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <32FBA62C.7AB6@HP.com>
Source record: 97568

Ed Burress wrote:
>
> I was interested in Henry Titchens question about building a
> diode detector aircraft band receiver, and had similar thoughts
> about using them for HF bands.
>
> So my question is this:
> Has anyone successfully built and used a germanuim crystal receiver
> on the HF bands for QSO's recently? If so, how do you keep out the
> local AM radio stations without compromising sensitivity? Is picking
> up code without a side tone oscillator practical?
>
> I know that this is not a new question, and many might wonder why on
> Earth a person would waste their time on this. I find that I still
> have the same enthusiasm in the hobby that I had as a kid, and enjoy
> all facets of the hobby: QRP-SSB, fast scan TV, packet, homebuilt
> duplexer design, etc. I also collect antique radios, and have thought
> of operating a 1920's-1930's vintage station one of these days.
> (receiving your signal well on 1st and 2nd harmonic) ;^).
> Picking up a signal without a battery has always fascinated me.
>
> Thanks,
> Ed Burress
> KC7GFX

Hi Ed OM,

Your question was really three questions.

Firstly, any crystal receiver can work on HF to copy AM stations.
Many have been built. Selectivity is
a problem.
Secondly, elimination of AM radio station QRM is accomplished with
high-pass and/or bandpass
input filters ahead of, (but not loaded down (de-Q'd) by, the crystal
detector load), same as in any
other receiver. You must be familiar with this, having designed
duplexers.
Thirdly, you cannot conveniently "hear" an unmodulated, keyed carrier
(A1 CW) with an AM receiver.
Consequently, you cannot do it with a crystal receiver, which is merely
an AM receiver. You can do it
if you make a locally generated signal (oscillator), and use it to beat
against the received on/off
keyed signal, generating a difference frequency in the audio range.

This local oscillator has always
been called a BFO. (Beat Frequency Oscillator).
See any ARRL handbooks of past several decades for more info.

73 and GL,

Don, W6JL

1514. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0702971421300001@news.vcnet.com>
Source record: 97569

In article <5ddtkm$23lk$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) wrote:

> In message <measures-ya02408000R0502971115470001@news.vcnet.com> -
> measures@mail.vcnet.com (R. L. Measures) writes:
> :>
> :>------
> :>According to American Heritage Dictionary: "name-drop"
> :> To mention casually the names of illustrious or famous people in order
:>to imply that one is on familiar terms with them, intended as a means of
> :>self-promotion.
> :>------
>
> "Name-drop" is not the issue here ...

True enough, Joe, but some of the paticipants in this discussion used this ploy.

> Webster's New World Dictionary of the American Language: libel (n)
> any written or printed statement ... tending to expose a person to
> public ridicule or contempt or to injure his reputation in any way.
>
Bzzzzzzzzzzt. ....
My copy of the Webster's New World Dictionary says: LIBEL n. 1. Any false and malicious written or printed statement..... The key ingredient in the definition of LIBEL is the word FALSE. It appears that you adjusted the definition, Mr. Subich. ....BTW, is that a bullet hole in the toe of your left shoe?

For example: The 8877 has a maximum filament voltage rating of 5.25v. If I state that a certain 8877 amplifier manufacturer applies 5.90v to the filament of the 8877 when the amplifier is operated from 240.0v mains---and the actual filament voltage is 5.0 volts, then the statement is libelous. However, if the filament voltage measures 5.90v, the statement that the filament voltage is 5.90v is not libelous---even though the manufacturer's reputation was damaged by the disclosure of such information.

Let's say that YOU bought such an amplifier, Joe. When you measured the filament voltage, it was 5.90v. However, when you telephoned the manufacturer and voiced concern, you were told that 5.90v was perfectly harmless to the 8877, and that it might be best to leave the engineering to recognized amplifier experts.

...snip...
---
e-mail copy to Mr. Subich

--
--Rich-- ag6k, 805-386-3734

1515. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: rapuppa@lightspeed.net
Message-ID: <32fba9b4.1336532@news.lightspeed.net>
Source record: 97570
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On 7 Feb 1997 08:58:03 GMT, "Ian Gill" <ian@minidata.co.nz> wrote:

<<> > Your best bet is to TALK to your neighbors. Be neighborly! It sure
<<> > > can avoid problems.
<<> >
<<> > The best time to talk to music lovers, especially ones given to shaving
<<> > their heads and wearing swastika armbands, is early morning, say 6.30
<<am.
<<>
<<> The best way to handel that is take your huge speakers with the 13 inch
<<> CV's in them and turn them around facing the wall that they live behind
<<> (provided it's an apartment) and set your timer for one hour after you
<<> leave, crank up that bad boy, get some really offensive rap CD from Death
<<
<<> Row and set it to go off just before you get home from work and that
<<> should take care of that! :)
<<
<<Yes, that's good, soften them up a bit, then go and talk neighbourly to
<<them.
<<
<<and hope they dont put a nice vent in the front of your speaker ala 12ga double
<<as ive experienced such an event a friends 1200$ b&w got a nice perferation also
<<a nifty peep hole between apts they had cats too!
<< good luck rappua

1516. Re: Wanted data on Russian tube pls.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: syversen@online.no
Message-ID: <5dgbj7$2q5$1@o.online.no>
Source record: 97571

Hei, jeg holder p&#65533; med byggeprosjekt me GU-43-B her selv og har ALLE
skjemaer liggende her med diagrammer og det hele, hvis du er
interessert kan jeg kopiere disse og sende deg disse!!

Leter for&#65533;vrig etter vacuum condensatoret til PLATE og TUNE hvis du
har noen info, ogs&#65533; vacuum rele for QSK!!
send meg en E_mail hvis du er interessert i kopier
73 cu de Frode LA9WDA /Fredrikstad
Istvan Zarnoczay <iz@tdk.dk> wrote:

```
>Hi out there,

>Are there anybody who could give me some information on a Russian
>tube called GU-43B
> I'm interested in all avaible information about this device becouse I
>have the tube but know nothing about it.

>please send information to

>iz@tdk.dk or
>iza@post5.tele.dk

>73 de OZ1EYZ
```

1517. Re: help building a VLF reciever for a 'teen starting out in radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5dgc87$rh8@hpcvsnz.cv.hp.com>
Source record: 97572

Michael Black (blackm00@CAM.ORG) wrote:
: But I thought the point of using VLF for communicating with subs was that
: those low frequencies (provided the power was high enough) could penetrate
: into the ocean so the submerged subs could receive messages. You want
: to have some means of reaching the subs without them having to surface.

..

: When the sub receives the transmission, then they can surface if need
: requires it and conditions allow it.

Or just send up an antenna. It doesn't take much of an antenna to receive
a satellite transmission.

: I assume that shortwave may have been used years ago, since there
: weren't satellites and they did want range. But VHF/UHF with satellites
: now has the advantage of a reliable link, and one that is harder
: to listen in on.

The Jim Creek Naval Radio Transmitting Station (note the unidirectional
implication in the name) has been in operation since the very early
'50's, and before it, a station at Battle Point on Bainbridge Island in
Puget Sound was used. The Battle Point station had some impressively tall
guyed towers. Not sure about the frequency they used, but it was pretty
low. The Jim Creek antenna system is also quite impressive, but not as
obvious till you get pretty close to it, since it's mainly made of wire,
and is in a more remote area.

--
Cheers,
Tom
tomb@lsid.hp.com

1518. Re: Over drive problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <32fbb5c7.42179352@news.flash.net>
Source record: 97573

On Fri, 7 Feb 1997 08:28:30 UNDEFINED, pff@bfs.uwm.edu wrote:

>Hi,
> I would appreciate any help with a overdrive problem I have. I built several
>amplifiers using mosfets. These devices only require a few watts drive to get
>max output. I am driving the amp with my ts430 which put out 100 watts. If I
>overdrive just a hair I blow the transistor. I have blown 4 now at $180 a
>piece.

Man, that sounds like it's getting expensive! Try the ARRL Handbook
for ALC schematics. I know it sounds wasteful and inefficient, but
how about using a big swamping resistor across the input like some of
the old amps used? Dentron had some like this, instead of a tuned
input, there was a big resistor across the input.

Kerry Miller
WD5ABC

1519. Re: URL for Ant. building

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5dgc9c$di9@news1.mnsinc.com>
Source record: 97574

If there isn't, the this is a GREAT idea!

With all of the thousands of ham web pages out there you'd think SOMEONE would put up some good instructional data on something like this so that young people can learn about it on-line!!!!!

"R.A." <caveman@megsinet.net> whistled a happy tune like:

|>Is there any home pages for ant. building,
|>To help newer hams understand how they work, 10 - 14 year olds.

|>thanks Ron N9OMP e-Mail caveman@megsinet.net

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.

1520. Improving Spectrum Analyzer noise floor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Allen Wallace <allen_wallace@powertalk.dtint.com>
Message-ID: <32fbb9ce.0@itchy.itsnet.com>
Source record: 97575

My 1970's Spectrum Analyzer has a noise floor of about -80 dbm. If I replace the mixer diode, could I expect an improvment in the sensitivity?

Allen Wallace

1521. Re: 16/1700 KCS IF xfmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Eric Ness <ness1@apple.com>
Message-ID: <32FBD178.4319@apple.com>
Source record: 97576

Jeff Duntemann wrote:
>
...
>
> My suggestion is this, which is something I have hoped to try for some
> time: Create your own IF transformer using two windings of fine wire
> on a toroid, and a pair of Arco ceramic trimcaps on either side. It
> won't *look* like an IF transformer, but it should work reasonably
> well as one, especially if you can keep the Q high. You lose the
> ability to control the degree of coupling with a movable slug, but you
> can tune the notch with the independent trimmers and play tricks with
> the bandwidth that way.
...

I too have been seeking 1600 KC IF transformers for years and have yet to find one. Like Jeff, I too have had the idea of making my own IF transformers using a toroid. I'm not sure that winding both the primary and secondary on the same core would be a good idea though. The coupling would be much too tight for an IF transformer. In order to remedy this problem I was thinking to use seperate toroids for the primary and secondary and a link of a small number of turns between them. The number of turns in the link could be adjusted for optimum coupling. Any thoughts??

Eric, WD6DGX

1522. I need info for filter.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Aziz Sua TORTU <aziz@turnet.net.tr>
Message-ID: <32FC1A48.4589@turnet.net.tr>
Source record: 97577

hi dear om :

thanks for reading this message .
I maked a full home made repeater for my QTH but we have`nt duplexer .
so I want to use it with two antenna , but I need good band pass filter
schema for receiver input side , abouth 4 or 5 pole .
if you have any good schema for my repeater please send me with more
detail . (repeater output 10 watts abouth)

all the best 73`s de sua tortu (TA2AD) Zonguldak, TURKEY.

1523. Re: HF diode receivers (was VHF crystal diode receivers)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <32FC21E3.2115@erols.com>
Source record: 97578

Well, if you're gonna use spark tx then you should use a coherer for the rx or a gelena and cat's`whisker. To be authentic and all that....

A friend of mine built a crystal set for 80 meter a few years back. It used two tuned rf circuits. If you're really interested, I might be able to get the details.

S

Tom Bruhns wrote:
>
> Ed Burress (edbu@sepia.wv.tek.com) wrote:
> : Is picking up code without a side tone oscillator practical?
>
> To what I wrote in a followup posted a little while ago, I'd add
> that in the days of spark transmitters, the signal was really
> "MCW" -- amplitude modulated CW. So you could pick it up on
> something like a simple crystal detector OK without a sidetone
> oscillator. Perhaps you'd like to suggest a return to spark
> transmitters along with crystal radios... maybe we could get the FCC and
> other regulatory bodies around the world to set aside one day when
> spark transmissions would be allowed for a few hours... ;-)
> (Just so long as the emissions outside the ham bands were properly
> attenuated... ;-) ;-)
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com

1524. ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Joe Romanosky <saywhat@erols.com>
Message-ID: <32FC2F1F.A7D@erols.com>
Source record: 97579
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Anyone have any experience/info on using a Icom 735
with a transverter? The 735 manual is skimpy on info
on the transverter jack on the rear panel. any hints
or kinks are appreciated....

I would like to homebrew a transverter(s) for 144 and 220.

73 de K3KN

1525. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0702972204080001@news.vcnet.com>
Source record: 97580

In article <19970208011200.UAA21530@ladder01.news.aol.com>,
commquart@aol.com wrote:
snip...
> > N7WS further states on his web page:
> >
> > "Some mathematical manipulation can demonstrate that shunting
> > the conventional suppressor with additional resistance will
> > bring the curves into better alignment. An additional 250 ohm
> > resistor in parallel with the network will cause the Rp curves
> > to nearly overlap the nichrome curves above about 30 MHz. Below
> > 30 MHz, the Rp of the adjusted conventional type will be higher
> > than the Rp of the nichrome device."
>
>
> Rich, I am confused! What is N7WS implying by the above statement??
>
I don't know, Peter.
---
e-mail copy to Mr. Bertini

--
--Rich-- ag6k, 805-386-3734

1526. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0702972228080001@news.vcnet.com>
Source record: 97581

In article <5dgp49$2k2i$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) wrote:
...snip...
So according to Joe Subich, OJ was libeled by the 30 photographs of him wearing Bruno Magli shoes, and he was libeled by the photo of him wearing Bruno Magli shoes that appeared in a football newsletter some months prior to the N. Brown and R. Goldman murders.

What's wrong with this picture?
---
e-mail copy to Mr. Subich

--
--Rich-- ag6k, 805-386-3734

1527. WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <d74_9702072126@conchbbs.com>
Source record: 97582
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.ama

Hi jvfax works about the same you can use it on gose noaa i think i got a new
pro-62 scanner with am & fm modes so i might can rx the noaa in the 136 and 137
freq range.
for the converter you can use hamcomm interface that i made and it works.

73s kc5cxu

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

1528. Active Filter Design Breakthrough

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: John Haag <jhaag@webblabs.com>
Message-ID: <32FB85F7.4514@webblabs.com>
Source record: 97583

ACTIVE FILTER DESIGN ENVIRONMENT

Developed For the Active Filter Houses

Now Available to Every Design Group

The Webb Laboratories Active Filter Design Environment is the only complete synthesis solution available! Standard features include:

User-Definable Filter Circuit Topologies
User-Definable Synthesis to Poles and Zeroes
User-Definable Simulator Netlist Generation
Interactive Time Domain and Frequency Domain Graphics
Pole/Zero and Component Sensitivity and Worst-Case Analysis
Schematic Display and Print Functions
Graphics Plotter and Printer Support
Multiple Filter Combination for Complex System Design and Analysis
Synthesis to User-Specified Frequency Response in the Circuit Type of Choice

Users can design filters of lowpass, highpass, bandpass, bandstop and allpass types to 20th order. Filter characteristics supported include:

Butterworth
Chebychev
Inverse Chebychev
Elliptic (Cauer)
Bessel (linear phase)
Real Pole
Gaussian
Transitional Gaussian
Linear Phase with Equiripple Error
Symmetrical Ripple Delay
Papoulis
Parabolic
Catenary
Elliptic Contour

Implementation Circuit Topologies Include:

Multiple Feedback
VCVS
Biquadratic
State Variable
Reticon and national SC Filters
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Dual Opamp Biquad

Simulator Interfaces are Included For:

SPICE
Touchstone (HP/EEsof)
Super Star (Eagleware)
ECA
Netopt

New! Standalone nodal circuit analysis is now included!

The Webb Laboratories Active Filter Design Environment is in use by EVERY known active filter supplier in the United States. Active filters are as necessary in today's systems as ever before, with operating frequencies increasing. Designs based on simple tables are no longer adequate. Your design group can now take advantage of the choice of the professional active filter houses. Complex filters can now be synthesized and reliably manufactured in-house, with component tolerances taken into account!

For more information, please contact John Haag at:

John Haag
Webb Laboratories
13731 W. Capitol Drive, Suite 260
Brookfield, WI 53005
USA
E-Mail: jhaag@webblabs.com
TEL 414.367.6825
FAX 414.367.6824

1529. RX Sony ICF-SW 7600

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199702061416.GAA27686@mail.ucsd.edu>
Source record: 97641

I need schematics of the Sony ICF-SW 7600 receiver

Thanks

IW1DZD Chalp Maurizio

1530. Re: testing inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-07 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970207060705.21241A-100000@supreme>
Source record: 97642

On 1 Feb 1997, Kum6306 wrote:

> I am an electronic hobbyist.
> Can anyone out there tell me how to identify a variable inductor coil.
> this one that I have has no marking on it(it's a variable coil within a
> metal case).

A method I used with great success allows quite accurate inductance measurement over a wide range. Firstly you need a frequency counter that can go up to 4 MHz (I have one of those built into my multimeter :)

Then you need to make a VFO circuit with known capacitance in the tuned circuit. However, make the variable capacitor fixed - preferably use a silver mica or polystyrene capacitor. My unit is built in a die cast box and used a 10uH RF choke for the inductor. With total capacitance about 190 pF, the unit operates on about 3.7 MHz.

The unknown inductor is inserted in series with the 10uH coil. The greater it is the lower the frequency. Thus you can calculate the inductance from the capacitance across the tuned circuit and the frequency displayed. Then take off 10uH to compensate for the series VFO coil. Though it is a bit fiddly (you need to use a calculator), the method is accurate, and allows measurements to bemade from values well under a microhenry to several hundred microhenries or more.

Of course, instead of the frequency counter, you could use a calibrated receiver and make up a chart showing the relationship between oscillator frequency and inductance.

73, Peter Parker VK1PK

1531. Re: 16/1700 KCS IF xfmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <32FC5574.7AD3@wenzel.com>
Source record: 97393

I have a pretty good stock of large 455kHz transformers which are easy to open and modify. Want some?

1532. Re: HF diode receivers (was VHF crystal diode receivers)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <330a37eb.2492556927@news.sci.fi>
Source record: 97394

tomb@lsid.hp.com (Tom Bruhns) wrote:

>Ed Burress (edbu@sepia.wv.tek.com) wrote:
>: So my question is this:
>: Has anyone successfully built and used a germanuim crystal receiver
>: on the HF bands for QSO's recently? If so, how do you keep out the
>: local AM radio stations without compromising sensitivity? Is picking
>: up code without a side tone oscillator practical?
>

<clip>

>Finally, what you'd pick up with a CW signal is a changing DC level at
>the output of the detector. Unless you amplified that and drove a
>telegraph sounder with it, I don't think it would be very practical.

If you take a low quality AM-only MF/HF receiver and tune across the bands, you can sometimes hear very high pitched CW-signals (provided that no resolute attempts have been made to limit the audio bandwidth) which are most likely some intermodulation products between the CW signal and a strong broadcast station. I do not know if this is practical in a crystal receiver with only one stage generating intermodulation products.

Someone from Region 2 wrote in rec.radio.amateur.* that in the 7100-7300 kHz range, you could turn off the BFO and use the strong European broadcast carriers as BFOs to pick up local CW signals between them.

Paul OH3LWR

1533. Transistor info please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: Steve@chubs.DEmon.co.UK
Message-ID: <cw98FYAohF$yEw5V@chubs.demon.co.uk>
Source record: 97395

Hi all,

Can someone tell me the power ratings/outputs, voltages, gain etc of the
following transistors.

My Motorola Databook is a little too new I think.

MRF422
MRF450A
MRF455
MRF475
MRF477

Also the 2SC 1945 and BLY83

Please reply by e-mail.

Regards.
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
Visit Radio World -
HTTP://www.chubs.demon.co.uk

1534. Re: Over drive problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb8.120318.6648@ke4zv.atl.ga.us>
Source record: 97396

In article <pff.30.0011D00F@bfs.uwm.edu> pff@bfs.uwm.edu writes:
>Hi,
> I would appreciate any help with a overdrive problem I have. I built several
>amplifiers using mosfets. These devices only require a few watts drive to get
>max output. I am driving the amp with my ts430 which put out 100 watts. If I
>overdrive just a hair I blow the transistor. I have blown 4 now at $180 a
>piece. I need a complete protection circuit for this amp. I got the amp design
>from motorola. It works fine but is bare bones. No protection circuitry, no
>filters and no ALC just the amp. Does anyone know where I can get schematics
>for these circuits I seek that will be usable with my amp? Thanks.

There is only one sure protection from overdrive for your amplifier.
That is a power attenuator on the input sufficient to knock the full
100 watts of your exciter down to the level the amplifier will tolerate.
ALC is inadequate to assure you won't see high drive transients, and
the power control of the TS430 is too unreliable to trust. Of course
you could bypass the PA of the TS430 and use its driver to drive your
amplifier. That would also assure you that overdrive would be impossible.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1535. Re: Transistor info please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <32FC94FE.2CBE@imaxx.net>
Source record: 97397

Steve, Try my Web Site at http://www.imaxx.net/~kd9jq
under Component there's a Semiconductor section which may
help you.

73 Chuck KD9JQ

--

Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net

1536. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970208153400.KAA18760@ladder01.news.aol.com>
Source record: 97398

In article <measures-ya02408000R0502971115470001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

> I published a photograph of a burned bandswitch that was removed from an
>ETO amplifier. Are you suggesting that---like the "fake" photo of the
>Bruno Magli shoes---this photo was also fake? Would you like to
>speculate on whether or not this bandswitch would be introduced as
evidence
>in the event that Mr. Erhorn sued me for libel?

I think the libelous part is your unsubstantiated claim of a parasitic.

You misrepresent fact.

1537. Mosfet power amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: Steve@chubs.DEmon.co.UK
Message-ID: <n8HymCAAcJ$yEwfw@chubs.demon.co.uk>
Source record: 97399

>>Hi,
>> I would appreciate any help with a overdrive problem I have. I built several
>>amplifiers using mosfets. These devices only require a few watts drive to get
>>max output. I am driving the amp with my ts430 which put out 100 watts. If I
>>overdrive just a hair I blow the transistor. I have blown 4 now at $180 a
>>piece. I need a complete protection circuit for this amp. I got the amp design
>>from motorola. It works fine but is bare bones. No protection circuitry, no
>>filters and no ALC just the amp. Does anyone know where I can get schematics
>>for these circuits I seek that will be usable with my amp? Thanks.

You could find out the max voltage allowed at the input of the device
and fit a Zener diode of that voltage across it.
Over driving will cause clipping and therefore distortion but it should
at least save the device while you are tuning and experimenting.

Let us all know how you get on.

Regards. . .
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
Visit Radio World -
HTTP://www.chubs.demon.co.uk

1538. My Home page for Hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: murf@indigo.ie
Message-ID: <5di7ce$g57@news.indigo.ie>
Source record: 97400
Cross-posted to: uk.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,alt.ham-radio.packet

I have set up a page on my site for Hams with brilliant links and Hints and tips etc..

If you want to check it out or maybe even submit your own hints and tips and links even, surf to http://indigo.ie/~murf

Regards,

Aidan EI5HW

1539. Filter cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: k4to@mis.net
Message-ID: <32fc9f47.2011628@netnews.mis.net>
Source record: 97401

WEll, I didn't get any replies to my last message and I still need 30-50ufd at 5500 VDC. Anyone out there know a good source for such a thing? I would appreciate an Email reply to k4to@mis.net. Thanks and 73,

Dave, K4TO

1540. Re: 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb8.135517.7198@ke4zv.atl.ga.us>
Source record: 97402

In article <5da2ogjnm1@post.servtech.com> maroof@cybersys.net (Maroof H. Choudhury) writes:
>In article <1997Feb4.161129.16349@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary >Coffman) wrote:
>
>>In article <5d3272$t8h@news3-gui.server.cableol.net>
>> "carl.ratcliffe3@virgin.net"@virgin.net writes:
>>>I'm a new HAM and would like to build a portable 80m LSB Tx
>>>anyone got any good ideas ?
>>
>>There are three basic ways to make a SSB transmitter. There is
>>the filter method, the phasing method, and the third method
>>(also called the Weaver method).
>
>Can you explane how 3KHz+ voice bandwidth is available at the output even when
>it passes through a 1.8KHz LP filter after the fisrt Qmodulation? I've been
>trying to understand it for some time but crunching long equations is no fun.

The spectrum is essentially folded back upon itself in the first step of the Weaver method. You can think of this as sub-nyquist aliasing. Now normally you couldn't subsequently treat the aliased component separately, but because you do an identical aliasing in the other channel, when you recombine them, the aliased parts do separate back out and you get a full bandwidth signal.

The advantage of this method is that any imperfections in phase and amplitude balance result in products *on channel*. The ordinary phasing method results in products *out of channel*, IE the undesired sideband. So the Weaver method is more neighbor friendly than the ordinary phasing method in this regard. However, it results in a less pure on channel signal, and in practice there's a nasty phase distortion at the pivot frequency in the middle of the channel. That makes it an ugly method for data modulation.

>Can you give a comparision of performance of Tx/Rx made in the three mthods?
>Also, maybe you could help me build my rig I'm planning for the 20M band.

Ok, all the following comments apply equally to reception and transmission, except for the ones that don't. :-)

The filter method is brute force. It is conceptually simple, and its characteristics are mainly just the characteristics of the filter used. Since that is typically a commercial filter, and is consistent from unit to unit, a very manufacturable design results. But the characteristics of the filter are also the source of problems for this method. Of course the filter is fixed frequency, and that forces you to use superhetrodyne

technique. And to achieve sufficient opposite sideband rejection, the filter shape factor has to be very sharp. This causes phase and amplitude irregularities in the passband (and especially near the passband edges). This causes problems for data transmission.

OTOH, the phasing method results in a very clean signal with smooth phase and amplitude characteristics on channel. This makes it well suited to data transmission. It can also be done on channel, meaning superhetrodyne conversions are unnecessary. It can even be done at high level, meaning a chain of linear amplifiers isn't needed following the modulator. This can result in a more efficient overall design. Its deficit is that phase and amplitude imbalances cause products outside the channel, IE opposite sideband suppression suffers if good phase and amplitude balance are not maintained.

In practice this often means that each unit has to be adjusted by hand for best opposite sideband suppression. This is undesirable in a mass produced product. Also, because the modulating audio spans octaves, achieving precise audio quadrature over the entire range can be quite challenging with conventional analog methods. It is a trivial matter for DSP processed signals, however, since a simple Hilbert transform will give you perfect quadrature. With audio DSP becoming de rigeur for today's designs, this becomes a natural method.

The Weaver method is conceptually difficult to understand, has more transforms which require precise phasing and amplitude balance, and has a dirtier passband. Balanced against that, it is more neighbor friendly in that it generates no products outside the passband. It may have some merit as a transmitting scheme, but does nothing useful for you as a receiving scheme.

Now I've mentioned data modulation in regard to each of these methods. That's primarily because it is my own primary interest, and also because it can be the severest test of each method. For ordinary voice operation, the phase and amplitude imperfections of the filter and Weaver methods aren't very significant. Both the Weaver and phasing method require good audio quadrature. This can be difficult to achieve with conventional analog circuits. But if you are going to DSP process the audio anyway, it is trivial to achieve perfect quadrature via a Hilbert transform, so these methods become a natural choice.

If you intend a completely analog design, use of the filter method is probably the simplest way to get good opposite sideband rejection. It is easy to understand and easy to adjust. You do need the expensive filter, you will need to use superhetrodyne technique, with image filters, mixers, and local oscillators, and you'll need a chain of linear amplifiers to boost the signal up to transmission level. All that adds cost and complexity, as well as additional areas to generate performance deficits.

A modern phasing rig, with DSP processed baseband, high level modulation (Class D) to power FET mixers, and using a DDS chipset with quadrature

output, would be the slick way to go if you want to build something high performance, efficient, and SOTA. Cost is likely to be comparable to the analog filter rig too if more than QRP levels are intended. This isn't for the faint of heart, however, because there are few published designs to rip off. You'll be on your own.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1541. Re: Transistor info please??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc15e3$c2f92a80$88c1e1ce@cstevens.usr.com>
Source record: 97403

Steve Simpson <Steve@chubs.DEmon.co.UK> wrote in article
<cw98FYAohF$yEw5V@chubs.demon.co.uk>...
> Hi all,
>
> Can someone tell me the power ratings/outputs, voltages, gain etc of the
> following transistors.
>
> My Motorola Databook is a little too new I think.
>
> MRF422
> MRF450A
> MRF455
> MRF475
> MRF477
>
> Also the 2SC 1945 and BLY83

For the MRF parts, check out Motorola's web site at

http://www.design-net.com

you should find Adobe Acrobat .pdf datasheets there.

73,
Carl - wa6vse
carl@ais.net

1542. Re: 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc15e3$74cbbd00$88c1e1ce@cstevens.usr.com>
Source record: 97404

Gary Coffman <gary@ke4zv.atl.ga.us> wrote in article
<1997Feb8.135517.7198@ke4zv.atl.ga.us>...
>
> >>There are three basic ways to make a SSB transmitter. There is
> >>the filter method, the phasing method, and the third method
> >>(also called the Weaver method).
> >
> >Can you explane how 3KHz+ voice bandwidth is available at the output
even when
> >it passes through a 1.8KHz LP filter after the fisrt Qmodulation? I've
been
> >trying to understand it for some time but crunching long equations is no
fun.
>
> The spectrum is essentially folded back upon itself in the first step of
> the Weaver method. You can think of this as sub-nyquist aliasing. Now
> normally you couldn't subsequently treat the aliased component
separately,
> but because you do an identical aliasing in the other channel, when you
> recombine them, the aliased parts do separate back out and you get a full
> bandwidth signal.
>
> The advantage of this method is that any imperfections in phase and
> amplitude balance result in products *on channel*. The ordinary phasing
> method results in products *out of channel*, IE the undesired sideband.
> So the Weaver method is more neighbor friendly than the ordinary phasing
> method in this regard. However, it results in a less pure on channel
> signal, and in practice there's a nasty phase distortion at the pivot
> frequency in the middle of the channel. That makes it an ugly method
> for data modulation.

Gary,

On the contrary ... if the data is coded so that there's a null at DC in
the
data's (folded or I/Q) baseband spectrum, then one can insert the channel
center
carrier as a pilot (through the use of a DC term) and use the pilot in the
proper
receiver (Weaver, plus a special inner structure which does feedforward
correction for both the fading amplitude and fading phase of the channel).
This eliminates (to the precision of the processing) the "irreducible error
rate" phenomenon which plagues the multipath channel.

If you are interested, we can discuss this in e-mail ... no sense in upsetting
the beepers with "technical stuff" <grin>.

> The Weaver method is conceptually difficult to understand, has more
> transforms which require precise phasing and amplitude balance, and
> has a dirtier passband. Balanced against that, it is more neighbor
> friendly in that it generates no products outside the passband. It
> may have some merit as a transmitting scheme, but does nothing useful
> for you as a receiving scheme.

Actually, the second I/Q mix in the Weaver receiver is the *perfect* place to apply feedforward corrections in amplitude and phase, allowing one to collapse those big, "fuzzy" symbols that the multipath channel presents back into the nice, crisp points that the transmitter generated. This can be done on a sample by sample basis, in a deterministic fashion, without the "guesswork" that goes on in a traditional adaptive equalizer.

It is also significant to note that the corrections *must* be applied in a feedforward fashion and *also* that the corrections for amplitude and phase *must* be done simultaneously for best results ... correcting either the amplitude or the phase independently doesn't product the desired results because it in further spreading of the signal, which is contrary to the goal.

Additionally, the "inner structure" I allude to is also capable of being used
to implement a FM/FSK receiver with performance directly equivalent to a limiter/discriminator ... providing an easy path to multimode operation (or backwardly compatible interoperability with conventional NBFM radio as in the 2m/440 bands and/or the "refarming" environment now occurring in the VHF/UHF PLMR bands.

73,
Carl - wa6vse
carl@ais.net

1543. Re: Mocom-70, Need Help!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com.DELETE-FOR-EMAIL>
Message-ID: <32FCBBC2.25E5D4E2@primenet.com.DELETE-FOR-EMAIL>
Source record: 97405

Eric Vincent wrote:
>
> Hello, I have 2 mocom 70, hi split,30 watts, and I would like to build a
> repeter with that.
>
> Anybody can tell me if it's a good idea or have any hint for my project.
>
> Thank's in advence.
>
> Eric Vincent VE2VXT
> evincent@mediom.qc.ca
> QTH Quebec City.

Other than the obvious changes to get the unit to transmit and receive simultaneously, you will have to improve the shielding of the front end. We basically removed the front end assembly, sealed it up in a RF tight box, brought power in through feedthru capacitors, and used double shielded coax on the RF input port.

I didn't like the squelch operation, so it uses an external squelch. Its been running for years without a glitch. Knock. Knock.

Bob
WA3TGF

1544. Re: 16/1700 KCS IF xfmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: dhayes@terminus.com
Message-ID: <32fdb743.4387246@news.impulse.net>
Source record: 97406

Eric Ness <ness1@apple.com> wrote:

[bandwidth snip]

> Any thoughts??
>
>Eric, WD6DGX

If you can find a copy, the Jan/Feb 1983 issue of RF Design magazine has an article and a Basic program for the design of IF amplifier strips. The article describes a number of coupling techniques, and solves for the component values. It uses Y parameters for the active devices, and computes the IF strip gain and stability. The article describes the iterative design of a 21.4 MHz IF strip. I have a copy of the program revised for MS Qbasic, but cannot furnish a copy of the orignal article.

1545. Help Required - HV PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <UBeSCAAe4L$yEw60@falstaf.demon.co.uk>
Source record: 97407
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Dear All,
I am attempting to make a 1.2kV PSU for a WWII airborne TX (T1154) work. This PSU used to have a metal oxide rectifier in it. This has since gone west and I have replaced it with a load of silicon. This in itself works fine its just increased the volts by about 200!!!.

In addition, the regulation is c****p sorry - very poor. The TX is used for morse and to add insult to injury the VFO is unregulated, being fed directly from the HV rail. This means that as the current swings from key up to key down (about 20 - 200mA) the VFO moves to another band.

I want to add a regulator to the output of the PSU to allow it to stay closer to 1.2kV and have tried several approaches, all of which have failed. Can somebody help out. I want a design for a regulator that I can build into the PSU.

The PSU is a transformer, rectifier (full bridge) and two inductor/cap elements. I don't mind having non original bits inside the box but want to keep as much as I can.

I'm after example circuits - help, help, help.

73

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

1546. Mailing list,

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: davidn@ssd.fsi.COM
Message-ID: <9702081830.AA113486@dev1.ssd.fsi.com>
Source record: 97408

You have a user at our site maher@ssd.fsi.com subscribed to your mailing list. Mr Maher unfortunelty has passed away, would you please remove his name from your mailing list.

Thank you
David Nunn
Division Administrator
FlightSafety International 918-251-0500 Ext 223
Simulation Systems Division davidn@ssd.fsi.com

1547. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970208184501.NAA27982@ladder01.news.aol.com>
Source record: 97409

:

<< As I recall, Mr. Rauch measured the internal VHF resonances in a tuning capacitor. All tuning capacitors have them, Peter. Do VHF resonant circuits always exhibit low reactance at VHF?

--Rich-- ag6k, 805-386-3734 >>

Aw shucks, Rich. I must admit this question is a real poser, I don't know how to answer it. I had always assumed that at the "resonant" frequency, there would be no reactive component. Is j 1 and j -1added together equal to 0? Where does stray reactance come from in a resonant circuit?

I always assumed that the "impedance" of a resonant circuit was defined by the presence of resistance loading (loaded Q), or by the resistive losses inherent in the design of the capacitor or inductor (Q factor).

Are we talking about series or parallel resonance?

Please excuse my "bad science" in making these unwarranted assumptions.

73

Pete

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1548. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: kb9oce@aol.com
Message-ID: <19970208195700.OAA01353@ladder01.news.aol.com>
Source record: 97410

I've heard of a crystal reciever, also known as a "Foxhole" reciever in
that a razor blade is used as the detector....any ideas on how it is done?
Thanks Mike

1549. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <32FCE85D.4909@ping.be>
Source record: 97411
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.ama

Charles Mccurdy wrote:
>
> Hi jvfax works about the same you can use it on gose noaa i think i got a new
> pro-62 scanner with am & fm modes so i might can rx the noaa in the 136 and 137
> freq range.
> for the converter you can use hamcomm interface that i made and it works.
>
> 73s kc5cxu

Hello,

If i understand you, you use a scanner to receive NOAA pictures ?
Could you please send me the frequenties for NOAA and is this wide or
narrow FM ?

The antenna is this also importend ?

Thanks for all your help,

73
William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

1550. Custon 4CX1000 Amp 4 sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: DALE POWELL <powell@polarnet.com>
Message-ID: <32FCE2C7.2292@polarnet.com>
Source record: 97412

One of a kind custom built 4CX1000 for sale. Uses remote control panel
with large LED readout display for vacuum variable cap. and roller
inductor position. Large meters for plate current and voltage, bias
voltage, and grid current. Tank circuit components motor driven with
potentiometer feedback. Uses remote blower for cooling (included).
Power supply components included but not assembled. Several spare tubes
available. Approx 1500 watts out with 15 watts in. (Has input pad).
Tested and operational, needs to be assembled with PS etc.
Make offer, or trade for tabletop legal limit amp.
--
MZï¿½

1551. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: DALE POWELL <powell@polarnet.com>
Message-ID: <32FCE29F.A33@polarnet.com>
Source record: 97413

test
--
MZï¿½

1552. SALE VACUUM VARIABLE CAPS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5dipr7$9ke@cletus.bright.net>
Source record: 97414

I have some 5 to 125 pf, 5kv ceramic variable vacuum caps. $45 each
I also have some 100 pf 15kv and 200 pf 7.5kv ceramic doorknob
transmitting caps for $6 each.

If interested contact above
Thanks...

Norm N8RGR
norsan@bright.net

1553. synthesised vfo for hf

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: xdk96@dial.pipex.com
Message-ID: <32fcf1d5.10823534@news.dial.pipex.com>
Source record: 97415

Does any one have any thoughts, circuits or ideas on constructing a
synthesised vfo for the hf bands from 80 to 10 metres and an I.F. of
9Mhz ?
I would be interested in corresponding with any one who has similar
ideas along these lines.
Rob Rigley
xdk96@dial.pipex.com

1554. Re: Request for Heathkit rotator controller info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: wdmilner@atcon.com
Message-ID: <5diovr$1ut$10@thor.atcon.com>
Source record: 97416

Joe Scalet <jscalet@sound.net> wrote:

>Does any one have a source code listing for the Heatkit computerised
>rotator controller HD/1750. I need to take out the delay/time out
>feature because my rotator (an ORION 2800) doesn't require a duty
>cycle limitation. I don't want to disassemble my controller untill I
>have a new prom/cpu programmed. With Heatkit gone some parts are made of
>unobtainium and I don't want to risk the cpu/eprom unnecessarily. Any
>info would be appreciated to email jscalet@sound.net tnx joe WK0G

Is that similar to the HD/HDW-1780? I assume you are looking for the
EPROM contents? If so you can do a DUMP from the MISC menu. This
performs an Intel hex dump of the memory content that can be used to
make a new EPROM.

NOt sure if that helps with your model or not :) Hope so.

73,

Dean, VE1CBF VE1CBF@VE1CBF.ns.ca
wdmilner@atcon.com FN96VC

- - ... ... - -

1555. MINT TS-450S/AT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: DALE POWELL <powell@polarnet.com>
Message-ID: <32FCF70F.7A08@polarnet.com>
Source record: 97417
Cross-posted to: rec.radio.amateur.homebrew,rec.radio-amateur.equipment,rec.radio.swap

For sale: Kenwood TS-450S/AT perfect mint condition, 3 years old,
barely used, never mobile or portable $1100.
--
MZï¿½

1556. Re: RX Sony ICF-SW 7600

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: Robert Ogburn <rogburn@pacbell.net>
Message-ID: <32FD15F5.2C26@pacbell.net>
Source record: 97418

chalpm@hqlab.ico.olivetti.COM wrote:
>
> I need schematics of the Sony ICF-SW 7600 receiver
>
> Thanks
>
> IW1DZD Chalp Maurizio
- - - - - - -

ditto

Bob Ogburn
WA6LXK

1557. Peace in Our Time

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d67003d6825d6909897c7@news.planet.net>
Source record: 97419
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

Through the magic of modern technology, Carl (WA6VSE) and myself have been in contact with each other. We have agreed that this in-fighting, here on both rram and rrap does nothing to protect the ARS from the battles that are being fought now and soon to be declared.

In light of this, Carl has agreed to keep ALL discussions on a civil basis (no insults, innuendo, etc) and I have agreed to stop my self professed harassment of Carl.

We both feel that these newsgroups can best be used to further the ARS and that there is essentially room within the ARS "charter" for all concerned, both those advocating the retention and those advocating the elimination of the code requirement.

I personally will endeavor to keep this "peace". I have every confidence that Carl will do so as well and we both encourage all participants in the newsgroups to do the same.

Now is not the time to be a house divided.

As was said once is now said again "Once again, peace is now at hand and we can see the future.

On behalf of Carl and myself

73,

Steve KF2TI

1558. Pair 4-1000 amp wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: swm332@earthlink.net
Message-ID: <32FD7577.5333@earthlink.net>
Source record: 97420

Looking to buy a pair of 4-1000 80-10 meter amp would like a two

piece amp rf deck and power supply. If you have one and it is home brew

and priced as such e mail swm332@earthlink.net.

1559. Re: Peace in Our Time

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: dick@merlin.libelle.com
Message-ID: <dick-ya02408000R0802971907030001@news.zippo.com>
Source record: 97421
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.cb

In article <MPG.d67003d6825d6909897c7@news.planet.net>, adell@planet.net
(Steve - KF2TI (Landing, NJ)) wrote:

>In light of this, Carl has agreed to keep ALL discussions on a civil
>basis (no insults, innuendo, etc) and I have agreed to stop my self
>professed harassment of Carl.

Who are you and what have you done with the real Steve and Carl?!

:)
--
Dick Flanagan W6OLD CFII Minden, Nevada
Visit http://wadg.greatbasin.net/siera/

1560. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970208011201.UAA21526@ladder01.news.aol.com>
Source record: 97584

In article <measures-ya02408000R0602970328350001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>>
>Thanks.
> It's an interesting idea, Phil. I wonder why none of the amplifier
>manufacturers are using the technique---especially Ameritron since Mr.
>Rauch gave W4QQ high marks. On the other hand, I see that W4QQ is not on
>Mr. Rauch's recognized (and self-recognized) Amplifier Experts List in
the
>9/94 issue of QST magazine.
>----------------------------
>e-mail copy to Mr. Clements

Dear Rich,

I believe Mr. Rauch, a recognized amplifier expert, did use a RCL
technique in an Ameritron amplifier. Tom has posted this information,
I informed of this information via email -- again you ignore what choose
to.

Peter

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1561. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970208011200.UAA21530@ladder01.news.aol.com>
Source record: 97585

In article <measures-ya02408000R0202970611130001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>The choice is yours, folks. If you want more VHF-Rp in your HF amplfier,
>suppressors made from copper are for you. If you want even more VHF-Rp,
go
>for silver-strap suppressors, such as those found in the Kenwood TL-922
>amplifier, and in Henry Radio amplifiers.
> OTOH, if you want less VHF-Rp in your amplifier, according to Wes'
>measurements, a nickle-chromium alloy VHF suppressor will produce the
>desired result---which is really nothing new. In the 1926 Edition of the
>*Radio Amateur's Handbook*, Mr. F. E. Handy wrote about it.
>
>
Taken from another post by Mr. Measures:

> N7WS further states on his web page:
>
> "Some mathematical manipulation can demonstrate that shunting
> the conventional suppressor with additional resistance will
> bring the curves into better alignment. An additional 250 ohm
> resistor in parallel with the network will cause the Rp curves
> to nearly overlap the nichrome curves above about 30 MHz. Below
> 30 MHz, the Rp of the adjusted conventional type will be higher
> than the Rp of the nichrome device."

Rich, I am confused! What is N7WS implying by the above statement??

73

Peter

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1562. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970208011200.UAA21537@ladder01.news.aol.com>
Source record: 97586

In article <measures-ya02408000R0302970821320001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>..snip...
>
>BTW, I am still waiting for one of the naysayers to provide us with the
>values of a copper-wire suppressor that equals the performance of a
>suppressor made from resistance-wire. .... The time has come to
stand
>and deliver. What will it be--deliver or quiver?
>--------------------------
>e-mail copy to Mr. Peter Bertini, K1ZJH
>
>--
>--Rich-- ag6k, 805-386-3734
>
>
Bertini responded:
>
Tom showed you how and why months ago. Ian White reached the
same conclusion based on measurements you endorse...

Apparently I missed it, Peter. What are the values of Ls and Rs?

Taken from a post made by Mr. Measures: --
--Rich-- ag6k, 805-386-3734
> N7WS further states on his web page:
>
> "Some mathematical manipulation can demonstrate that shunting
> the conventional suppressor with additional resistance will
> bring the curves into better alignment. An additional 250 ohm
> resistor in parallel with the network will cause the Rp curves
> to nearly overlap the nichrome curves above about 30 MHz. Below
> 30 MHz, the Rp of the adjusted conventional type will be higher
> than the Rp of the nichrome device."
"at VHF, there are only slight differences between the effective
parameter values for the two types of networks."

Taken from a post by Ian, G3SEK

All that I was saying to Rich was that if he wanted to make the
conventional suppressor have *exactly* the same Q as one of his, at any
desired frequency, he only needed to shift the whole curve up or down by
a small amount (this being a useful property of the log scale).

Good news, Rich! I think I was able to round up the material
you requested and have posted it above. I hope this helps
with your requests!

73

Pete

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1563. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5dgp49$2k2i$1@news-s01.ny.us.ibm.net>
Source record: 97587

In message <measures-ya02408000R0702970709050001@news.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures) writes:
:>
:>Bzzzzzzzzzt. ....
:> My copy of the Webster's New World Dictionary says: LIBEL n. 1. Any
:>false and malicious written or printed statement..... The key
:>ingredient in the definition of the word LIBEL is the word FALSE. It
:>appears that you adjusted the defination, Mr. Subich.

I have copied the applicable sections of the definition directly.
However, since you insist on making FALSE accusations, here it is in its
entirety:

| Webster's New World Dictionary of the American Language College
| Edition, Library of Congress Catalog Card Number: 64-12965
|
| Libel: 1. Any written or printed statement or any sign, picture,
| or effigy, not made in the public interest, tending to expose a
| person to public ridicule or contempt or to injure his reputation
| in any way: cf. slander. 2. the act of publishing such a thing.
| 3. anything that gives an unflattering or damaging picture of the
| subject with which it is dealing. 4. in admirality & ecclesiastical
| law, the plaintiff's written statement of the wrongs he has suffered.
| v.t. 1. to publish of make a libel against. 2. to give an
| unflattering of damaging picture of; say or print unfavorable or
| false things about. 3. in admirality & ecclesiastical law, to
| bring suit against by presenting a written statement of grievences.

You will note that the word "false" appears only once in a relatively
long defintion. Even then it is coupled to unflattering with the
conjunction "or" meaning that either action is sufficient to
constitute libel.

It seems that you are as selective in your language as your science.

--
==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<subich@compuserve.com>
==

1564. RE: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bc157c$866ab780$87229bcf@kn6dv.qnet.com>
Source record: 97588

For those who are interested in the on going discussion of the interesting
topic of " Good source for amplifier tips" I have upload part 12 (long) you
van find the 12 parts via my home page:
--
http://www.av.qnet.com/~kn6dv

This is a uncensored and uncut archive with all the complete articles.

73 Will, KN6DV

kn6dv@contesting.com

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for attractive vices, he will fail.
(Walter Lippmann)

1565. Icom IC-W32A HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: rlc062@aol.com
Message-ID: <19970208055800.AAA04023@ladder01.news.aol.com>
Source record: 97589

Help,

I need to build a serial programming cable for my computer because I'm not paying $50 for one from Icom. Also, anyone know if any battery chargers other than Icom's will work? I will take any info you have on the Icom W32A.

1566. Motorola 8000/9000 Cell. users !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: "Roger H. Smith" <goldwing@iquest.net>
Message-ID: <01bc158d$a2c62d40$3dabf6ce@goldwing.iquest.net>
Source record: 97590
Cross-posted to:
fido.ham-sale,in.ham-radio,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics,sci.electronics.misc

I've got a limited number of alkaline battery holders to fit Motorola 8000/9000 and equiv. cell phones. This is a great idea if you want to have a "emergency back-up" battery for your phone. Fill this holder with 6 AA alkaline batteries and slide it on your phone ..... that's all there is to it !

Motorola 8000/9000 alkaline "pack" : $5.00 + $3.00 S&H = $8.00 (To your door in Cont. U.S.) ONLY HAVE 5 TO SELL !

Motorola 8000/9000 battery eliminator (for auto. cigar lighter outlet) : $10.00 + $3.00 S&H = $13.00 ONLY HAVE 1 TO SELL !

Nokia 100 alkaline "pack" : $5.00 + $3.00 S&H = $8.00 ONLY HAVE 1 TO SELL !

E-mail me to reserve yours ..... MONEY ORDERS ONLY, please. (any brand will do)

Thanks & enjoy ! :-)

1567. 2 Meter Eggbeater Ant

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: ljones@flash.NET
Message-ID: <199702080649.AAA10853@endeavor>
Source record: 97591

Greetings Gang...

Someone a few weeks ago asked for info on the Eggbeater antenna. I found the article I was looking for in the April 1971 issue of QST. If you want more info, contect me direct.

Larry N5OSG

1568. WTD:software for Wx Stn

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-08 00:00:00 UTC
From: Michael Kassay <mkassay@sympatico.ca>
Message-ID: <32FC34DB.1A45@sympatico.ca>
Source record: 97592

Hi... I have a Heathkit ID-5001 weather station that uses the RS-232
comm port. Im looking for software that will allow me to connect this
unit to my computer to log data. But most of all have the capability to
link the weather unit to my TNC (packet radio).
It was mentioned that when Heathkit sold this weather station some
software came with it...Would this be true??
It was also mentioned to me that a Ham, N4XI sold software, but so
far Im having no luck in contacting this fellow.
If anyone can help me out it would be appreciated!!

73 Mike
VE3MKX

PS... if anyone has any mods for the wx stn, Id like to hear from you!

1569. SPICE and vacuum tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: provero@connix.com
Message-ID: <5dj9o7$mgj@beast.connix.com>
Source record: 97422

Anyone who can guide me through the use of the
net tube SPICE models with spice3f4 or 3f5.?

It's either brain block or something else simple,
I'm sure...

P.J. "Josh" Rovero email: provero@connix.com
Oceanographer work: rovero@sonalysts.com
Meteorologist radio: KK1D
Curmudgeon at large web: http://www.connix.com/~provero/

1570. Re: --- SOFTWARE COLLECTION FOR $100 ---

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: <>
Message-ID: <5djevc$1ch2$5@news-s01.ca.us.ibm.net>
Source record: 97423
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
In <199702061821.KAA22944@mailmasher.com>, aszx <aszx@mailmasher.com> writes:
>
>We sell full CD's with many software applications for $100.
>
>For detail Email to collection@emails.com
>
>write on the subject "INFO - (the newsgroup name that you saw the adv.)"
>
>
> _____ ____ __
> / ___/ ____ / __/ / /__ __ ____ _ _____ ___
> \__ \ / __ \ / /_ / __/ | /| / // __ `/ / ___// _ \
> ___/ // /_/ // __/ / /_ | |/ |/ // /_/ / / / / __/
>/____/ \____//_/ \__/ |__/|__/ \__,_/ /_/ \___/
>
> collection@emails.com
> ______ __ __ __ _
> / ____/ ____ / / / / ___ _____ / /_ (_) ____ ____
> / / / __ \ / / / / / _ \/ ___// __/ / / / __ \ / __ \
>/ /___ / /_/ // / / / / __/ /__ / /_ / / / /_/ // / / /
>\____/ \____//_/ /_/ \___/\___/ \__/ /_/ \____//_/ /_/
>
>
>

Interestingly, this is from the same server address as 'R.F. Burns'
```

1571. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5djf1l$m7i$1@news-s01.ny.us.ibm.net>
Source record: 97424

In message <measures-ya02408000R0702972228080001@news.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures) writes:
:>
:>So according to Joe Subich, OJ was libeled by the 30 photographs of
:>him wearing Bruno Magli shoes, and he was libeled by the photo of
:>him wearing Bruno Magli shoes that appeared in a football newsletter
:>some months prior to the N. Brown and R. Goldman murders.
:>
:> What's wrong with this picture?

Mr Measures, are you using your "network analyzer calibrated grid dip
meter" to make legal judgements now?

OJ Simpson is considered a "public figure." In the case of a public
figure, libel requires intentional malice. But then, since you don't
appear to understand the difference between measurements made with a
GDO and a network analyzer, the differences between "public figures"
and the rest of us would be lost on you.

==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<subich@compuserve.com>
==

1572. Help w/ HW-7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: "Keith E. Spainhour" <KSpainhour@wilkes.net>
Message-ID: <01bc162d$42114a20$4ab174cc@ks>
Source record: 97425

I am looking for a new dial, mine has
some of the markings removed.
anybody got any ideas where i would
find one, or anybody got a junk
hw-7 they are willing to sell?

--
73 de KT4XW
Keith Spainhour
KSpainhour@wilkes.net

1573. 2 Meter Eggbeater Ant, again.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: ljones@flash.NET
Message-ID: <199702090819.CAA01468@endeavor>
Source record: 97426

Greetings Gang...

While looking for some other information I came upon another article for the Eggbeater antenna. Look at the October 1984 issue of "73 Magazine". This one uses square elements instead of the circular elements of the April 1971 issue of "QST".

Larry N5OSG

1574. Re: synthesised vfo for hf

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <DDs3iAAXvZ$yEw5i@falstaf.demon.co.uk>
Source record: 97427

In article <32fcf1d5.10823534@news.dial.pipex.com>, xdk96@dial.pipex.com
writes
>Does any one have any thoughts, circuits or ideas on constructing a
>synthesised vfo for the hf bands from 80 to 10 metres and an I.F. of
>9Mhz ?
>I would be interested in corresponding with any one who has similar
>ideas along these lines.
>Rob Rigley
>xdk96@dial.pipex.com
>
The UK QRP club's comic 'SPRAT' had one of these in its latest issue.
Its based around an analogue devices programmable modulator chip and a
microconroller. The frequencies you are after would possibly require
reprogramming but the basic circuit is applicable to your need.

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

1575. Re: synthesised vfo for hf

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: John Rabson <word.factory@zetnet.co.uk>
Message-ID: <19970209090142682l3@zetnet.co.uk>
Source record: 97428

Try SPRAT (GQRP club) issue 89. Pages 15-25 have a DDS for a 5 MHz
VFO which can also generate DC to 15 MHz in 1 Hz steps.

GQRP are on www.gqrp.demon.co.uk and the editor is at g3rjv@gqrp.demon.co.uk

73 d G3PAI

1576. Re: Peace in Our Time

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: jwilkers@freenet.columbus.oh.us
Message-ID: <5dkgrp$igt@login.freenet.columbus.oh.us>
Source record: 97429
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Steve - KF2TI (Landing, NJ) (adell@planet.net) wrote:
: Through the magic of modern technology, Carl (WA6VSE) and myself have
: been in contact with each other. We have agreed that this in-fighting,
: here on both rram and rrap does nothing to protect the ARS from the
: battles that are being fought now and soon to be declared.

: In light of this, Carl has agreed to keep ALL discussions on a civil
: basis (no insults, innuendo, etc) and I have agreed to stop my self
: professed harassment of Carl.

: We both feel that these newsgroups can best be used to further the ARS
: and that there is essentially room within the ARS "charter" for all
: concerned, both those advocating the retention and those advocating the
: elimination of the code requirement.

: I personally will endeavor to keep this "peace". I have every confidence
: that Carl will do so as well and we both encourage all participants in
: the newsgroups to do the same.

: Now is not the time to be a house divided.

: As was said once is now said again "Once again, peace is now at hand and
: we can see the future.

: On behalf of Carl and myself

: 73,

What the FUCK does this have to do with CB radio. There are enough
problems on rec.radio.cb without you hams bringing *your* bullshit to our
group. Stay away, and stay silent.

Thanks
--
John L. Wilkerson Jr... jwilkers@freenet.columbus.oh.us
johnw@iwaynet.net
http://www.iwaynet.net/~johnw
Rec.radio.cb FAQ coordinator

1577. Haw do I make a bandpass filter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: Geert Pirens <pass@glo.be>
Message-ID: <01bc168b$5824c040$6db630ce@pass>
Source record: 97430

Hello,

Can somebody tell me haw I can make bandpass filter for 137 Mhz ?

I have problems with my receiver, cous 5 miles away from me is a huge radio
station at 98 Mhz,
There signal is to strong for good receiving any other frequency.

But i like to receive at 137 til 138 Mhz.

So have some of yours a schematic diagram or PCB layout for making a
bandpass filter ?

ALL INFORMATION IS WELKOM !!

THANKS IN ADVANCE

GEERT ONL2057

1578. TI 99 Hamsoft *Help*

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: Virgil Chambers <edge@sprynet.com>
Message-ID: <01bc1622$4dc84180$24dfaec7@virgil>
Source record: 97431

I have recently been given an old Hamsoft interface for use with a TI 99 - but I have no technical data at all - If anyone can help, please post or send Email. - Thanks

73 de JF4LGZ

1579. Re: TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: Virgil Chambers <edge@sprynet.com>
Message-ID: <01bc1627$3b25cd40$24dfaec7@virgil>
Source record: 97432

Christian M. Arnaut Sr. <acetech@gatecom.com> wrote in article
<01bc12aa$28e57d40$ad1157c6@acetech.gatecom.com>...
> Anyone have a schematic for a homebrew TNC? I remember reading about one
> in 73 a few years ago.
>
> Thanks
>
> Chris
> N8TGC
>

Try the ARRL FTP areas - (web search ARRL for the URL - don't know it off
the top of my head)

1580. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970209145900.JAA10854@ladder01.news.aol.com>
Source record: 97433

In article <measures-ya02408000R0702970709050001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>
> For example: The 8877 has a maximum filament voltage rating of 5.25v.
If
>I state that a certain 8877 amplifier manufacturer applies 5.90v to the
>filament of the 8877 when the amplifier is operated from 240.0v
mains---and
>the actual filament voltage is 5.0 volts, then the statement is libelous.

>However, if the filament voltage measures 5.90v, the statement that the
>filament voltage is 5.90v is not libelous---even though the
manufacturer's
>reputation was damaged by the disclosure of such information.

Let's say you say the filament voltage is excessive, but you just guess at
it.
You have no meter, and no way to measure the problem. All you have is a
burnt out 8877 tube. You don't even have the amplifier the tube came from,
and have never seen it!

Is that libelous Rich?

Or are you above the laws of society?

Let's say you tell two people someone has a "drinking problem". Suppose
that person does not even drink. Is that libelous Rich?

What puts you above the requirement for knowing what you say is a fact
before you say something?

73 Tom

1581. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970209145900.JAA10861@ladder01.news.aol.com>
Source record: 97434

Mr. Measures has himself in a real jam with his nichrome. He avoids a simple question that pins him down. This one is crystal clear, and drives a stake in the heart of his nichrome theory.

In article <measures-ya02408000R0702970726430001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

W8JI asked in part,
>> It would be nice if you showed fault in my analysis of your claim a low Rp
>> results in more stability, instead of launching into another lie.

Rich responded:
>If your 'amplifier expert' analysis determined that the voltage
>amplification of a triode is basically NOT equal to Mu*R, this discussion
>has reached impasse.

What does that mean? Here was the question.....

In article <measures-ya02408000R0402970132530001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:
> In other words, the arcing that destroyed the original bandswitch and the
>replacement bandswitch in Rick May's AL-80 can not be explained by a load
>fault. The only thing that was altered after bandswitch #3 was the VHF-Rp
>of the VHF suppressor in the AL-80.

Let's just pretend Measures is correct about the above and not lying, Measure then claims....

>The original suppressor has an Rp of
>about 166 ohms at the anode resonant frequency of 160MHz.

That's the stock suppressor, 166 ohms (by the way 160 MHz is NOT the frequency an AL-80 oscillates at if the suppresor is removed).

>The replacement suppressor has an Rp that is around 101 ohms at 160MHz.

That's his suppressor, 101 ohms.

>Since voltage gain is essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain.

Rich is very plainly claiming LOWERING parallel resistance of the suppressor will decrease VHF gain and increase stability. He cites that as proof damage to the switch was from a parasitic.

But he forgot we can all apply common sense to his claim, and check it out.

1.) If a lower Rp suppressor (such as the suppressor Measures touts) results in more system stability, the ultimate reduction in Rp must occur with a dead short for a suppressor.

2.) If Measures is correct, the highest Rp would result from an open anode lead, or a very high resistance in series with the anode lead.

According to Measure's theory, the one he uses to slander Amerirtron, if we connect a 5000 ohm resistor in series with the anode it would make the PA less stable than with a zero ohm series resistor.

According to Measure's theory, removing suppressors from equipment and replacing them with shorts will result in maximum VHF gain reduction and maximum stability.

Can anyone with real world PA experience support Rich's theory? If we replace a high resistance in series with the anode lead with a low resistance, does stabilty improve as Richard claims?

How many people have found smaller resistors and inductors in suppressors improve stability? Rich claims a lower value of suppressor parallel impedance results in better stability, that means a lower value parallel resistor and less reactance in the suppressor.

The lowest value resistor is zero ohms, the smallest value inductor is zero turns.

Does any find that removing turns from the suppressor coil, partially shorting it out, or removing it entirely INCREASE stability? Rich claims a lower value of RP results in better stability.

Why won't Rich answer this directly?

Rich, if lowering Rp increases stability (as you claim) why isn't the best suppressor a large surface area silver plated lead from the anode? If you are absolutely stuck, can you find a friend or follower to help you with this?

73 Tom

1582. Re: Over drive problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970209145900.JAA10865@ladder01.news.aol.com>
Source record: 97435

In article <pff.30.0011D00F@bfs.uwm.edu>, pff@bfs.uwm.edu writes:

>,
> I would appreciate any help with a overdrive problem I have. I built
>several
>amplifiers using mosfets. These devices only require a few watts drive to
get
>
>max output. I am driving the amp with my ts430 which put out 100 watts.
If I
>overdrive just a hair I blow the transistor. I have blown 4 now at $180 a

>piece. I need a complete protection circuit for this amp. I got the amp
>design
>from motorola. It works fine but is bare bones. No protection circuitry,
no
>filters and no ALC just the amp. Does anyone know where I can get
schematics
>
>for these circuits I seek that will be usable with my amp? Thanks.
>
>

I faced this problem in a commercial design. You will never cure it with
ALC, because the response time of an ALC system will be far too slow.

You need to use an attenuator in the PA, so the radio is running at full
power. There are no other reliable solutions to the problem you have.

73 Tom

1583. Re: HF diode receivers (was VHF crystal diode receivers)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970209150000.KAA10872@ladder01.news.aol.com>
Source record: 97436

In article <5dg29r$p97@hpcvsnz.cv.hp.com>, tomb@lsid.hp.com (Tom Bruhns)
writes:

>Perhaps you'd like to suggest a return to spark
>transmitters along with crystal radios... maybe we could get the FCC and
>other regulatory bodies around the world to set aside one day when
>spark transmissions would be allowed for a few hours... ;-)

Cool, I'll jump in my model T and drive the petetion personally to
Washington.

That is, if we can get a few hours set aside to allow a 10 mph car on the
freeways.

73 Tom

1584. Re: Help Required - HV PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5dkq38$eqr@mtinsc05.worldnet.att.net>
Source record: 97437
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

First thought is a (stack of ?) zener/resistor to reg the vfo. Would be feasable if not too much current is required.

If you must regulate the HV...
Can't think of a specific circuit published somewhere, but wonder if regulating (using) the ac line input would work... Feed back a sensing line/circuit from the hvdc to the control of a triac on the line in.
Woody

Robin Birch wrote:
>
> Dear All,
> I am attempting to make a 1.2kV PSU for a WWII airborne TX (T1154) work.
> This PSU used to have a metal oxide rectifier in it. This has since
> gone west and I have replaced it with a load of silicon. This in itself
> works fine its just increased the volts by about 200!!!.
>
> In addition, the regulation is c****p sorry - very poor. The TX is used
> for morse and to add insult to injury the VFO is unregulated, being fed
> directly from the HV rail. This means that as the current swings from
> key up to key down (about 20 - 200mA) the VFO moves to another band.
>
> I want to add a regulator to the output of the PSU to allow it to stay
> closer to 1.2kV and have tried several approaches, all of which have
> failed. Can somebody help out. I want a design for a regulator that I
> can build into the PSU.
>
> The PSU is a transformer, rectifier (full bridge) and two inductor/cap
> elements. I don't mind having non original bits inside the box but want
> to keep as much as I can.
>
> I'm after example circuits - help, help, help.
>
> 73
>
> Robin
> Robin Birch robin@falstaf.demon.co.uk
>
> M1ASU Old computers and radios always welcome

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,

'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

1585. Re: Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0902970719260001@news.vcnet.com>
Source record: 97438

In article <32F54E46.4F11@tri.net>, stoskopf@tri.net wrote:

> Boy this discussion has been going on a long time and has degenerated.
>
> I don't know Buzz personally, just met him at a CSVHF conference where
> he presented an excellent talk on using one of the Eimac tubes on 1296.
> He stayed up late several nights discussing tubes and amps in general
> with anyone having questions.
>
> WB0DRL built several of the amps and actually had some CNC versions
> machined. Fried a couple of tubes, Buzz was right there with
> replacements and dissected the dead at the factory to help with the
> design. As I recall, he had several made with water cooled jackets to
> see what Pete could do with those (I suspect you have to be somewhere in
> the chain of command to get that done for Ham purposes).
>
> Anyway, he is/was a great guy and if he happened to lurk here a while
> before joining the discussion, I suspect he is now under deep cover.
>
> N0UU

Here's a copy of the postcard I sent to Mr. Miklos:

"12-18-96
Mr. Miklos
If you are the same Joseph Miklos who used to work at the Varian-Eimac
Salt Lake City plant, I would like to speak with you on the telephone, at
your convenience, on my dime. If you are not this person, please put this
in the nearest roundfile.
Background: I am also an amateur radio operator. I was first licensed in
September of 1955. My FCC callsign is ag6k. Between October 1988 and
January 1994, I wrote some QST magazine articles. .I am currently involved
in a debate about these articles with some of my critics on the
rec.radio.amateur.homebrew UUNET Newsgroup. One of these critics
repeatedly cited sources at Eimac who disagreed with virtually everything I
wrote in the QST articles. These sources were identified as Mr. "XXX",
"they", and "it's the entire staff" at Eimac. I kept pressing for names.
Finally, he produced the name Buzz Miklos. He said Mr. Miklos was employed
at the Salt Lake plant. He said his job description was "R+D engineering
manager". However, there were some things that did not appear to add up, so
I telephoned the personnel department at Salt Lake. The personnel
department confirmed that you had worked there, told me that you were an
"Engineer B", and volunteered the opinion that you were a widly respected
engineer at the plant. .I asked if you were the "R+D engineering manager".
They said that you were not. ....Obviously, somebody was not

telling the truth.
Another thing that did not appear to add up was that this critic told me you refused to talk to me on the telephone. This struck me as a bit odd. I have never spoken with you on the telephone. It seemed to me as if the critic was afraid I might phone you to check out the critic's story.
Please telephone me collect anytime (I keep odd hours) at the telephone number on the address side of this postcard. If I'm out, please leave a message, and I will return your call ASAP. "
---
e-mail copy to Mr. Stoskopf.

--
--Rich-- ag6k, 805-386-3734

1586. Re: Mosfet power amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5dkqn6$eqr@mtinsc05.worldnet.att.net>
Source record: 97439

Perhaps a ZD <below>, but beware of the shunt capacitance and zener
speed.
If your (IF) rig has analog power control imput / ALC...
I would monitor the drive voltage to the amp using a directional coupler
(see this month's QST) or a fast "pick-off" Ge diode. Run the sig
through comparator (with some hysterisis feedback). Condition the output
of the comparator to be compatible with the rig's control requirement.
Use the comparator reference voltage to set the cut-off level.
Woody

Steve Simpson wrote:
>
> >>Hi,
> >> I would appreciate any help with a overdrive problem I have. I built several
> >>amplifiers using mosfets. <snip>
> You could find out the max voltage allowed at the input of the device
> and fit a Zener diode of that voltage across it.
> Over driving will cause clipping and therefore distortion but it should
> at least save the device while you are tuning and experimenting.
>
> Let us all know how you get on.
>
> Regards. . .
> --
> Steve "Chubby" Simpson
> Radio/Night Club D.J.
> Steve@chubs.demon.co.uk
> Visit Radio World -
> HTTP://www.chubs.demon.co.uk

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

1587. Re: Mosfet power amp.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970209155001.KAA12907@ladder01.news.aol.com>
Source record: 97440

Hi Steve--

It's not clear HOW you are driving this experimental amp with your TS-430. Are you driving it through a 10 dB or greater resistive attenuator--or by simply turning down the power control on your radio? If you are turning down the power control, you should be aware that Kenwood (and most other) transceivers have a significant amount of ALC overshoot. In other words, the first few milliseconds of you transmission may pump a short pulse in excess of 150 Watts onto the gate of your device before the gain-regulating circuits kick in. Indeed, the mechanical noise generated from closing the PTT switch is all it takes. Since the gate of a FET is punched through by voltage and not by dissipated power, even one cycle of RF at this power level is enough to do the deed. If you attenuate your exciter properly and run it at full power--or choose a lower-power exciter--this problem should go away.

Rick K1BQT

1588. Re: Haw do I make a bandpass filter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Message-ID: <32FDF521.70F0DB90@juts.ccc.amdahl.com>
Source record: 97441

Geert Pirens wrote:
>
> Hello,
>
> Can somebody tell me haw I can make bandpass filter for 137 Mhz ?
>
> I have problems with my receiver, cous 5 miles away from me is a huge radio
> station at 98 Mhz,
> There signal is to strong for good receiving any other frequency.
>
> But i like to receive at 137 til 138 Mhz.
>
> So have some of yours a schematic diagram or PCB layout for making a
> bandpass filter ?
>
> ALL INFORMATION IS WELKOM !!
>
> THANKS IN ADVANCE
>
> GEERT ONL2057
In this case you need to bypass the 98 Mhz signal, haven't worked it
out, but you could easily do it by trial and error, so here goes my wet
finger in the air.....
start with about 10 turns of 16-20 guage wire (not very thin stuff)
formed around a pencil, stout hookup wire will do, put in series with a
low value variable capacitor or trimmer one end connected to the antenna
input and the other to ground. Cut and adjust till you have got rid of
the signal, then replace with the capacitor with a fixed one of the
approximate value, squeeze the coil turns closer or farther apart/cut as
necessary and make a permanent connection, with a suitable trimmer, youd
save yourself the second readjustments.
Regards
--
... Sid Boyce...Amdahl(UK)...szb50@juts.ccc.amdahl.com

Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

1589. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <32fde75a.3586517@eskinews.eskimo.com>
Source record: 97442

w8jitom@aol.com wrote:
<snip>
>>In article <32fbc058.2707013@eskinews.eskimo.com>, wrt@eskimo.com (Bill
>>Turner) wrote:
>>
>> Does anyone know WHY grids are gold-plated? If evaporation of gold is a
>> potential problem, why not just make them from a high-temperature metal
>>such
>> as tungsten and be done with it? Obviously, there has to be some
>>advantage,
>> but what?
>
>The grids are made from tungsten or other high temperature materials Bill.
>The gold is necessary to prevent poisoning of the grid by cathode
>materials as they migrate from the cathode.
>
>The gold is generally used only in a metal oxide cathode tube. In a
>conventional directly heated tube, the grid is almost always not plated.
>When the grid is not plated, grid dissipation is MUCH higher. That's
>because the grid can be run much hotter without the very soft low melting
>point gold getiing hot and contaminating the tube. If the gold gets hot,
>or is hit hard by electrons, it evaporates (it can do that without even
>"melting") and deposits on the cathode and other places where it ruins the
>tube.
>
>Conductivity has nothing at all to do with it, the gold is put there
>simply because without gold the grid of a MOX cathode tube would quickly
>be ruined by contamination.
>Gold is a necessary but troublesome evil.
>
>73 Tom

Ok, but why would cathode material contaminate tungsten but not contaminate
gold? Would it be from a chemical reaction as opposed to simple deposition?

73, Bill W7TI
wrt@eskimo.com

1590. Re: URL for Ant. building

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: bruce muscolino <w6toy@erols.com>
Message-ID: <5dl1ov$nbp@boursy.news.erols.com>
Source record: 97493

Bryan,
I believe there's a newsgroup ca;;ed <rec.radio.amateur.antennas>.
Have a look and let me know.

73,

Bruce -- W6TOY/3

1591. Re: Filter cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: bruce muscolino <w6toy@erols.com>
Message-ID: <5dl1t2$nbp@boursy.news.erols.com>
Source record: 97494

Dave,

I've heard good things about Antique Electronic (or Radio) Supply out in Arizona. I'm sorry I don't have more data available, but surely someone can point you there.

73,
Bruce -- W6TOY/3

1592. Coax Info Request

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: rmwatson@eskimo.com
Message-ID: <E5CIIw.1Az@eskimo.com>
Source record: 97495

Good day. I have a coil of military coaxial cable, and the specifics are as noted:

Manufacturer: Plastoid Corporation

Type: M17/163-00001
Mil-C-17 77314

What I would like to find out is this:

* Characteristic Impedance:
* Velocity Factor:
Capacitance per foot:
Dielectric Constant:

*Note: These are the most important to me, so if possible, I would like this information.

Your help is truly appreciated. Thanks.

73

Robert/KJ7BO
rmwatson@eskimo.com

1593. Re: URL for Ant. building

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: AC6V <#AC6V@ix.netcom.com>
Message-ID: <32FE0EB8.47C6@ix.netcom.com>
Source record: 97496

R.A. wrote:
>
> Is there any home pages for ant. building,
> To help newer hams understand how they work, 10 - 14 year olds.
>
> thanks Ron N9OMP e-Mail caveman@megsinet.net

Hi Ron try the antenna links at URL:

http://pw2.netcom.com/~ac6v/pageA.html#A

Good Luck
Rod in San Diego
--
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V (WAZ 10M SSB #118)

1594. Re: Haw do I make a bandpass filter ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb9.172817.13009@ke4zv.atl.ga.us>
Source record: 97497

In article <01bc168b$5824c040$6db630ce@pass> "Geert Pirens" <pass@glo.be> writes:
>Can somebody tell me haw I can make bandpass filter for 137 Mhz ?
>
>I have problems with my receiver, cous 5 miles away from me is a huge radio
>station at 98 Mhz,
>There signal is to strong for good receiving any other frequency.
>
>But i like to receive at 137 til 138 Mhz.
>
>So have some of yours a schematic diagram or PCB layout for making a
>bandpass filter ?

Well, Geert, have you tried a notch filter for 98 MHz? That is probably the simplest solution to your particular problem, and it will have less insertion loss than a bandpass filter. A quick and easy notch filter is simply a 1/4-wave coaxial stub Teed into the antenna line. Just take a piece of coax slightly longer than an electrical quarterwave at 98 MHz and put a connector on one end. Attach that to a Tee fitting in the antenna line. Now trim the length in tiny steps until the 98 MHz signal is attenuated the most. Tape up the open end, and you're done.

The notch will be deepest with high quality coax, airline is best, foam is second best, and ordinary RG-58 is worst. With airline, you can achieve a notch of nearly 30 db, RG-58 may only give a notch of 12 db. If one such notch is not enough, you can add a second one. The attenuation values will add.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1595. Re: 16/1700 KCS IF xfmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb9.180058.13276@ke4zv.atl.ga.us>
Source record: 97498

In article <32FBD178.4319@apple.com> ness1@apple.com writes:
>Jeff Duntemann wrote:
>...
>> My suggestion is this, which is something I have hoped to try for some
>> time: Create your own IF transformer using two windings of fine wire
>> on a toroid, and a pair of Arco ceramic trimcaps on either side. It
>> won't *look* like an IF transformer, but it should work reasonably
>> well as one, especially if you can keep the Q high. You lose the
>> ability to control the degree of coupling with a movable slug, but you
>> can tune the notch with the independent trimmers and play tricks with
>> the bandwidth that way.
>...
>
>I too have been seeking 1600 KC IF transformers for years and have yet
>to find one. Like Jeff, I too have had the idea of making my own IF
>transformers using a toroid. I'm not sure that winding both the primary
>and secondary on the same core would be a good idea though. The
>coupling would be much too tight for an IF transformer. In order to
>remedy this problem I was thinking to use seperate toroids for the
>primary and secondary and a link of a small number of turns between
>them. The number of turns in the link could be adjusted for optimum
>coupling. Any thoughts??
>
>Eric, WD6DGX

A toroid has a closed flux path, so the mutual coupling of two
coils wound on a toroid should approach 1. This is normally
considered "a good thing" (TM). But if you are trying to gain
selectivity by loose coupling, of course, it is not. Now use
of two toroids and a link still gives a coupling of 1, so you
gain no advantage from doing this. This is basically a back
to back transformer circuit, and the link windings will simply
carry a greater current to maintain a coupling of 1.

To reduce the coupling below 1, you need to introduce some
loss element to take the place of the flux leakage in an
ordinary air core transformer. Rather than a link, try a
small value capacitor top coupled between the two coils.
That's the approach I took for the preselector in my
receiver.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
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Lawrenceville, GA 30244 | |

1596. 23cm 1.2Mbit/s PSK Packet Radio by S53MV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: marty@trucom.com
Message-ID: <32fd76e9.2271503@news.trucom.com>
Source record: 97499
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

Hello Out There...

Anyone have any experience with the 23cm PSK packet-radio RTX for
1.2Mbit/s by Matjaz Vidmar, S53MV in Slovenia?

(those interested can find more info at:

http://www.hamradio.si/hamradio/packet.html

a quite nice site, BTW!)

Anyway...

Sounds interesting at least but due to my eyesite, I have trouble
reading the online schematics and layouts.

Would be interested in the opinions and experiences of those that have
looked at and/or tried this system.

Take Care & 73

Marty Albert - marty@trucom.com
Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

Heartland Internet Services

****
Interested in Amateur Radio?
http://www.trucom.com/ppages/marty
****

1597. wanted Yaesu FL 7000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <32ff25b7.1533011@news5.inter.NL.net>
Source record: 97500

My friend Corne PA3DBG is looking for an occasion Yaesu FL7000. His brother lives in America and comes in march to Holland, so he can bring the amplifier with him. So if you have something to sell you can react to me, because Corne has not internet. If you have packet radio you can sent a message to Corne. He is often in the DX cluster AC4ET and every day he contact his home bbs ON4DXA, so messages sent as PA3DBG@ON4DXA will be read by him. Thanks in advance.
73 de Bart PA3GGM

1598. WTD:software for Wx Stn

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: eugene.welcome@eagles.wa.com
Message-ID: <9702091038342437@eagles.wa.com>
Source record: 97501

From: Michael Kassay <mkassay@sympatico.ca>
Subject: WTD:software for Wx Stn
>I have a Heathkit ID-5001 weather station that uses the RS-232
>comm port. Im looking for software that will allow me to
>connect this unit to my computer to log data.
>If anyone can help me out it would be appreciated!!

Hi Mike, give Heathkit a call, they are still alive and selling to the
educational world plus they still sell the IDA-5001-1 kit. I couldn't
locate my latest catalog but the 1993 issue still shows this unit for
sale. Call Heath at 1-800-253-0570
or Electrolab LTD in Canada 1-800-267-7482. Either number should get
you some answers as there is PC software offered in the catalog.
_ ,,/|
\'o 0'
73, Gene, K7"EEK" !! a =(_"_)= ?? He ate my Mouse !
U
eugene.welcome@eagles.wa.com

1599. Re: Improving Spectrum Analyzer noise floor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: "Michael J. Masterson"
Message-ID: <5dl9us$g2s@mtinsc05.worldnet.att.net>
Source record: 97502

Sounds like a familiar problem. Leads to obvious next questions:
1) Was the mixer diode(s) burned out?
2) Check the condition of the blocking capacitor found inside
the HP s/a's- I found they get broken easily.
3) For the -80dBm what is the Video BW and Res BW?
4) Can always try a LNA but will do nothing for Dynamic Range.
GL es 73 DE WN2A Mike Masterson mmastersonkdi@worldnet.att.net

1600. Re: Help Required - HV PSU

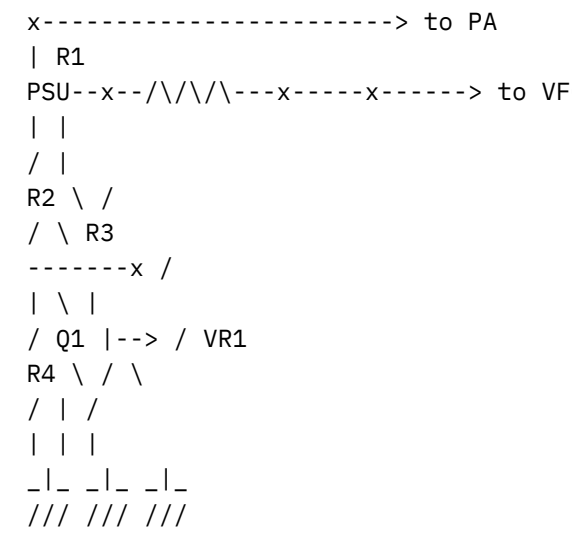
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb9.194255.13669@ke4zv.atl.ga.us>
Source record: 97503
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <5dkq38$eqr@mtinsc05.worldnet.att.net> eMail, @, my.www.page.Mailto writes:
>First thought is a (stack of ?) zener/resistor to reg the vfo. Would be
>feasable if not too much current is required.
>
>If you must regulate the HV...
>Can't think of a specific circuit published somewhere, but wonder if
>regulating (using) the ac line input would work... Feed back a sensing
>line/circuit from the hvdc to the control of a triac on the line in.
>_Woody_

I've tried that approach. It can work Ok with a steady load, but the
dynamic regulation is poor due to being restricted to switching at the
line frequency. It isn't a good solution in this case.

Probably the best solution is a shunt regulator. The real problem here
is the high key up voltage. So loading the supply will pull that down.
Even a heavy bleeder resistor would do wonders. Changing the power supply
to choke input filtering would also help this problem.

We really don't care much that the voltage varies to the PA. The
real issue here is the VFO as you noted. I'd suggest separating its
power feed and feeding it via a shunt regulator. That won't require
dissipating much power, since the current draw of the VFO is only
about 0.02 A. A stack of zeners can be used, or you can use a transistor
as a dynamic load. Here's an example circuit:



Select R1 to drop 300 volts at 30mA, IE make it 10k. Select
R2 to drop 900 volts at 30mA, IE make it 30k. R3 should be
about 300k, and VR1 should be about 10k. Adjust VR1 to set

the desired regulated voltage. I'd suggest regulating for
1 kV to the VFO. Use a transistor with a CE breakdown of at
least 350 volts, a TV horizontal output transistor will do
nicely. R4 should be 10k, and will limit the voltage across
Q1 when the regulator is heavily loaded and Q1 is biased
nearly out of conduction.

These values are just crude off the top of my head numbers.
If you want to carefully analyze the circuit, you may be
able to choose more optimized values. But these should
work if we assume the VFO draws 20 mils. The idea is to
size R1 so that more current than the load requires has
to be drawn to achieve the necessary voltage drop. This
gives the shunt regulator something to work with.

Gary

>Robin Birch wrote:
>>
>> Dear All,
>> I am attempting to make a 1.2kV PSU for a WWII airborne TX (T1154) work.
>> This PSU used to have a metal oxide rectifier in it. This has since
>> gone west and I have replaced it with a load of silicon. This in itself
>> works fine its just increased the volts by about 200!!!.
>>
>> In addition, the regulation is c****p sorry - very poor. The TX is used
>> for morse and to add insult to injury the VFO is unregulated, being fed
>> directly from the HV rail. This means that as the current swings from
>> key up to key down (about 20 - 200mA) the VFO moves to another band.
>>
>> I want to add a regulator to the output of the PSU to allow it to stay
>> closer to 1.2kV and have tried several approaches, all of which have
>> failed. Can somebody help out. I want a design for a regulator that I
>> can build into the PSU.
>>
>> The PSU is a transformer, rectifier (full bridge) and two inductor/cap
>> elements. I don't mind having non original bits inside the box but want
>> to keep as much as I can.
>>
>> I'm after example circuits - help, help, help.
>>
>> 73
>>
>> Robin
>> Robin Birch robin@falstaf.demon.co.uk
>>
>> M1ASU Old computers and radios always welcome
>
>--
>de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
>Work: Electron Microscopist/Microanalysist

>Balance: Ham radio "homebrewer", shade tree mechanic,
>'90 Nissan 240SX, wish still had my Mcycle too!
>http://www.geocities.com/capecanaveral/3722
>.

--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1601. help with Lafayette HE-45B (6m)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: jwg6@cornell.edu
Message-ID: <jwg6-0902971803140001@cu-dialup-0823.cit.cornell.edu>
Source record: 97504
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> Hi. I've this 6m AM rig that I picked up, and it doesn't seem to be
> modulating adequately.
>
> Anyone out there have the HE45B, and/or could tell me how the following
> tubes function in the circuit?
>
> 1. There is a 7868, which is a power pentode. Not sure but perhaps it's
> the modulator. It gets squealy quite often when I key up.
>
> 2. One 6CN7, can't tell what it is performing as.
>
> 3. One 6U8A/6EA8, apparently the speech amp, as it is most closely linked
> to the mic inputs.
>
>
> I haven't picked up a manual for this yet.
>
> I would also be interested in info on how the rig should "behave" in
> loading up. I've gotten approx. mid-scale readings on RF meter setting.
>
> With meter in "S" position, it pegs full scale upon keying the mic.
> Sometimes I have noticed the meter fluctuating downward from full-scale
> with modulation, but it is very intermittent. Usually it just stays fully
> pegged.
>
> Any info appreciated. The rig is in excellent shape and seems to be
> functioning well with the matching vfo.
>
> Thanks very much, 73,
>
> Joel N1AEP Freeville, NY FN12

1602. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: Jaime McGlothlin <mcglot@flash.net>
Message-ID: <32FE65BD.2597@flash.net>
Source record: 97505

I am not positive about this, but I think that the razor blade is used to touch a specific spot on a germanium crystal. Hence, the germanium crystal is actually the detector, just like crystal sets you buy today.

I hope this helps, and I am also interested in any other information you receive.

Rudye McGlothlin

1603. Re: URL for Ant. building

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: barney@ix.netcom.com
Message-ID: <5dlpqi$8d6@news1.mnsinc.com>
Source record: 97506

bruce muscolino <w6toy@erols.com> whistled a happy tune like:

|>Bryan,
|>I believe there's a newsgroup ca;;ed <rec.radio.amateur.antennas>.
|>Have a look and let me know.

|>73,

|>Bruce -- W6TOY/3

I don't see that group here Bruce.
Is it on your ISP???

Bry

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

1604. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: cpierce@usit.net
Message-ID: <cpierce-0902972314460001@col-max67.dynamic.usit.net>
Source record: 97507

In article <32FE65BD.2597@flash.net>, Jaime McGlothlin <mcglot@flash.net> wrote:

> I am not positive about this, but I think that the razor blade is used
> to touch a specific spot on a germanium crystal. Hence, the germanium
> crystal is actually the detector, just like crystal sets you buy today.
>
> I hope this helps, and I am also interested in any other information you
> receive.
>
> Rudye McGlothlin

Actually the razor is used as the crystal detector and a "cat wisker" is
used to tune it.

It was used durring WW2 for GI's to keep up with world events while they
were in the POW Camps.

My Dad and I made one back in the early 60's as one of my first projects.
He was a mechanic on the B-17's in England and all airmen were trained on
how to make this radio (and other things), also the playing cards when
placed in water would peel apart to unfold into a map of the country side
of where they were flying. Hope that they picked up the right deck of
cards. ;)

Hope that this helps

Charles

1605. Frequency Doubler ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-09 00:00:00 UTC
From: ianls@patrol.i-way.co.uk
Message-ID: <32fdbb9a.577340@news.i-way.co.uk>
Source record: 97508

I intend building a 10 mtr CW transmitter using a VFO. An oscllator running at 14 MHz and doubled to 28 MHz would be ideal, but do we still have to depend on diode doublers or class C amps to do this or is there a nice little chip? A TTL doubler would also help isolate the VFO from the o/p stages. I've looked thru the usual component catalogues, but can't find anything! But there must be something in the 1000s of lised ICs that will do the trick...

Thanks,
G4JQT
--
Ian
ianls@patrol.i-way.co.uk

1606. Re: Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1002971445240001@news.vcnet.com>
Source record: 97343

In article <19970210035700.WAA16157@ladder01.news.aol.com>,
commquart@aol.com wrote:

snip...
> Rich, if you really put all of that on a standard postcard, you must
> write with teeeny tiny letters. Can anyone read it afterwards??
>
> Peter ;)
>
The postcards i use are 4" by 6". The text area on Miklos' postcard is
18.67 square inches. The font is 9.5 pt. Times Roman. There are 1950
characters. People with fairly normal vision can read 9.5 pt. Times
Roman. My secretary can read 5 pt. Times Roman without magnification. If
you want a copy of the Miklos postcard, send me a mailing address, Peter.
I guess you could say that I get my 20 cents worth.
---
e-mail copy to Mr. Bertini

--
--Rich-- ag6k, 805-386-3734

1607. Re: Mocom-70, Need Help!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Jim Devenport <jdevenport@lanl.gov>
Message-ID: <32FF8FD1.351D@lanl.gov>
Source record: 97344

Eric Vincent wrote:
>
> Hello, I have 2 mocom 70, hi split,30 watts, and I would like to build a
> repeter with that.
>
> Anybody can tell me if it's a good idea or have any hint for my project.
>
Years ago (!) when Mocom 70's were brand new we attempted to modify
these for full duplex operation so we could use them in our RCC mobile
telephone service. They worked, and I've always been a Mocom 70 fan,
but the desense was terrible (meaning the receiver sensitivity degrades
to very poor performance when the transmitter is simultaneously running)
since the transmitter and receiver circuits are side-by-side on the same
board. If these mocoms were cheap enough (getting there!) the only way
I'd attempt it would be to use 2: one for transmit and one for receive
and mount them inside good shielded boxes with appropriate filtered and
bypassed power and control leads.
Since you already have 2 this may be feasible for you IF both are in
working condition and you don't have to rob one to get the other
working.
--
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |
|My views rarely (if ever) reflect those of my employers|
http://nis-www.lanl.gov/~jdport/

1608. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: n7ory*@*primenet.com
Message-ID: <32ffac19.28077629@news.primenet.com>
Source record: 97345
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

If they are listenin to Fm radio, you can purchase a device from most any consumer electronics store that allows you to transmit CD audio (or whatever) to a nearby stereo. Most devices will allow you to tune them for the entire band. Simply attach a more resonant antenna, tune to the station they listen to, then pump the most absurd music into thier system. If they change stations, you can too.
Of course, interference of this type can get you into a heap of trouble.

For cassette players, a 25W mobile 440 rig, into a 4 ele beam pointed at the equipment in question will quiet that device fo a while. Although I do not reccommend this.

Story: I had a gal at work that cranked her headphones up SO loud, I could hear Stevey Wonder's harmonica down the hall and into the bathroom! She worked in the office just behind the wall, and behind me. She was using the cassette player on her walkman. First I brought a CB walkie talkie in, a 5W'er.. Did no good. Then one day I was trying to key up a local 440 repeater when I noticed the audio on her headphones quiet a bit on transmit. I placed the ht as close to the wall as I could, keyed it up, and it wiped the audio out completely. For some reason I could not hit the repeater that day, but sure was fun trying.

All in fun guys.
(or the info nazis will getch'a!)

Rob Neff (N7ORY)

1609. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: mlicht103@aol.com
Message-ID: <19970210233101.SAA23888@ladder01.news.aol.com>
Source record: 97346

The way I remember hearing about it was to tack the blade flat and make a cat's whisker from a paperclip twisted at the end to hold a piece of pencil lead. The pencil lead was then moved to the most sensitive spot on the blade by trial and error.

1610. Re: Frequency Doubler ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5dobv3$2me@hpcvsnz.cv.hp.com>
Source record: 97347

Ian (ianls@patrol.i-way.co.uk) wrote:
: I intend building a 10 mtr CW transmitter using a VFO. An oscllator
: running at 14 MHz and doubled to 28 MHz would be ideal, but do we
: still have to depend on diode doublers or class C amps to do this or
: is there a nice little chip? A TTL doubler would also help isolate the
: VFO from the o/p stages. I've looked thru the usual component
: catalogues, but can't find anything! But there must be something in
: the 1000s of lised ICs that will do the trick...

I gather you have your 14MHz at TTL levels already... if so, and if it's a decently symmetrical square wave, you can double it nicely using a one-shot that's triggered on each edge. (That is, trigger on both the rising and the falling edge.) The one-shot should have a period 1/2 the total period of the 28MHz output: a bit shy of 18 nanoseconds. You might have trouble doing it with a typical oneshot chip, since it's pretty short, but you can just feed the the 14MHz into one input of an exclusive-OR gate, and delay the 14MHz by 18 nanoseconds and feed it (either true or inverted) into the other xOR gate input. The output will have some second harmonic (of 28MHz) which could be nulled by adjusting the 18 nanosecond delay and the symmetry of the input waveform, but the output should be mostly the desired 28MHz, and its odd harmonics.

--
Cheers,
Tom
tomb@lsid.hp.com

1611. Re: 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970210190620.9905A@keystone.intergate.net>
Source record: 97348

hi there, i have checked into the georgia ssb net with 5 watts, when the staatic is low, so that's not always true. n4pge in griffin, georgia.

1612. Re: Help Required - HV PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Al Rooney <n2nkb@worldnet.att.net>
Message-ID: <32FFEB56.71B5@worldnet.att.net>
Source record: 97349
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Robin Birch wrote:

> Dear All,
> I am attempting to make a 1.2kV PSU for a WWII airborne TX (T1154) work.
>...
> for morse and to add insult to injury the VFO is unregulated, being fed
> directly from the HV rail.

Have you considered running a separate regulated line going to the VFO only?
73 de N2NKB, Al

1613. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Mike Agner <ka3jjz@erols.com>
Message-ID: <33000B88.A3A@erols.com>
Source record: 97350
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.ama

William Vynck wrote:
>
> Charles Mccurdy wrote:
> >
> > Hi jvfax works about the same you can use it on gose noaa i think i got a new
> > pro-62 scanner with am & fm modes so i might can rx the noaa in the 136 and 137
> > freq range.
> > for the converter you can use hamcomm interface that i made and it works.
> >
> > 73s kc5cxu
>
> Hello,
>
> If i understand you, you use a scanner to receive NOAA pictures ?
> Could you please send me the frequenties for NOAA and is this wide or
> narrow FM ?
>
> The antenna is this also importend ?
>
> Thanks for all your help,
>
> 73
> William
>
> --
> Visit my Homepage http://www.ping.be/RACO
> E-mail RACO@ping.be and/or William.Vynck@ping.be
> Fidonet 2:291/1800.15
> Radio Amateur ONL4021
> QSL via bureau UBA Belgium Under normal circumstances the bandwidth needed to receive a
weather
sat picture in the 136 mhz is greater than most scanners can handle
without modifications. You would most likely only get part of the
picture (if any at all, assuming the sync pulse wasn't chopped as well).I
would be interested in knowing how you modified the Pro62 to handle this.
73s Mike

1614. HB 4-1000A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Jerry Booth <jerryjtb@csrlink.net>
Message-ID: <32FFD43F.6E85@csrlink.net>
Source record: 97351

Sell or trade 4-1000A RF deck. Dual vacuum tuning with BW 850A tank. 80 thru 10 meters. Vacuum tr relay, tuned input, Peter Dahl Filament Xfmr BW filament choke. Includes two tubes both tested full output and one SK506 chimney. Internal blower. Amp is fully metered Plate volts and amps, grid ma. and RF out volts. Approx 17"x 17"x 16" (Fully enclosed) with 19"X 17" front panel. Fist into commercial cabinet. Asking $675.00 or will consider trade of equal value plus or minus cash.

Tnx,

Jerry W0ZD

1615. Re: Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Jerry Booth <jerryjtb@csrlink.net>
Message-ID: <32FFD7D6.3F27@csrlink.net>
Source record: 97352

commquart@aol.com wrote:
>
> In article <measures-ya02408000R0902970719260001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
> >Here's a copy of the postcard I sent to Mr. Miklos:
> >
> >"12-18-96
> >Mr. Miklos
> > If you are the same Joseph Miklos who used to work at the Varian-Eimac
> >Salt Lake City plant, I would like to speak with you on the telephone, at
> >your convenience, on my dime. If you are not this person, please put
> this
> >in the nearest roundfile.
> >Background: I am also an amateur radio operator. I was first licensed
> in
> >September of 1955. My FCC callsign is ag6k. Between October 1988 and
> >January 1994, I wrote some QST magazine articles. .I am currently
> involved
> >in a debate about these articles with some of my critics on the
> >rec.radio.amateur.homebrew UUNET Newsgroup. One of these critics
> >repeatedly cited sources at Eimac who disagreed with virtually everything
> I
> >wrote in the QST articles. These sources were identified as Mr. "XXX",
> >"they", and "it's the entire staff" at Eimac. I kept pressing for names.
>
> >Finally, he produced the name Buzz Miklos. He said Mr. Miklos was
> employed
> >at the Salt Lake plant. He said his job description was "R+D engineering
> >manager". However, there were some things that did not appear to add up,
> so
> >I telephoned the personnel department at Salt Lake. The personnel
> >department confirmed that you had worked there, told me that you were an
> >"Engineer B", and volunteered the opinion that you were a widly respected
> >engineer at the plant. .I asked if you were the "R+D engineering
> manager".
> >They said that you were not. ....Obviously, somebody was not
> >telling the truth.
> > Another thing that did not appear to add up was that this critic told
> me
> >you refused to talk to me on the telephone. This struck me as a bit odd.
>
> >I have never spoken with you on the telephone. It seemed to me as if the
> >critic was afraid I might phone you to check out the critic's story.

> > Please telephone me collect anytime (I keep odd hours) at the
> telephone
> >number on the address side of this postcard. If I'm out, please leave a
> >message, and I will return your call ASAP. "
> >----------------------------
> >e-mail copy to Mr. Stoskopf.
> >
> >--
> >--Rich-- ag6k, 805-386-3734
> >
> Rich, if you really put all of that on a standard postcard, you must
> write with teeeny tiny letters. Can anyone read it afterwards??
>
> Peter ;)
>
> Peter Bertini K1ZJH
> Senior Technical Editor, Communications Quarterly Magazine
> "The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

Any of you men want to talk with BUZZ ??? He works with me at Litton Electron Devices in Williamsport, Pa. He is the engineering manager and very good one I might add. Helped him put up his vhf/uhf antennas when he moved here.

Jerry W0ZD

1616. Re: TNC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970210223323.16579A-100000@Ocean.CAM.ORG>
Source record: 97353

The schematic and details of the TNC-1 were published in 73. Around
'84/85/86. I don't recall the exact issue, and I certainly can't put
my fingers on it easily. It was a period when they had the index on
the cover.

It used a 6809, and a Western Digital HDLC controller. You used to
be able to get the source code from TAPR, though unless you had the
compiler that they used, it would not be too helpful. Presumably
at one point you could get the software in ROM.

Maybe five years ago (around the time when they had the TNC-1 sourcecode)
you could get a schematic for the TNC-2 from TAPR. They also sold empty
boards, and the software in ROM separately. I'm not sure you can
get that from them anymore, but one would think you could still get
the schematic. Maybe by now, the source code is available, and since
the TNC-2 used the Z80, putting the source code into machine code may
be easier.

The TNC-2 is really a much more standard dedicated computer. You
should be able to scrounge up the parts really easily and really cheaply,
unlike the TNC-1 which used harder to find components. You could even
make the task of building the TNC-2 easier by forgetting the modem
that was originally used, and plugging in a modem like that used
with software TNC's.

So TAPR is the place to look, though I don't think you'll find this
info online. I think it's
www.tapr.org

By the way, the ARRL website is
www.arrl.org

Michael VE2BVW

On 9 Feb 1997, Virgil Chambers wrote:

>
>
> Christian M. Arnaut Sr. <acetech@gatecom.com> wrote in article
> <01bc12aa$28e57d40$ad1157c6@acetech.gatecom.com>...
> > Anyone have a schematic for a homebrew TNC? I remember reading about one
> > in 73 a few years ago.
> >
> > Thanks
> >
> > Chris
> > N8TGC

> >
>
>
> Try the ARRL FTP areas - (web search ARRL for the URL - don't know it off
> the top of my head)
>
>
>

1617. Re: Frequency Doubler ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970210224209.16579B-100000@Ocean.CAM.ORG>
Source record: 97354

In the old days, you'd see single-transistor doubler stages. There
was a time when Doug DeMaw would describe double-ended doubler stages,
and at one point he was showing them using CA3028 differential amplifiers.

One form of doubler that hasn't got much press, presumably due to parts
count, is using a double-balance modulator/mixer. Feed the input
signal into both inputs, and they mix together giving a DC output
(for the difference frequency), and the sum, which is twice the input
(f+f=2f). CIrcuit balance determines how much of the original signal
feeds through to the output.

This has traditionally been rather bulky, since you need a
bunch of discrete components, or something like an MC1496 and all of
it's external components. Nowadays, with NE602's so common, the
scheme could be implemented as easily and as cheaply as some other
form of doubler. Of course, the NE602 has that transistor on one
fo the inputs meant for use as an oscillator, so that might get in
the way of really good balance for this scheme.

The MC1350P/MC1590 IF amp is in effect a double-balanced modulator
equivalent to the MC1496, but with an amplifier on the output. IT
might be worth looking into as a device for this scheme, since they
are cheap, relatively easy to find and need few external components.

I don't think there is much use in going to a digital multiplier scheme
unless you already have a digital signal. Having to convert
to a digital signal so it can be doubled seems like more work than other
schemes.

However, if you already have a digital signal, I've seen doublers using
exclusive-or gates. I've seen the scheme in a number of places over the
years, there was even an article in Electronics Now (was Radio
Electronics) in recent years, but I can't put my finger on a reference
right now. YOu need small pulses to make it work, so usually they
feed the input signal through rc networks. I seem to recall that the
outpu signal is also narrow pulses, which may not be what you
want for a transmitter.

If you already have a digital signal, you might try just feeding it
through a transistor with an LC circuit on the output, to pick off
the desired harmonic.

Yet another digital scheme would be a phase-locked loop. Have a
VCO running on the desired output frequency. Then, have a divider
chain that divides this down to the input signal. PUt this signal
and the input signal into the phase comparator, and use the output

of the phase detector to provide feedback to the VCO. Kind of bulky and not worth the trouble for a simple doubler.

But it is definitely one way of using up all those old FT243 crystals that multiply up to the 6 meter band. In the old days, they'd start with 6 or 8 Mhz crystals, then multiply by 4 (or 3) to 24, then double to 50. The more multiplier stages needed, the more worthwhile the scheme for simple CW or DSB (or phasing SSB) VHF transmitters. For six, some 74-series variant would work for the divider. For a 2-meter or higher transmitter, the idea has occurred to me to find a divider IC from a TV tuner, which could handle the higher frequency and would be easy to find if you can find old tv sets. The idea of using a PLL instead of multipliers is that you don't have to worry about filtering out those lower frequency signals that are part of the process of multiplying up to the desired frequency.

Michael VE2BVW

On Sun, 9 Feb 1997, Ian wrote:

> I intend building a 10 mtr CW transmitter using a VFO. An oscllator
> running at 14 MHz and doubled to 28 MHz would be ideal, but do we
> still have to depend on diode doublers or class C amps to do this or
> is there a nice little chip? A TTL doubler would also help isolate the
> VFO from the o/p stages. I've looked thru the usual component
> catalogues, but can't find anything! But there must be something in
> the 1000s of lised ICs that will do the trick...
>
> Thanks,
> G4JQT
> --
> Ian
> ianls@patrol.i-way.co.uk
>
>

1618. F.S. - Tubesand misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970210010600.UAA08563@ladder01.news.aol.com>
Source record: 97509

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #201-T.

1619. Re: Q:Where to get SCA Adapter Circuits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: MICHAEL J DRUM <mikedrum@ix.netcom.com>
Message-ID: <5dm43p$ck6@sjx-ixn8.ix.netcom.com>
Source record: 97510

In article <19970209032500.WAA20785@ladder01.news.aol.com>,
jmarcellej@aol.com (JMarcelleJ) wrote:
>Tom wrote:
>
>>I want to modify my radio to receive SCA. Where can I get a cheap
>>kit/circuit? Thanks.
>
>The 1996 FM Atlas Catalog has the following SCA adapters:
>
>"Elf-2" tunable (57-92 kHz) adapter - $24 kit or $28 assembled.
>
>"Elf-3" for either 67 or 92 kHz, "fix-tuned for the best audio quality"-
>$24 kit or $32 assembled. Specify 67 or 92 kHz. I have these in
>my GE Superadio and they sound good.
>
>"Elf-4" for 67 kHz, $26 assembled. "A low-cost alternative to the Elf-3."
>
> "SCS Radio Technologies deluxe adapter featuring 40 components, a
>filtered power supply and adjustable mute (for background music
>services which remove their carrier between songs). Specify frequency
>desired: 57, 67, 78.67 (TV-SAP), 92 or 102.271 (TV Pro Channel)." $32
>assembled.
>
>Shipping charge is $2.50 per order. Address: FM Atlas, Box 336, Esko
>MN 55733-0336.
>
>
>J. M. Johnson
>

Could someone tell me where in circuit I can install an SCA adapter in
the GE Superadio III. I don't have a schematic so a description of
the install tap-off point would be greatly appreciated.

Thank You.

Mike Drum>

1620. Re: Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970210035700.WAA16157@ladder01.news.aol.com>
Source record: 97511

In article <measures-ya02408000R0902970719260001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>Here's a copy of the postcard I sent to Mr. Miklos:
>
>"12-18-96
>Mr. Miklos
> If you are the same Joseph Miklos who used to work at the Varian-Eimac
>Salt Lake City plant, I would like to speak with you on the telephone, at
>your convenience, on my dime. If you are not this person, please put
this
>in the nearest roundfile.
>Background: I am also an amateur radio operator. I was first licensed
in
>September of 1955. My FCC callsign is ag6k. Between October 1988 and
>January 1994, I wrote some QST magazine articles. .I am currently
involved
>in a debate about these articles with some of my critics on the
>rec.radio.amateur.homebrew UUNET Newsgroup. One of these critics
>repeatedly cited sources at Eimac who disagreed with virtually everything
I
>wrote in the QST articles. These sources were identified as Mr. "XXX",
>"they", and "it's the entire staff" at Eimac. I kept pressing for names.

>Finally, he produced the name Buzz Miklos. He said Mr. Miklos was
employed
>at the Salt Lake plant. He said his job description was "R+D engineering
>manager". However, there were some things that did not appear to add up,
so
>I telephoned the personnel department at Salt Lake. The personnel
>department confirmed that you had worked there, told me that you were an
>"Engineer B", and volunteered the opinion that you were a widly respected
>engineer at the plant. .I asked if you were the "R+D engineering
manager".
>They said that you were not. ....Obviously, somebody was not
>telling the truth.
> Another thing that did not appear to add up was that this critic told
me
>you refused to talk to me on the telephone. This struck me as a bit odd.

>I have never spoken with you on the telephone. It seemed to me as if the
>critic was afraid I might phone you to check out the critic's story.
> Please telephone me collect anytime (I keep odd hours) at the
telephone
>number on the address side of this postcard. If I'm out, please leave a

>message, and I will return your call ASAP. "
>----------
>e-mail copy to Mr. Stoskopf.
>
>--
>--Rich-- ag6k, 805-386-3734
>
Rich, if you really put all of that on a standard postcard, you must
write with teeeny tiny letters. Can anyone read it afterwards??

Peter ;)

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1621. Re: down east microwave

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: k6ls@amsat.ORG
Message-ID: <32FE9655.7D2C@amsat.org>
Source record: 97512

Down Eastmicrowave:

http://www.downeastmicrowave.com/

1622. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Erik Skovgaard <Erik_Skovgaard@bc.sympatico.ca>
Message-ID: <01bc1714$94db0e20$2ec56cce@default>
Source record: 97513
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Joe,

I tried it using a Hamtronics transmitting and receiving converter. The transverter output from the 735 is very low (10 mW, I think) - too low for most transverters. The separate RX antenna input to the 735 is a real blessing for transverters, however.

I found the sensitivity a little on the poor side on 10 meters. However, a good preamp on the transverter fixed that (and that is the right way to do it, too). Overall, the 735 is a very good rig to use on the back end of a transverter, but you may have to boost the transmit signal. I used the main antenna output (instead of the transverter output) and an attenuator. I did manage to blast 100 into the transverter a few times, of course :-)

73 de VE7MDL ....Erik.

Joe Romanosky <saywhat@erols.com> wrote in article
<32FC2F1F.A7D@erols.com>...
> Anyone have any experience/info on using a Icom 735
> with a transverter? The 735 manual is skimpy on info
> on the transverter jack on the rear panel. any hints
> or kinks are appreciated....
>
> I would like to homebrew a transverter(s) for 144 and 220.
>
> 73 de K3KN
>

1623. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970210061500.BAA21986@ladder01.news.aol.com>
Source record: 97514

In article <32fde75a.3586517@eskinews.eskimo.com>, wrt@eskimo.com (Bill Turner) writes:

>Ok, but why would cathode material contaminate tungsten but not contaminate
>gold? Would it be from a chemical reaction as opposed to simple deposition?

Hi Bill,

I'm not a metallurgist, I would go to someone with that specific background for help you can absolutely trust. If you like, I can call two or three people who are involved in tube design or metallurgy and ask them.

The reason why it happens was never a concern of mine, since I only need to know that it happens.

I do know, as an absolute fact, skin effect has nothing to do with the use of gold in power grid tubes like those used in amateur service. Grid heating is produced mainly by the kenetic energy of the electrons bombarding the grid. The secondary heating effect is caused by proximity of the cathode or filament to the grid.

Since gold is a soft metal with a low melting point, it "evaporates" from the grid at much lower energy levels than tunsten would. That is one reason why the designer take great care to not place the grid in the electron beam path, and why the grid is so easy to damage in a metal oxide cathode tube. Just like a pan of water slowly evaporates at very low temperatures, you do not need to boil the gold or even make it a liquid to have it slowly migrate.

73 Tom

1624. Re: Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970210061500.BAA21991@ladder01.news.aol.com>
Source record: 97515

In article <measures-ya02408000R0902970719260001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

> Another thing that did not appear to add up was that this critic told me
>you refused to talk to me on the telephone. This struck me as a bit odd.

>I have never spoken with you on the telephone. It seemed to me as if the
>critic was afraid I might phone you to check out the critic's story.
> Please telephone me collect anytime (I keep odd hours) at the
telephone
>number on the address side of this postcard. If I'm out, please leave a
>message, and I will return your call ASAP. "
>----------

Gosh Rich, did Buzz call you? Or doesn't he want to talk with you?

Think about it.

1625. FS: ECL <->TTL Interfaces

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Rob Bailey <wm8s@pobox.com>
Message-ID: <01bc171c$48cdc7e0$5e7e65ce@wm8s-1>
Source record: 97516

If you're experimenting with ECL (Extremely Cwick Logic ;^), I've got a sack load of ECL <-> TTL interface tranceivers (both directions) that I've been trying to unload *cheap(. This time, they're going in the bin if I can't get rid of them. They're PLCC (28-pin, I think). 300 or 400 total, with plenty of both.

73 de Rob, WM8S@pobox.com

1626. 4.6 MHz crystals or resonators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Rob Bailey <wm8s@pobox.com>
Message-ID: <01bc171c$bfade8e0$5e7e65ce@wm8s-1>
Source record: 97517

I need some 4.6 MHz crystals or resonators for a project (ten or twelve) I'm working on and I'm not having any luck. The euro colorburst (4.443... MHz) is too low and the baud rate generator (4.9.. MHz) is too high. SMT preferable, or even anything in HC-19 pin spacing, but I'll take anything at all. I found some 4.61 MHz ceramic resonators at Dayton last year, but--like an idiot--only bought four cause it was all I needed at the time.

73 de Rob WM8S@pobox.com

1627. Re: WTD:software for Wx Stn

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Michael Wick <shelby13@mail.bright.net>
Message-ID: <01bc1721$dfe333e0$1094d4cd@default>
Source record: 97518

Michael Kassay <mkassay@sympatico.ca> wrote in article
<32FC34DB.1A45@sympatico.ca>...
> Hi... I have a Heathkit ID-5001 weather station that uses the RS-232
> comm port. Im looking for software that will allow me to connect this
> unit to my computer to log data. But most of all have the capability to
> link the weather unit to my TNC (packet radio).
> It was mentioned that when Heathkit sold this weather station some
> software came with it...Would this be true??
> It was also mentioned to me that a Ham, N4XI sold software, but so
> far Im having no luck in contacting this fellow.
> If anyone can help me out it would be appreciated!!
>
> 73 Mike
> VE3MKX
>
> PS... if anyone has any mods for the wx stn, Id like to hear from you!

Try http://www.heathkit.com/

I believe they are on line and maybe able to help you.

I have the software for the Heathkit, so if you run into problems let me
know.

Mike Wick
KC8EIT
Sidney, OH
shelby13@bright.net

1628. Newsletter Articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Brion Bott <brion@clear.net.nz>
Message-ID: <01bc1735$b33f31e0$b43061cb@dyna>
Source record: 97519

I am editor of our local ham club newsletter and am looking for articles on home brew.
If you would like to contribute such an article of any size (within reason), which you would like to submit to a local New Zealand club newsletter, please E-mail it to me along with your name and callsign. If it is included I will mail a copy of the publication to you with thanks.
All mailings will be answered.
73 de Brion ZL1CAG

1629. MicroCap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: maroof@cybersys.net
Message-ID: <5dmu53$84u$3@post.servtech.com>
Source record: 97520
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

I've been using a program called Microcap for electronic ckt simulation. I looked around the web for later versions of microcap. But I couldn't find any. Can anyone help?

<maroof@triton.kaifnet.com>

1630. hf amp to 6m conv help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Robert Dashoff <robert@ucr.campus.mci.net>
Message-ID: <32FEDC09.57F8@ucr.campus.mci.net>
Source record: 97521

I have a little 50 watt solid-state mobile hf amp (DARTZ brand) that I would like to modify to go up to 6m. The manufacturer claims it's range is 2 MHz to 50 mhz but it seems to only work well up to 30mhz. The power transistors are TRW pt9796 7616 c. There are two of them. There are two clusters of toroids with multiple turns of wire running thorough them it looks like a toroid set in the input and also on the output. One set has two rows of six toroids with four turns of wire running though it (larger of the two) and the other is two rows of three toroids and has three turns of wire running through them (smaller of the two). There is a 560pf silver mica cap that looks like it's on the output. Can I maybe change caps or change the number of turns of wire running thorough those toroids? Can these transistors handle that band? Would anyone out there know what can be done if anything to raise the operating freq. on this little amp? Thanks for any assistance. Bob.... KN6GA

1631. Re: subscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970210060950.4020A-100000@keystone.intergate.net>
Source record: 97522

subscribe to what?

On Wed, 5 Feb 1997, Neil Heckt wrote:

> subscribe
>
>

1632. Re: MicroCap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: phil kenny <pkenny@ix.netcom.com>
Message-ID: <32FF4281.987@ix.netcom.com>
Source record: 97523
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Maroof H. Choudhury wrote:
>
> I've been using a program called Microcap for electronic ckt simulation. I
> looked around the web for later versions of microcap. But I couldn't find any.
> Can anyone help?
>
> <maroof@triton.kaifnet.com>

MicroCap is available from Spectrum Software. They have a
web site at:

http://www.spectrum-soft.com/

phil kenny

1633. 2m transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: markalin@rainbowsix.com
Message-ID: <5dmji2$fgr@lori.zippo.com>
Source record: 97524

Anyone know where, on the Internet, can I get a schematics for a 2m transmitter?

Mark

1634. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb10.170754.18453@ke4zv.atl.ga.us>
Source record: 97525

In article <32FE65BD.2597@flash.net> Jaime McGlothlin <mcglot@flash.net> writes:
>
>I am not positive about this, but I think that the razor blade is used
>to touch a specific spot on a germanium crystal. Hence, the germanium
>crystal is actually the detector, just like crystal sets you buy today.

That is *not* correct. The classic crystal radio uses a galena crystal.
Galena is a lead ore. Its chemical formula is PbS, IE lead sulphide.
Now the ore is not pure. There are impurities or *dopants* in the crystal.
These form semiconductor "sweet spots" in the crystal. By probing the
crystal with a "cat's whisker" (a fine stiff copper wire), one can find
these "sweet spots" where the galena acts as a rectifier or diode detector
for radio waves.

The razor blade radio works somewhat differently. The razor blade, a
Gillette Blue Blade, is coated with *selenium*. This is what makes the
blade blue. When oxidized, we have a selenium rectifier (an almost totally
obsolete type of solid state rectifier), which can also act as a diode
detector for radio waves. Again, a cat's whisker is used to probe the
blade for a "sweet spot". Selenium rectifiers don't have a high back
resistance even when carefully manufactured (which is why they are
obsolete), so this crude rectifier won't do a very good job as a diode
detector, and a razor blade radio won't be as sensitive as a crystal
set with a good crystal.

Otherwise, a crystal radio set and a razor blade radio (also called a
foxhole radio) are identical. The only difference is in the material
used to form the diode detector. Both detectors are rather haphazard
in formation. No control has been exercised to insure precisely the
correct type and amount of impurity, IE dopant, is present in a galena
crystal, and little care has been taken to ensure a proper selenium
oxide layer on the razor blade. So a manufactured diode is better.

A silicon diode can be used, but a germanium diode works better
because it has a lower potential barrier, IE 0.2 volt instead of
0.6 volt. This makes it more sensitive. But you can increase the
sensitivity of either type by biasing the diode with a DC source
to very near the barrier potential. This is how detectors in radar
sets worked until the recent invention of GASFET preamplifiers
which can work at radar frequencies.

Another detector used in the early days is the *electrolytic* detector.
This can be quite sensitive. This was commonly made from a small tin
cup filled with fresh lemon juice. A cat's whisker was dipped in the
liquid, then pulled back out carefully to form a tiny menscus between
the tip of the cat's whisker and the surface of the liquid. This also

acts as a rectifier or diode detector. The juice has to be fresh. After it has been exposed to air for a few hours, it oxidizes and loses its rectifying ability. And of course you have to avoid jarring the detector or the menscus will break. This is why it wasn't normally used on shipboard stations.

The cat's whisker forms one terminal of the diode in all of these cases, and the tin cup, crystal holder, or the screws holding the razor blade to the board, serve as the other terminal of the diode. The mechanisms to precisely position and hold the cat's whisker for these detectors were often marvels of mechanical precision, but you can use a spring clothespin as a cat's whisker holder for your homemade radios.

You need high impedance headphones with any crystal radio. The only way the signal can break over the potential barrier of the detector used is for its voltage to have built up in a high Q resonant circuit. Loading this circuit with low impedance headphones would lower the Q so much that the barrier potential wouldn't be exceeded. Amateurs typically used headphones of 2,000 ohms impedance, but the high rollers would spring for more expensive headphones of 20,000 ohms impedance. A few headphones made from piezoelectric materials, the so-called crystal headphones, could have an impedance as high as 100,000 ohms. Sound quality from these was typically much poorer, however. (The higher the impedance, the more sensitive the radio will be.)

The earliest crystal radios didn't use an explicit lumped LC tank. The antenna was designed to be *self-resonant* at the desired frequency. This required it to be cut to a precise length. A loading coil, with a sliding tap, was used to electrically shorten the required antenna to less than a 1/4-wave, and to allow it to be tuned over a limited range. It was worked against Earth, or against a counterpoise. Later, a capacitor was added in parallel with the coil to form a parallel LC tank resonated to the desired frequency. When this was done, the precise physical length of the antenna became much less critical, one could even use a horizontal dipole fed with ladder line and link coupled to the LC tank, and selectivity was better (though still very poor).

To further increase selectivity, a loose coupler was used. This was made with a LC tank connected to the antenna, and another LC tank connected to the diode detector. The mutual coupling between the two coils was adjusted by varying the spacing of the two coils from one another. The looser the coupling, the better the selectivity, but also the worse the sensitivity. One couldn't have both sensitivity and selectivity at the same time until active amplifiers were invented. Early active radios might have as many as 3 stages of loose coupling to achieve the desired amount of selectivity. These sets were called TRF radios. Vacuum tube diode detectors replaced the crystal detector in these sets.

This is probably more than you wanted to know about early receivers.

Gary
--

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Lawrenceville, GA 30244 | |

1635. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: edbu@sepia.wv.tek.com
Message-ID: <5dnmthINN56f@sepia.wv.tek.com>
Source record: 97526

In article <cpierce-0902972314460001@col-max67.dynamic.usit.net> cpierce@usit.net (C) writes:
>
>Actually the razor is used as the crystal detector and a "cat wisker" is
>used to tune it.
>
>It was used durring WW2 for GI's to keep up with world events while they
>were in the POW Camps.
>
I remember seeing (and listening to) one of these built as a high school science project. As well as I can remember, the razor blade had the brand name etched into it. By placing a sewing needle lightly against the brand name, a crude semi-conductor is formed that can be used as a detector. The radio that I listened to had this type of detector, but had commercial headphones. My question is how did they build an earphone out of "found objects".

Ideas?
Ed Burress
KC7GFX

1636. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb10.172650.18576@ke4zv.atl.ga.us>
Source record: 97527
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <01bc1714$94db0e20$2ec56cce@default> "Erik Skovgaard"
<Erik_Skovgaard@bc.sympatico.ca> writes:
>Joe,
>
>I tried it using a Hamtronics transmitting and receiving converter. The
>transverter output from the 735 is very low (10 mW, I think) - too low for
>most transverters. The separate RX antenna input to the 735 is a real
>blessing for transverters, however.

The output at the transverter jack is much lower than 10 mW. 10 mW is
what most available transverters want to see, but the 735 puts out less
than a milliwatt. The reason for this is that the transverter output is
tapped off the pre-pre-driver stage instead of the pre-driver stage so
the transverter port can be used transceive.

As long as you're going to use the separate Rx input anyway, you can fix
that. The cable going from the pre-driver on the main board to the driver
on the PA board is the right level to drive most transverters. Just unplug
this cable from the main board, and plug the transverter jack cable in its
place. Now you'll have about 10 mW at the transverter jack on the back, but
you can't *transceive* on this port anymore. (That's Ok, you're using the
separate Rx port to receive.)

If you add another jack to the back, you can route the cable going to
the PA to it. Then to restore the radio to normal operation, all you
need to do is put a jumper on the outside on the back between this new
jack and the transverter out jack. Simple. This way you can never over-
drive a transverter, and you'll have the right level for most modern
transceiver designs.

I don't know what Icom was thinking when they set the radio up this way.
Perhaps they had plans, which never materialized, to offer transverters
for it which required the lower drive level. Anyway, after this mod,
it is a wonderful radio to use with transverters.

Gary
--
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Lawrenceville, GA 30244 | |

1637. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Michael Davidsohn <michael-davidson@easynet.co.uk>
Message-ID: <01bc1777$6598efc0$80689ac2@workstation.easynet.co.uk>
Source record: 97528
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

100 watts of 70mhz AM should do IT!!

Gary Coffman <gary@ke4zv.atl.ga.us> wrote in article
<1997Feb6.175433.27521@ke4zv.atl.ga.us>...
> In article <32F8B927.F24@tntech.edu> John Noel <jhn5012@tntech.edu>
writes:
> >
> >I have neighbors who play loud music. Is their a way to jam their
> >electronic equipment, e.g., CD player, to keep them from working? Would
> >a transmitter of some sort work? Any help would be appreciated.
> >
> > John
>
> It is perhaps possible that you could generate sufficient RFI to
> interfere with the operation of their stereo (as well as every other
> consumer electronic appliance within a wide radius), but besides being
> illegal, it would be stupid. Either they, and the rest of your neighbors,
> would come over and beat your butt, or they'd just add some simple RFI
> suppressors to their stereo and turn it up louder.
>
> It will be much better to deal with the problem in a legal fashion.
> If you can't come to an amicable agreement with them, and they really
> are playing the music so loud as to be a public nuisance, then file
> a complaint with the local police for violation of the local noise
> ordinances (almost every community has one). If for some reason your
> community doesn't have a noise ordinance, file a civil suit directly.
>
> If you don't wish to involve the law for some reason, then I suggest
> you invest in a cheap pair of hearing protectors, available from any
> industrial safety equipment supplier, or a shooting supplies outlet.
>
> Gary
> --
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addresses
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ke4zv@radio.org
> Lawrenceville, GA 30244 | |
>

1638. Equipment designation on old QSL cards --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: jwg6@cornell.edu
Message-ID: <jwg6-1002971419010001@cu-dialup-0823.cit.cornell.edu>
Source record: 97529

I have several stacks of qsl cards dating back to the late 30s, up through the 70's, which were the collection of W3GCN, my wife's grandfather.

They are fun to look through , and I find the personal and station notes to be quite interesting.

Question is this:

On many of the oldest cards, transmitters and receivers were listed separately (no compact transceivers back then!). BUT they don't give the tube names. All they will have is a set of numbers, separated by hyphens, denoting the circuits used.

What do these numbers stand for? Are they prefixes to the tube types or something? How can you tell what the circuit was like just by these sets of numbers?

Thanks, 73

Joel N1AEP

1639. WTB: 10mtr CW transmitter strip/Exciter Module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: doug469@knox.mindspring.com
Message-ID: <5dnsu2$irb@camel5.mindspring.com>
Source record: 97530

Hi All,
I need a small 10mtr crystal controlled CW transmitter strip for a beacon project. Preferably 5w out or less (1 - 2 watts would be perfect), 12vdc powered. Looking for something similar to the ones advertised in the ham mags for 20,30,40 and 80mtrs. Transmit only.

I would prefer a pre-built unit, (I don't have a lot of time for kit building these days) but a kit would be fine.

Anybody out there have such a beast or know were I can find one????

Thanks >>> Doug

Email replies to;
doug469@mindspring.com

1640. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: w6tg@aol.com
Message-ID: <19970210194001.OAA13582@ladder01.news.aol.com>
Source record: 97531

This thread has turned into a real pissing contest.
Too bad, it was real interesting for sometime.
W6TG

1641. Re: QEX articles

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5dntg3$rc8@lace.colorado.edu>
Source record: 97532

In article <5cqjs1$hmo1@hpbs1500.boi.hp.com>,
Tony Baca (?) <tbaca@boi.hp.com> wrote:

>Bruce, if you can tell us the issues, we can get reprints from QEX
>as described in the following: [...]

>QST/QEX ARTICLE REPRINT ORDERING PROCEDURE
>ARRL CONTACT NUMBERS:
>Main Number: 860-594-0200
>Fax Number: 860-594-0259
>Circulation Department: 860-594-0250
>Technical Q*s: 860-594-0214
>Technical Department Secretary, Bridget DiCosimo -
> Phone: 860-594-0278 Internet Address: bdicosimo@arrl.org
[...]

The original article is Feb '91, pp 3-9, and the corrigendum appeared in the Aug '91, pp 21-2. A complete, modified schematic appears in the corrigendum, (p.22) but even it has one obvious typo: At the top right of the circuit (which is on the top left of the page) there is a wire that directly shorts out a protection diode, making the diode superfluous. Probably, the wire is the typo as the diode was one of the things added in the "corrected" circiut. This offending wire is immediately to the left of the diode's part number, "UES 1306."

I am not aware of any other published corrections to this circuit.

As I wrote before, I have not built the full, high-power version of the circuit, only low-power mockups of it. Also, I repeat that I *did* build the TTL "square wave" oscillator, but found it didn't give anything like a square wave output. And has anyone managed to find the input-mains DC filter cap in the picture? It's 5100 uF at 400 V - and there's no hint of in on the photo on p. 5 of the article.

I apologize for my delay in locating the reference.

Bruce
N6URH

1642. Re: Frequency Doubler ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: "Michael Masterson"
Message-ID: <5dnp22$j4n@mtinsc02.worldnet.att.net>
Source record: 97533
Body handling: HTML body converted to readable text

<-->

I have a 28 MHz MOSFET transmitter running abt 6 Watts out(Uses IRF510). The oscillator is a 14 MHz VXO driving a buffer to a balanced diode doubler. These give very clean output,easily filtered to yield 28 MHz drive. All spurious & sub-harmonics are down -55 dBc with a single-tuned tank after the diode doubler. I've done this for all the HF bands 80-10 with repeatable results, but I did see a recent QST article (Jan 97??) using exclusive-OR gates with RC time delays to produce doublers. You could do some experiments with these and it would be interesting to see if the output is clean or not. Best of Luck!! de Mike WN2A

1643. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: tiemann@spot.Colorado.EDU
Message-ID: <5dntn3$rjh@lace.colorado.edu>
Source record: 97534
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <1997Feb10.172650.18576@ke4zv.atl.ga.us>,
Gary Coffman <gary@ke4zv.atl.ga.us> wrote:

[An excellent mod for making the IC-735 good for transverters.]

Gary, or anyone else, is there an equally excellent way to modify the
IC-726 (which is IC-725 + 6 meters) for use with transverters?

Has anyone done this?

Bruce
N6URH

1644. Re: 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb10.182945.18894@ke4zv.atl.ga.us>
Source record: 97535

In article <Pine.SOL.3.91.970207061751.21241B-100000@supreme> Peter Parker
<parkerp@pcug.org.au> writes:
>On Tue, 4 Feb 1997, Gary Coffman wrote:
>> Let me note here that QRP SSB usually isn't very effective on
>> the 75m band. Due to the high atmospheric noise and the heavy
>> QRM on this popular and crowded band, you usually need some
>> power to be effective. I'd suggest that 100 watts be considered
>> the comfortable minimum for SSB operation. You can sometimes use
>> much less, but often you need even more power. So a QRP kit may
>> not be the best way to go.
>
>Having done some experiments with QRP SSB/DSB on 80 metres, I'd agree
>that there appears to be a threshold power below which 80% of 80m SSB
>contacts are not really successful/a battle with QRN, etc. Sure you can
>make contacts below this threshold, but it is hard going, and successful
>contacts where you're not repeating everything are few.
>
>Above the threshold, it becomes more a matter of 80% of contacts being
>successful, and operating becomes more enjoyable.
>
>From my own experiences a power of 1 watt DSB on 80m is probably below
>this threshold most of the time. However, 5 watts SSB will almost
>certainly be above it (Note that QRP is anything less than 10w SSB). Thus
>QRP SSB is definitely possible (and practical) on 80m, and I'd disagree
>with Gary that 100w be considered a practical minimum.
>
>My furthest contacts with 2-3w SSB on 80m have been close to 2500km, but
>contacts of anywhere up to 1000km are quite practical on a fairly regular
>basis provided static levels aren't too high. However during such times,
>100 watt stations have a battle, and many turn off.

Peter, I'd suggest you don't have a good feel for the normal QRM
levels in the US on 75m. On most nights, you can tune across the
entire 75m band without seeing the S meter drop below S9 (mostly
these are stations from 4 and 5 land as heard from my location, kW
amps appear the rule, and low antennas appear to be the rule, so
a lot of this is high angle stuff which you'd never hear in your
location, but which simply swamps us here). I'm afraid that 5 watts
doesn't have much of a chance against that.

I *have* used 5 watts successfully (TenTec Argonaut) *very* late
at night after most operators have gone to bed. But during the
prime evening hours, you have to have enough power to make it
through all the QRM. 100 watts suffices most of the time to make
a contact anywhere in North America. During summer, when heavy

static adds on top of the QRM, a kilowatt sometimes isn't enough (mainly because everyone else has fired up *their* kilowatts too).

As the CBers are fond of saying (and unfortunately our 75m band often sounds like CB), the signals are "wall to wall and treetop tall" on 75m here in the US during prime evening hours. You just cannot find a completely clear spot to operate. During less busy times, low power can work. Of course you can move down to 80m and use a non-voice mode at low power even in prime time bacause there is far less activity there and you can almost always find a clear frequency. I've done Clover at ridiculously low power levels around 3625 kHz even during prime time (I've had successful contacts out to 1000 km at the 20 mW level).

I figure that for good SSB voice contacts, I need 100 watts on 160m (maybe more depending on how efficient an antenna I can get up on 160m at the time), 75m (amateur QRM limited), and 40m (foreign broadcast QRM limited) during prime time. On the bands above 40m, 10 watts is usually plenty unless you're trying to bust a Dx pileup, which I don't do. I have a kilowatt amp, but rarely use it, typically only for a net check in with traffic on 75m in summer during prime time. Since I handle most traffic on digital modes, where low power is plenty, the amp is rarely used.

Now make no mistake, if you're willing to hunt and pounce and keep contacts very short, you can probably make contacts on 75m SSB with 5 watts even in prime time. But you won't make many, and you won't do much extended ragchewing, unless you have the capability to turn up the wick a bit.

Gary
--
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Lawrenceville, GA 30244 | |

1645. How to couple transmitter to antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: jwg6@cornell.edu
Message-ID: <jwg6-1002971413160001@cu-dialup-0823.cit.cornell.edu>
Source record: 97536

Hi. I have an old Thordesen (sp?) transformer catalog, looking to be from late 50's/early 60's. It includes several transmitter/exciter and modulator circuits, with instructions for building them.

The info is very interesting and nostalgic. However, I noted that the transmitter outputs in the schematics are "old-fashioned."
What I mean is, they don't show 50 ohm or even coaxial-type ouputs. Instead, they just show the two leads which are supposed to connect to the antenna.

How can you tell what type of antenna is intended? Impedance? Type of feedline? There is no mention of it, so I guess it was common knowledge, at the time, as to how to couple the antenna, and what impedance of antenna you would use.

I'm just used to more modern circuit diagrams, showing the usual co-axial, low impedance output. With those, you pretty much can presume they're looking for around 50 ohms. How about with the older tx schematics?

Many thanks,

JWG

1646. Re: Equipment designation on old QSL cards --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: mjsilva@ix.netcom.com
Message-ID: <5dnvnp$o6j@dfw-ixnews10.ix.netcom.com>
Source record: 97537

In <jwg6-1002971419010001@cu-dialup-0823.cit.cornell.edu>
jwg6@cornell.edu (Joel Govostes) writes:

>
>On many of the oldest cards, transmitters and receivers were listed
>separately (no compact transceivers back then!). BUT they don't give
>the tube names. All they will have is a set of numbers, separated by
>hyphens, denoting the circuits used.
>
>What do these numbers stand for?

They might very well be tube lineups -- why don't you post a few
samples.

73,
Mike, KK6GM

1647. Reveal PC Radio Card ?any mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: rapuppa@lightspeed.net
Message-ID: <32ff8cea.8954624@news.lightspeed.net>
Source record: 97538

<<hello all does any one know of or have seen any info on
<<modifying the reveal ra300 fm card if so post re: or e me
<< thanks for your time
<< 73 rapuppa
<< rapuppa@lightspeed.net
<<
<<
<<

1648. Re: FS: HP141T Spectrum Analyzer (0-1200mHz)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: Wyatt@dis.org
Message-ID: <32ff95e7.337782861@news.alt.net>
Source record: 97539
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Thu, 06 Feb 1997 17:10:10 GMT, jim@rst-engr.com (Jim Weir) wrote:

>dallen@melpar.esys.com (Dale Allen)
>shared these priceless pearls of wisdom:
>
>->This is a real-time analog spectrum analyzer
>
>Ok, fellers, this is the same guy that had a Boonton 250 RX meter last
>week. Doing a onesy-twosie sale on an occasional basis is one thing. My
>suspect is that this is going to become the weekly auction thing.
>
>Besides, what's this auction crap. Put up a price. First one to meet it
>buys it.

I agree, the auction thing is silly. But if you insist I will enter a
bit of $250 just like you asked. If that is not enough money for you,
please try to come up with a number and let us all know. I hate
trying to 'guess' how much something costs...

> I'll start the bidding
>at $250 plus Mail Box Center packing and shipping charges.
>Bidders from the 48 states only please. Offers will be accepted
>until next Friday 2/14. The unit is in no.VA (ZIP 20170) and the
>shipping weight is about 75lbs. Please forward all questions and
>offers to my home at: radiodale@dclink.com
>
> Thank you,
> Dale

1649. Re: URL for Ant. building

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: rwa@cs.athabascau.ca
Message-ID: <5do4rf$95n@aurora.cs.athabascau.ca>
Source record: 97540

barney@ix.netcom.com (Barney) writes:

>bruce muscolino <w6toy@erols.com> whistled a happy tune like:

>|>I believe there's a newsgroup ca;;ed <rec.radio.amateur.antennas>.
>|>Have a look and let me know.

>I don't see that group here Bruce.
>Is it on your ISP???

That's

rec.radio.amateur.antenna

Notice that it's not plural. This is an old well established group.
If your ISP isn't carrying it, bring the matter to their attention.

regards,
Ross ve6pdq
--
Ross Alexander, ve6pdq -- (403) 675 6311 -- rwa@cs.athabascau.ca

1650. Re: 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970210222000.RAA20516@ladder01.news.aol.com>
Source record: 97541

Hi Gary--

Looking down at my log from a few nights ago, I see LZ1QI, FP6ECS, YU1XA, and S59A--all worked around 10 PM on SSB using an MFJ-9475 running 12 Watts into an inverted V. It is indeed possible to work 75 at night--as long as you aren't having to blast through jammers making animal noises and burping into the microphone. I get on 3936 with friends most nights before dinner, and at that time of day, I can work anyting you can hear on 10 Watts. Of course, if you want to check into the trader net on 3898 later on, forget it--and when the band is that bad, 100 Watts won't cut it either! But, I've been doing QRP on 75 for several years, and I am continually amazed at how well it DOES work--especially if you have a good antenna.

Rick K1BQT

1651. ++++WANTED:INFO REGARDING MOBILE AS RF AMP++++

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-10 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19970210222100.RAA20552@ladder01.news.aol.com>
Source record: 97542

Hi,

I once saw on this Newsgroup a post by someone who said that an old hi power mobile, I believe a Mitrek or the like, could be used as an RF amp. If you are that person, or know who he/she is, please E-Mail me. However, If some has 100watt or close to that power output RF amp, I am looking to increase the output of my 45watt mobile. Tha only requirement is that the amp run on 12 volts DC, and not be the size of a VW Bug.

Thanx
Mike

HQ54@Aol.Com

1652. camera data panasonic?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: CHRIS PURDY <jj56@dial.pipex.com>
Message-ID: <32FFBEAD.A0B@dial.pipex.com>
Source record: 97355

PANASONIC colour tube camera WV-3000E

anyone got circuit details /pot references?
anyone ever adjusted tube positioning?
not completely broken-just needs focus adjustment.

Its a 1980's type 2/3inch spectraplex vidicon with
pistol grip & 10-pin cable plug(as used with older vcrs &
large over-the-sholder VHS portapacks.)

Will pay for reprographics cost incurred.

email please to: jj56@dial.pipex.com

Many thankx Chris Purdy--
regards Chris R. Purdy Signal Processors Ltd,Cambridge Science
Park,Cambridge CB4 4GJ ENGLAND
voice: 01223 420357 fax: 01223 420883 main E-mail: chrisp@spl.co.uk

website: www.spl.co.uk/satcomms/index.html bbs:01223 576895 alternative
email: jj56@dial.pipex.com

1653. Re: 80m SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970211012000.UAA29402@ladder01.news.aol.com>
Source record: 97356

In article <Pine.SOL.3.91.970207061751.21241B-100000@supreme>, Peter Parker <parkerp@pcug.org.au> writes:

>From my own experiences a power of 1 watt DSB on 80m is probably below
>this threshold most of the time. However, 5 watts SSB will almost
>certainly be above it (Note that QRP is anything less than 10w SSB). Thus

>QRP SSB is definitely possible (and practical) on 80m, and I'd disagree
>with Gary that 100w be considered a practical minimum.
>
>My furthest contacts with 2-3w SSB on 80m have been close to 2500km, but
>contacts of anywhere up to 1000km are quite practical on a fairly regular

>basis provided static levels aren't too high. However during such times,
>100 watt stations have a battle, and many turn off

While I don't doubt your success, you've also never had some lid, or oldtimer who can't hear anything, key right up on your QSO, or 1KHz away, and ignore your statements that the frequency was in use, except to laugh later about that squeaky signal about 10 minutes ago. QRN is a problem, but QRM as Gary said is even more of one. 73 de n8blk/3 -art clemons-

1654. Re: Equipment designation on old QSL cards --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: tim@america.net
Message-ID: <32ffc6e7.12368091@news.america.net>
Source record: 97357

On 10 Feb 1997 19:13:18 GMT, jwg6@cornell.edu (Joel Govostes) wrote:

> On many of the oldest cards, transmitters and receivers were listed
>separately (no compact transceivers back then!). BUT they don't give the
<SNIP>
>What do these numbers stand for?

How about an example or two ???

1655. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc17bc$49eb9e40$49112399@peter-s>
Source record: 97358
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Rob Neff <n7ory*@*primenet.com> wrote in article
<32ffac19.28077629@news.primenet.com>...
> Story: I had a gal at work that cranked her headphones up SO loud, I
> could hear Stevey Wonder's harmonica down the hall and into the
> bathroom! She worked in the office just behind the wall, and behind
> me. She was using the cassette player on her walkman. First I brought
> a CB walkie talkie in, a 5W'er.. Did no good. Then one day I was
> trying to key up a local 440 repeater when I noticed the audio on her
> headphones quiet a bit on transmit. I placed the ht as close to the
> wall as I could, keyed it up, and it wiped the audio out completely.
> For some reason I could not hit the repeater that day, but sure was
> fun trying.

Once I was waiting in line at a Pizza Hut and talking simplex to a friend
at
the other end of the mall. I noticed that whenever I keyed up the cash
register
beeped. When I got right near it I keyed up to ask my friend what she
wanted
and the register display went BLANK. Actually I crashed the entire system.
Did you know all the register were interconnected? I didn't. When they
restarted the system it insisted on printing the day end receipts which
took
quite some time. Despite them seeing me key up they had absolutely no
idea I caused the problem. I have since refrained from using the ht near
electronic equipment that has the possibility of delaying lunch.

1656. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <32fff973.80317973@news.santafe.edu>
Source record: 97359

w8jitom@aol.com wrote:

>In article <32fde75a.3586517@eskinews.eskimo.com>, wrt@eskimo.com (Bill
>Turner) writes:
>
>>Ok, but why would cathode material contaminate tungsten but not
>contaminate
>>gold? Would it be from a chemical reaction as opposed to simple
>deposition?
>
My understanding is that the purpose of the gold is to suppress
emission from the tungsten grid material which can get quite hot.
Vaporiing the gold messes up the emission of the cathode and can cause
HV hold-off problems by getting on the tube envelope.

My experience is limited to some small planar triodes with 2 to 3 cm
sq cathodes and grids that are only a few mils off the cathode. the
anode cathode spacing is about 0.1" . The tubes operate at 8 - 9 kV
and can put out 20-30 kW (pulsed). They are about 1"diam X 1" long
and require an external heatsink.

If anyone is interested the tubes are YU-141 and YU-176. I have made
360 kW amplifiers at 425 MHZ, 1% duty factor with 12 of these guys in
parallel. They are so closely spaced that transit time is not a factor
at 425 MHz and I have seen up to 60% efficiency with careful tuning.

&73 de K9XC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

1657. Source for *or* equivalent # for MC145163 (QEX 6/91)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: sc@webspan.com
Message-ID: <5dp30b$4pf@news.webspan.net>
Source record: 97360

I am looking for a frequency synthesizer chip like the MC145163.
It appeared in an article in the June 1991 QEX, page 22.
I have searched the Motorola web site, and the only one that
appears to come close to it is the MC145170, but it is a serial
interface, not BCD. I want to use BCD thumb-wheel encoders
with it. So I guess I am looking for a source for the MC145163
or the part number for an equivalent chip.

Thank you,
Steve

1658. Re: QEX articles: CORRECTION is in Nov 91 page 15

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: sc@webspan.com
Message-ID: <5dp498$4pf@news.webspan.net>
Source record: 97361

In article <5dntg3$rc8@lace.colorado.edu>, tiemann@spot.Colorado.EDU says...
>
>In article <5cqjs1$hmo1@hpbs1500.boi.hp.com>,
>Tony Baca (?) <tbaca@boi.hp.com> wrote:
>
>>Bruce, if you can tell us the issues, we can get reprints from QEX
>>as described in the following: [...]
>
<SNIP>
>The original article is Feb '91, pp 3-9, and the corrigendum appeared in
>the Aug '91, pp 21-2. A complete, modified schematic appears in the
>corrigendum, (p.22) but even it has one obvious typo: At the top right of
>the circuit (which is on the top left of the page) there is a wire that
>directly shorts out a protection diode, making the diode superfluous.
>Probably, the wire is the typo as the diode was one of the things added in
>the "corrected" circiut. This offending wire is immediately to the left
>of the diode's part number, "UES 1306."
>
>I am not aware of any other published corrections to this circuit.
>
<SNIP>

There was one more correction in the Nov 91 issue, page 15.
The wire you are talking about should not connect with the + line
by the 6800 pf 10kv cap (UES1306 anode), just remove that "dot" on
the schematic.

Steve

SPAM THWART: To E-mail change the "sc" to "scasey"

1659. Re: 23cm 1.2Mbit/s PSK Packet Radio by S53MV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: pavel.reberc@guest.arnes.si
Message-ID: <5dp5fq$o71$1@kanja.arnes.si>
Source record: 97362
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

marty@trucom.com (Marty Albert) wrote:

>Hello Out There...

>Anyone have any experience with the 23cm PSK packet-radio RTX for
>1.2Mbit/s by Matjaz Vidmar, S53MV in Slovenia?

>(those interested can find more info at:

> http://www.hamradio.si/hamradio/packet.html

>a quite nice site, BTW!)

>Anyway...

>Sounds interesting at least but due to my eyesite, I have trouble
>reading the online schematics and layouts.

>Would be interested in the opinions and experiences of those that have
>looked at and/or tried this system.

>Take Care & 73

Matjaz presented his 23cm PSK radio in Weinheim - Germany VHF Meeting.
So description is published in a script of this meeting.
If you want, write to me and i will send you a copy....

These radios are operating fine, mainly they are used for links
(operating over distances more than 80km)....
73, Paul s57ra

pr: s57ra@s50box.svn.eu EM: pavel.reberc@guest.arnes.si

1660. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1102970110020001@news.vcnet.com>
Source record: 97363

In article <32fff973.80317973@news.santafe.edu>, jpotter@jpaw.com wrote:

> w8jitom@aol.com wrote:
>
> >In article <32fde75a.3586517@eskinews.eskimo.com>, wrt@eskimo.com (Bill
> >Turner) writes:
> >
> >>Ok, but why would cathode material contaminate tungsten but not
> >contaminate
> >>gold? Would it be from a chemical reaction as opposed to simple
> >deposition?
> >
> My understanding is that the purpose of the gold is to suppress
> emission from the tungsten grid material which can get quite hot.
> Vaporiing the gold messes up the emission of the cathode and can cause
> HV hold-off problems by getting on the tube envelope.

ï¿½ Jim: I recently opened a kaput, 8877 that experienced both of these
problems during operation in an HF amplifier. Before the fatal
gold-sputtering episode took place, the dc grid current was reportedly
normal. Since the 8877's gold-plated grid can handle over 40a-rms of RF
grid current @250MHz, it does not seem likely that normal grid currents
could be responsible for the gold-sputtering that destroyed the tube.

> My experience is limited to some small planar triodes with 2 to 3 cm
> sq cathodes and grids that are only a few mils off the cathode. the
> anode cathode spacing is about 0.1" . The tubes operate at 8 - 9 kV
> and can put out 20-30 kW (pulsed). They are about 1"diam X 1" long
> and require an external heatsink.
>
> If anyone is interested the tubes are YU-141 and YU-176. I have made
> 360 kW amplifiers at 425 MHZ, 1% duty factor with 12 of these guys in
> parallel. They are so closely spaced that transit time is not a factor
> at 425 MHz and I have seen up to 60% efficiency with careful tuning.
>
> &73 de K9XC, Jim

ï¿½ Interesting.
Are the YU-141 and YU-176 similar to the Y-518? What are the anode
dissipation ratings and heater requirements for the YU-141 and YU-176?
thanks, Jim.
---
e-mail copy to Mr. Potter

--
--Rich-- ag6k, 805-386-3734

1661. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <330031C8.354F@rcru.rl.ac.uk>
Source record: 97364
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Gary Coffman wrote:

snip |

Great idea Gary, but it defaces the rig. No help when bowwowing Joe's rig on field day. An easy fix is to make up a small buffer amplifier using a single transistor, e.g. BF981 or a modamp, operating in a linear mode (most important) to boost the low power to about 20mW. Then add a filter on the output to ensure a clean drive.

A level setting pot is a good idea as well so you can adjust the power input to the transverter, and while you are at it, a relay and two sockets to switch the receive line and the signal to the transverter pin on the acc1 connector.

Now you can leave the rig wired for HF and have the transverter connected. Change bands at the flick of a switch and protect the transverter from 100W of HF.

73 Mike

1662. Cleartone CM6500 PMR Set MODS?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Max Lock <g7uoz@uhars.herts.ac.uk>
Message-ID:
<Pine.LNX.3.91.970207122955.20253C-100000-100000-100000-100000-100000-100000-100000@uhars.herts.ac.uk>
Source record: 97365
Cross-posted to: uk.radio.amateur,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hi All,

Bought a Cleartone CM6500 PMR set at the weekend, very cheaply too, just wondering if it's possible to mod the radio into the 70cm's band, and also where I can find any information to do this. Unfortunately, there is nothing obvious inside like a diode matrix or Eprom, so any help would be gratefully accepted.

Thanks in advance and 73's de G7UOZ, Max.

1663. Re: 23cm 1.2Mbit/s PSK Packet Radio by S53MV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: I.P.Beeby@nortel.co.uk
Message-ID: <I.P.Beeby-1102971144310001@nhl4m5bf.hal04.nt.com>
Source record: 97366
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.digital.misc

In article <5dp5fq$o71$1@kanja.arnes.si>, pavel.reberc@guest.arnes.si wrote:
> Matjaz presented his 23cm PSK radio in Weinheim - Germany VHF Meeting.
> So description is published in a script of this meeting.
> If you want, write to me and i will send you a copy....
>
> These radios are operating fine, mainly they are used for links
> (operating over distances more than 80km)....
> 73, Paul s57ra
>
> pr: s57ra@s50box.svn.eu EM: pavel.reberc@guest.arnes.si

Paul - this sounds very interesting - could you possibly post a brief
summary including contact names/addresses as otherwise I think you will be
inundated with requests to post...

Cheers

Ian

G8OGJ

--
Ian Beeby
Cogent
England
e-mail: I.P.Beeby@nortel.co.uk
England

1664. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Michael Tracy <mtracy@arrl.org>
Message-ID: <3300A4D9.C9B@arrl.org>
Source record: 97367
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.ama

Mike,
This is a matter of a simple IF filter replacement for most
scanners. Although wideband IF filters are not available at your local
Radio Shack, they are available from several mail order places. A
detailed description on how to do this appears in the Weather Satellite
Handbook by Taggart.

73, Michael Tracy, KC1SX, ARRL Technical Information Services

Mike Agner wrote:
>
>Under normal circumstances the bandwidth needed to receive a weather
> sat picture in the 136 mhz is greater than most scanners can handle
> without modifications. You would most likely only get part of the
> picture (if any at all, assuming the sync pulse wasn't chopped as >well).I
> would be interested in knowing how you modified the Pro62 to handle > this.
> 73s Mike

1665. ADULTS ONLY- Check this out! (MkQEpQ)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Paul287679120@%$#*&!+=.com
Message-ID: <3300876d.0@news.cias.net>
Source record: 97368

Are you into HOT CHAT? We've got the world's largest voice-personal dating system, as well as the hottest, sexiest "1 on 1", "2 on 1", and "PARTY-LINE" chat you'll find anywhere, all in one place! And you don't have to call a 900 number to get in on this hot phone fun!

You can choose from 5 hot programs that are sure to fulfill your every desire!

You can press 1 from the main menu to choose from our sexy "1 ON 1" PLEASURE MENU, then:
*to talk to a BEAUTIFUL SEXY GIRL, press 1.
*for a 1 on 1 session with an experienced DOMINANT MISTRESS, press 2.
*for steamy talk with a LUSCIOUS TRANSVESTITE, press 3.
*for an erotic 1 on 1 chat with an EXOTIC TRANSSEXUAL, press 4.

*for some man to man action with a HOT GUY, press 5.
You'll be billed just $3.99 per minute for your selection.

Or you can press 2 from the main menu to DOUBLE YOUR PLEASURE, then:
*to speak to 2 HOT SEXY GIRLS, press 1.
*to get it on with a swinging WILD COUPLE, press 2.
You'll be billed just $4.99 per minute for your selection.

Or you can press 3 from the main menu to join the GROUP ORGY LINE!
*You can party with the nations nastiest swingers for only $2.50 per minute.

Or you can press 4 from the main menu, then:
*Press 1 to join the FANTASY NETWORK. This is the world's only phone service that allows you to connect with people who share your personal fantasies. This state-of-the-art voice mail system lets you listen to messages from beautiful girls, sexy transvestites and she-males, gay and bisexual males, and dominant women. Leave them a hot and sexy message, then call back to see what erotic message they have left for you. You'll be billed just $3.50 per minute.
*Or press 2 to listen to a hot selection of recorded fantasies steamy enough to make you explode! Choose from beautiful, sexy women's fantasies or domination stories. You'll be billed just $2.49 per minute.

Or you can press 5 from the main menu for the HOT AND NASTY DATELINE, where you can listen, and respond, to voice personal ads from hot horny girls in your neighborhood, including their real names and home telephone numbers! You can also leave your own personal message for people to get in touch with you. Make new friends on the world's busiest voice personal lines! Meet singles or couples, gay or straight; you'll be billed only $2.99 per minute.

***JUST CALL 1-800-756-3906 to use your Mastercard, Visa, or American Express card. The charge is just $2.49-$4.99 per minute, plus a 50 cent connection fee. 18+ only.

***OR CALL 1-900-745-4398. The charge is just $2.49-$4.99 per minute. Must be 18 years of age or older.

Call now!!! YOU WON'T REGRET IT!

(MkQEpQ)

1666. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: xTimothy_Shearer@MK.com
Message-ID: <5dq45j$roq@esgadm.esg.mk.com>
Source record: 97369

I have (2) 10Ghz alarm motion detector units. I took them apart to see what was inside. There is a cavity with the Gunn? diode, a waveguide port and on the other side is a cover that had what looked like black conductive foam for storing CMOS IC's. It was very dry and crumbled away. Oooops

What is the purpose of this foam? Is it neccessary for the proper operation of the cavity? Is it like a dummy load in the cavity?

I don't know what kind of power these put out but I guess its in the 1 mW range??? I have established contact between the 2 units at 20 feet (this is without any additional waveguide extensions or parabolic dishes)

Are there any Web sites of interest for 10Ghz stuff?

Thanks
Tim KF8XW

1667. 10 Ghz device inquiry

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: xTimothy_Shearer@MK.com
Message-ID: <5dq620$sde@esgadm.esg.mk.com>
Source record: 97370

I have (2) 10Ghz alarm motion detector units. I took them apart to see what was inside. There is a cavity with the Gunn? diode, a waveguide port and on the other side is a cover that had what looked like black conductive foam for storing CMOS IC's. It was very dry and crumbled away. Oooops

What is the purpose of this foam? Is it neccessary for the proper operation of the cavity? Is it like a dummy load in the cavity?

I don't know what kind of power these put out but I guess its in the 1 mW range??? I have established contact between the 2 units at 20 feet (this is without any additional waveguide extensions or parabolic dishes)

Are there any Web sites of interest for 10Ghz stuff?

Thanks
Tim KF8XW

1668. Johnson 275W matchbox coil taps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Sheldon Darack <shel@fuwutai.lucent.com>
Message-ID: <3300B51B.7936@fuwutai.lucent.com>
Source record: 97371
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I repaired a Johnson matchbox (275W version). I don't know the correct
place for the input coil tap. I have it placed slightly more than two
turns from the ground side of the coil. (the other end is left open).
This tap is made by soldering a wire from the coax input connector. I
don't need to know the tap for a second receiver, that tap is adjustable
and is closer to the open end.
Thanks in advance,
Shel Darack WA2UBK shel@lucent.com

1669. Re: List Of Stamp Applications [970207]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Charles Laforge <cjl@hotmail.com>
Message-ID: <3300BCCB.4165@hotmail.com>
Source record: 97372
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

Jeffery B. Wood wrote:
>
> Christer Johansson <cj@hth.com> wrote in article
> <32faa0fa.2549319@news.buller.se>...
> > Since the L.O.S.A is getting bigger I only post the index of
> > applications to the newsgroups and you can download the complete
> > L.O.S.A from the following places...
>
> I keep seeing references to "BASIC stamp" but what is it?
>
> --
> Jeffery B. Wood KB7MQA
> jbwood@pacifier.com
> knickknack@juno.com

Hey Jeffery

Check out http://www.parallaxinc.com.

Charles

1670. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970211185800.NAA06823@ladder01.news.aol.com>
Source record: 97373

In article <19970210194001.OAA13582@ladder01.news.aol.com>, w6tg@aol.com (W6TG) writes:

>
>This thread has turned into a real pissing contest.
>Too bad, it was real interesting for sometime.
>W6TG

That's because it isn't science, it's religion. The conversation can't possibly be held to technical issues when personal opinion attacks are made against manufacturers and other people on a regular basis, and when a participant constantly presents false or corrupt data or half truths as fact.

But getting back to technical issues.

In article <measures-ya02408000R0402970132530001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>In other words, the arcing that destroyed the original bandswitch and
>the replacement bandswitch in Rick May's AL-80 can not be explained by a load
>fault. The only thing that was altered after bandswitch #3 was the
>VHF-Rp of the VHF suppressor in the AL-80.

Measure then claims....

>The original suppressor has an Rp of
>about 166 ohms at the anode resonant frequency of 160MHz.

That's the stock suppressor, 166 ohms (by the way 160 MHz is NOT the frequency an AL-80 oscillates at if the suppresor is removed).

>The replacement suppressor has an Rp that is around 101 ohms at 160MHz.

That's his nichrome suppressor, 101 ohms.

>Since voltage gain is essentially Mu*Rp, decreasing VHF-Rp decreases VHF voltage gain.

Rich is very plainly claiming LOWERING parallel (Rp he calls it) resistance of the
suppressor will decrease VHF gain and increase VHF stability. He cites that as
proof damage was from a parasitic.

We can deduce the following:

1.) If a lower Rp suppressor (such as in the suppressor Measures touts) results in more system stability, the ultimate reduction in Rp will occur with a dead short for a suppressor.

2.) If Measures is correct in his claims, the highest Rp would result from an open anode lead, or a very high resistance in series with the anode lead.

According to Measure's theory, if we connect a 5000 ohm resistor in series with the anode it would make the PA less stable than with a zero ohm series resistor. From that we can conclude removing suppressors from equipment and replacing them with shorts will result in maximum VHF gain reduction and maximum stability.

We all know this is untrue. The reason why the higher resistance value of Rp increases stability is because it is part of a larger system that has a finite impedance larger than zero ohms.

The only case where his suppressor would help is if the impedance of the anode path is very low, and the original suppressor has an even lower Rp than his suppressor. In the case of the AL-80, Rich's suppressor actually decreased stability....you can bet on it.

There is absolutely no technical reason for using nichrome, since even the slightest adjustment in inductance and resistance in a convetional suppressor will produce much more predictable results. The correct way to go is to increase the parallel impedance and resistance of the suppressor, not decrease it, if we need more stability.

73 Tom

1671. Re: Buzz Milkos and Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970211185900.NAA06825@ladder01.news.aol.com>
Source record: 97374

In article <32FFD7D6.3F27@csrlink.net>, Jerry Booth <jerryjtb@csrlink.net>
writes:

>Any of you men want to talk with BUZZ ??? He works with me at Litton
>Electron Devices in Williamsport, Pa. He is the engineering manager and
>very good one I might add. Helped him put up his vhf/uhf antennas when
>he moved here.
>Jerry W0ZD

Jerry,

Rich KNOWS what Buzz does because Rich called around and checked up on
him. :-) You must be mistaken.

Actually to bring you up to speed, here's what happened. At first I tried
to leave names out and just told Rich no one at Eimac agreed with him.
Finally when he kept pressing for who disagreed, I mentioned Buzz as one
of the people (after checking with Buzz first).

I said:
In article <19961127002400.TAA17657@ladder01.news.aol.com>,
w8jitom@aol.com writes:
>The former *R+D engineering manager*, Buzz Miklos, of the Salt Lake City
>Varian plant has agreed to speak to one or two people on the telephone
>about your theories. He said he will also come on line, but since he just
>took a position as engineering manager with another tube manufacturer in
>PA, it will be sometime in January before he is able to connect directly
>to this newsgroup.
>Mr. Miklos feels, and says his Eimac engineering staff felt, your
theories
>have no merit and display a complete misunderstanding of how a power grid
>tube operates and the mechanisms of tube failures.
>He prefers you not receive his phone number, since he understands you
have
>more time to argue than he does.

That was a direct relay of what Buzz said. That kicked it off, then
Measures responded....

In article <measures-1512960143130001@term1-13.vta.west.net>,
measures@mail.vcnet.com (R.L. Measures) writes:
>
>Mr. Rauch told us "that Mr. Miklos was indeed R+D engineering manager for
>Varian". I telephoned the Personnel Department at Varian-Eimac's Salt
>Lake City plant. They told me that Mr. Joseph 'Buzz' Miklos' title was
>"Engineer B". They assured me that Mr. Miklos was not the R and D

>Engineering Manager. I posted the information here.
>
>RE: "I have no more time for arguements..." :
> Translation: Having been caught adjusting the truth about Mr. Miklos'
>position at Varian, Mr Rauch seems to have abandoned the very debate that
>he desired since 1990.

You see, Measures accused me of lying.

In article <measures-ya023180001312961029260001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>I have little hope that Mr. Rauch will ever take anything seriously if it
>contradicts his dicta.

>Consider the case of Buzz Miklos, who used to work at
>Eimac-Varian's Salt Lake City plant. Mr. Rauch told us "that Mr. Miklos
>was indeed R+D engineering manager for Varian". However, when I
telephoned
>the personnel department at the Salt Lake City plant, they told me that
>Mr. Joseph 'Buzz' Miklos' title was "Engineer B"---and they assured me
that
>Mr. Miklos was NOT the R and D Engineering Manager.

In article <measures-0301971716380001@port10.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>Here we are in January already, and we still don't know who Eimac's Mr.
>XXX is. However, we should soon be hearing from Mr. Joseph P. "Buzz"
>Miklos who reportedly disagrees completely with me, but whose CV seems to
>disagree with Eimac's personnel records of his past employment.

And as you see, Mr. Measures assured everyone he "checked Buzz out" and
that Buzz was never R+D Manager at Varian Salt Lake. Measures implication
is that Buzz was an engineer grade B, and that I was just a liar who made
up stuff about Buzz being a qualified expert on power grid tubes.

In a letter to QST (that I have a copy of), Measures states an engineer at
Eimac is "someone who cleans bathrooms" in order to dismiss claims of
engineers at Eimac who disagree with him.

While you and I may hold Buzz (and other qualified engineers like Buzz) in
high esteem, Rich thinks (and even wrote to QST) they are people who
"clean toilets" for a living. But I'm sure that's only when they disagree
with Mr. Measures.

73 Tom

1672. For Sale: Tektronix 7603,7704A Oscilloscope Mainframes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: white@datasync.com
Message-ID: <3301c424.38321393@news.datasync.com>
Source record: 97375

For Sale: Tektronix 7603,7704A Oscilloscope Mainframes
650.00 each or trade for 7000series plugins.

Contact: Ed Rafferty , Rafferty Communication Systems (601)875-3414

1673. Re: tooner stuff

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: grhosler1@mmm.com
Message-ID: <5dqhad$pbg@dawn.mmm.com>
Source record: 97376

Butch Magee <butch@apollo.wes.army.mil> wrote:

>I have been searching dilligently for a company that advertised in QST.
>Their adds had pictures of roller inductors and air variable caps. for
>building tuners. I want to build one, where can I get parts and plans
>and etc? Or does any one know the place I'm speaking of?

>Butch KF5DE

You might be thinking of Radio Kit, Surplus Sales of Nebraska, or
perhaps Fair Radio (http://alpha.wcoil.com/~fairadio/index.html). The
last two carry used parts, some with reasonable prices (especially
Fair Radio). Good Luck!

Gary KN0Z

Opinions expressed herein are my own and may not represent those of my employer.

1674. 80M SSB QRP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: pacyna@auratek.COM
Message-ID: <3.0.16.19970211140117.37bf12fe@galaxy.auratek.com>
Source record: 97377

I do not operate QRP per se. However, I do build a lot of radio equipment and through experience have found that including a high power amplifier has not been necessary.

The 75M band is open 24 hours a day, 365 days a year.

The difference in signal strength between 1KW and 10W power level is 20dB.

Yes, there are times when conditions can be difficult, however, then the QRO ops throw in the towell too.

Ed
W1AAZ

1675. Re: help with Lafayette HE-45B (6m)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-1102971419520001@k4dii.ksc.nasa.gov>
Source record: 97378
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <jwg6-09029718031400001@cu-dialup-0823.cit.cornell.edu>,
jwg6@cornell.edu (Joel Govostes) wrote:
> Hi. I've this 6m AM rig that I picked up, and it doesn't seem to be
> modulating adequately.
> Anyone out there have the HE45B, and/or could tell me how the following
> tubes function in the circuit?

Joel-

Back in the 60's, several of my friends had the Lafayette HE-45A, when they were a current model. They all had the same low modulation problem. You might be more successful by taking the approach of looking for a design deficiency, rather than trying to fix a "broken" radio!

I always wanted to get my hands on one of them, to see if I could figure out where the problem was. I would have tried feeding the microphone circuit with an audio oscillator, and looking at the audio stages with a scope.

The first test, would be to increase the audio level until the modulator started to saturate, and see if it was capable of close to 100% modulation. If not, and an earlier stage didn't saturate first, then the modulation transformer turns ratio might be incorrect. As I recall, it used a tapped, single-winding modulation transformer, in an "autotransformer" configuration. (I don't remember if they used the same stage for receive audio. If so, then there may have been an additional speaker winding.)

If the modulator is capable of close to 100% modulation, then it may be possible to change load resistor values in the earlier stages, to increase voltage gain.

At least in theory, the modulator should have been capable of producing enough audio to come close to 100% modulation. I don't recognize the tube number 7868. It may have been a tube used in the newer "B" model, in an attempt to increase modulation. I think the older one used a 6AQ5.

Keep in mind that hearing is logarithmic, and most people's voices only reach an occasional peak without speech processing. A rule-of-thumb, is that average speach is 10 dB below the peaks, for "broadcast quality". Most two-way radios are set up so that voice peaks are limited, and average modulation is relatively high (maybe 50%). If it sounds weak compared to other signals, it is probably quite low in terms of average percentage.

73, Fred, K4DII

1676. Re: How to couple transmitter to antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb11.185304.23341@ke4zv.atl.ga.us>
Source record: 97379

In article <jwg6-1002971413160001@cu-dialup-0823.cit.cornell.edu> jwg6@cornell.edu (Joel Govostes) writes:
>Hi. I have an old Thordesen (sp?) transformer catalog, looking to be from
>late 50's/early 60's. It includes several transmitter/exciter and
>modulator circuits, with instructions for building them.
>
>The info is very interesting and nostalgic. However, I noted that the
>transmitter outputs in the schematics are "old-fashioned."
>What I mean is, they don't show 50 ohm or even coaxial-type ouputs.
>Instead, they just show the two leads which are supposed to connect to the
>antenna.
>
>How can you tell what type of antenna is intended? Impedance? Type of
>feedline? There is no mention of it, so I guess it was common knowledge,
>at the time, as to how to couple the antenna, and what impedance of
>antenna you would use.
>
>I'm just used to more modern circuit diagrams, showing the usual co-axial,
>low impedance output. With those, you pretty much can presume they're
>looking for around 50 ohms. How about with the older tx schematics?

Most older transmitter designs employed link coupling to ladder line.
The loading was controlled by varying the coupling of the link to the
output tank. So these transmitters weren't designed for any specific
load impedance. An amateur was expected to adjust the link to match
whatever load he had to feed.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1677. Re: WEFAX, FAX, SSTV, RTTY with Sound Blaster = OK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <3300D05D.52B7@ping.be>
Source record: 97380
Cross-posted to: alt.radio.amateur.club.clarc,alt.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.ama

Mike Agner wrote:

> > Charles Mccurdy wrote:

> > > Hi jvfax works about the same you can use it on gose noaa i think i got a new
> > > pro-62 scanner with am & fm modes so i might can rx the noaa in the 136 and 137
> > > freq range.
> > > for the converter you can use hamcomm interface that i made and it works.

> > If i understand you, you use a scanner to receive NOAA pictures ?
> > Could you please send me the frequenties for NOAA and is this wide or
> > narrow FM ?

> sat picture in the 136 mhz is greater than most scanners can handle
> without modifications. You would most likely only get part of the
> picture (if any at all, assuming the sync pulse wasn't chopped as well).I
> would be interested in knowing how you modified the Pro62 to handle this.
> 73s Mike

Today is usesd my scanner Bearcat UBC 9000 XLT and the program WXSAT
(soundblaster) to receive NOAA pictures.
It works GREAT !!! I get the compleet pictures, a friend of me have a
real NOAA receiver and we putt the two pictures together and they are
the same. So my scanner works great to receive weather sattelites on
+137 Mhz.

No modifications on my scanner, and i use a normal dualband antenne for
144 Mhz and 440 Mhz.

William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

1678. Re: 2m transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Don Huff <donh@vcd.hp.com>
Message-ID: <3300DCDB.30AA@vcd.hp.com>
Source record: 97381

Mark Lin wrote:
>
> Anyone know where, on the Internet, can I get a schematics for a 2m
> transmitter?
>
> Mark

Hi Mark,

Rather than asking for "schematics" on the internet, I suggest you
will have much better luck looking in appropriate magazines and
handbooks for transmitter construction projects. A schematic, by
itself, if of little use in building a VHF transmitter. Mechanical
arrangement of the parts is critical also. Look in any ARRL handbook in
recent decades for starters. Why this is so will also be explained to
you as you educate yourself by reading about transmitters in general, in
these books. The internet will never be a substitute for studying and
READING to learn about a subject. It takes effort to learn enough
so that you can then ask specific questions.

73 and GL,

Don, W6JL

1679. How do Xtals determine transmitter frequency??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: jwg6@cornell.edu
Message-ID: <jwg6-1102971758500001@cu-dialup-1821.cit.cornell.edu>
Source record: 97382

Could someone please offer a beginners' explanation as to how a crystal
determines the freq in an oscillator?

It would seem that a crystal would not allow current to pass, or at least
dc anyway, so doesn't it "look" like an open circuit?
Or does the crystal only pass currents at its precise resonant frequency?

The whole point of an oscillator is that some of the output is fed back
into the input circuit. This results in oscillation. OK,
but what's to say that the freq of oscillation corresponds to the crystal
freq.??

Thank you for any info on this.

1680. Re: How do Xtals determine transmitter frequency??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Joe Rocci <rocci@worldnet.att.net>
Message-ID: <3301219F.277E@worldnet.att.net>
Source record: 97383

OK, here's a very simplified description of the forces at work. A crystal is nothing more that a finely produced slab of quartz whose dimensions and crystalline structure have been engineered to have a mechanical resonance at some frequency. Electrodes are plated onto the flat faces of this quartz slab. What's unique about the quartz crystal is that a voltage applied to the electrodes will cause the mechanical structure to "warp" slightly. When the voltage is removed, the quartz relaxes to its original position, and generates an opposite voltage across the electrodes. The quartz is "giving back" the energy which was appplied to it. Since the mechanical structure of the quartz doesn't react to this stimulus instantly, but has some well defined inertia, there exists a "magic" stimulation rate at which the quartz will give back its stored energy at precisely the same rate at which it is tickled. This is the resonant frequency of the crystal (the series resonant frequency, to be precise). At resonance, the crystal is vibrating in synchronism with the stimulating AC signal, and AC currents will pass across the quartz with very little attenuation. The electrical equivalent is a series resonant LC circuit.

A crystal oscillator is, like all oscillators, nothing more that an amplifier with a feedback path which applies some of the output signal back to the input in the correct phase relationship to sustain oscillation. If the feedback is made frequency selective, there will be only one frequency at which the feedback produces the correct phase relationship for oscillation. This is the oscillation frequency. If a crystal is inserted in the feedback path, then the crystal, acting like an LC resonant circuit, will determine the oscillation frequency.

Having said all that, don't be surprised when you run out and try to build a crystal oscillator and find out that it doesn't work as expected. This simple explanation of crystal behavior is idealized, and doesn't account for losses in the quartz, electrode parasitic capacitance, or overtone resonances in the quartz. The circuit topology is also a big factor to getting expected results from a crystal.

1681. Information on GE MASTR II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <3300DCCC.265A@Bledsoe.net>
Source record: 97384

I'm looking for some detailed info on converting a GE MASTR II UHF for amateur use, I have some knowledge in electronics. Can I do this?, or is it better to have it done? If it's possible, I'd like to do it myself (with the right details) for the fun of it and of course to save money.
Thanks,
Sam KF4GQS

1682. transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Larry DiGioia <larryd@bright.net>
Message-ID: <33012E25.30F0@bright.net>
Source record: 97385

Hi all.

I need to replace a transistor, and I was at a hamfest the other day,
and I found what looks like a good substitute. Unfortunately, looks
aren't everything.

Can anyone tell me if the following is a good substitution?

the one I need to replace = 2N3924

the one I want to try = 2SC799

This is a 4 watt final amp, by the way...

Please reply via email, thanks!

-Larry KC8FDY / soon-to-be N8KU

1683. 10 Ghz cavity inquiry

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: x
Message-ID: <5dqmfb$2mr@esgadm.esg.mk.com>
Source record: 97386

I have (2) 10Ghz alarm motion detector units. I took them apart to see what was inside. There is a cavity with the Gunn? diode, a waveguide port and on the other side is a cover that had what looked like black conductive foam for storing CMOS IC's. It was very dry and crumbled away. Oooops

What is the purpose of this foam? Is it neccessary for the proper operation of the cavity? Is it like a dummy load in the cavity?

I don't know what kind of power these put out but I guess its in the 1 mW range??? I have established contact between the 2 units at 20 feet (this is without any additional waveguide extensions or parabolic dishes)

Are there any Web sites of interest for 10Ghz stuff?

Thanks
Tim KF8XW

1684. Re: 16/1700 KCS IF xfmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: Kenneth Scharf <ken.janis.scharf@worldnet.att.net>
Message-ID: <33013B12.2BA7@worldnet.att.net>
Source record: 97387

Gary Coffman wrote:
>
> In article <32FBD178.4319@apple.com> ness1@apple.com writes:
> >Jeff Duntemann wrote:
> >...
> >> My suggestion is this, which is something I have hoped to try for some
> >> time: Create your own IF transformer using two windings of fine wire
> >> on a toroid, and a pair of Arco ceramic trimcaps on either side. It
> >> won't *look* like an IF transformer, but it should work reasonably
> >> well as one, especially if you can keep the Q high. You lose the
> >> ability to control the degree of coupling with a movable slug, but you
> >> can tune the notch with the independent trimmers and play tricks with
> >> the bandwidth that way.
> >...
> >
> >I too have been seeking 1600 KC IF transformers for years and have yet
> >to find one. Like Jeff, I too have had the idea of making my own IF
> >transformers using a toroid. I'm not sure that winding both the primary
> >and secondary on the same core would be a good idea though. The
> >coupling would be much too tight for an IF transformer. In order to
> >remedy this problem I was thinking to use seperate toroids for the
> >primary and secondary and a link of a small number of turns between
> >them. The number of turns in the link could be adjusted for optimum
> >coupling. Any thoughts??
> >
> >Eric, WD6DGX
>
> A toroid has a closed flux path, so the mutual coupling of two
> coils wound on a toroid should approach 1. This is normally
> considered "a good thing" (TM). But if you are trying to gain
> selectivity by loose coupling, of course, it is not. Now use
> of two toroids and a link still gives a coupling of 1, so you
> gain no advantage from doing this. This is basically a back
> to back transformer circuit, and the link windings will simply
> carry a greater current to maintain a coupling of 1.
>
> To reduce the coupling below 1, you need to introduce some
> loss element to take the place of the flux leakage in an
> ordinary air core transformer. Rather than a link, try a
> small value capacitor top coupled between the two coils.
> That's the approach I took for the preselector in my
> receiver.
>
> Gary

> --
> Gary Coffman KE4ZV | You make it, | Due to provider problems
> Destructive Testing Systems | we break it. | with previous uucp addresses
> 534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
> Lawrenceville, GA 30244 | |
Another way is to connect the cold end of both coils to ground through a
common lead, ground the cold end of the tuning caps directly. This
creates a small amount of mutual coupling. The 1967 handbook shows this
used in the front end of a receiver.
Ken WA2MZE

1685. DXER.COM Update

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <331d5e0e.8345066@news.primenet.com>
Source record: 97388

Check out "http://www.dxer.com"
for the latest updates to these
indexes:

DX CLUBS
HAM RADIO CLUBS
LOGGING PROGRAMS
MANUFACTURERS
MORSE CODE (NEW)
SATELLITES
VHF/UHF SCANNING (NEW)

Coming soon:
PRODUCT REVIEW PAGE
MONTHLY DRAWING (Sponsored by NCG/COMET Antennas

Stop by and get your new Comet Catalog

1686. Twist-Lock Capacitor source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-11 00:00:00 UTC
From: moorej@marshall.edu
Message-ID: <moorej-ya02408000R1102972259260001@news.marshall.edu>
Source record: 97389

Can anyone suggest a source of the Twist-Lock style of capacitor, or are such even available at all? I'm looking for 250 mFd @ 450 V.

Thanks.

_ _ ··· ··· _ _ _·· · ·_ _ ····· ·· _ _ ·_ _ _

Bill Moore
moorej@marshall.edu
http://webpages.marshall.edu/~moorej/
Babe, you're just a wave, you're not the water. J.D. Gilmore

1687. Re: How do Xtals determine transmitter frequency??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: frog200@nospam.juno.com
Message-ID: <5dr2l0$9vc@news.wco.com>
Source record: 97390

In article <jwg6-1102971758500001@cu-dialup-1821.cit.cornell.edu>, jwg6@cornell.edu (Joel Govostes) wrote:
>Could someone please offer a beginners' explanation as to how a crystal
>determines the freq in an oscillator?
>

I've just had a couple glasses of wine, otherwise I'd attempt an answer. I suppose you are a ham. You should have a copy of the ARRL handbook. (IF you don't, get one!) Look up the chapter on oscillators. You should find the chapter listed in the index. I goes into oscillator theory in depth, but in a clear manner for you to understand.

Ed W7DXZ

1688. Re: FS: ECL <->TTL Interfaces

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <5dr4i8$3o4e@news.doit.wisc.edu>
Source record: 97391

"Rob Bailey" <wm8s@pobox.com> wrote:

>If you're experimenting with ECL (Extremely Cwick Logic ;^), I've got a
>sack load of ECL <-> TTL interface tranceivers (both directions) that I've
>been trying to unload *cheap(. This time, they're going in the bin if I
>can't get rid of them. They're PLCC (28-pin, I think). 300 or 400 total,
>with plenty of both.

What is the manufacturer and part number?

Jim

Melissa Kepner Jim Adney
mgkepner@facstaff.wisc.edu jim.adney@mpcug.com
Laura Kepner-Adney
Madison, Wisconsin

1689. Re: U-NII new unlicensed spectrum - Gear?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: John Duncan <JohnDuncan@msn.com>
Message-ID: <01bc18a5$e76270b0$ea217392@gizmo>
Source record: 97392
Cross-posted to: rec.radio.amateur,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Thomas Edwards <tedwards@access1.digex.net> wrote:
> I'm totally suprised there hasn't been more talk about the new U-NII bands
> in this forum!

I would love to hear from anyone interested in this subject. I am actively working on finding/building devices to use this band.

I'm supprised as well, and I'm *very* interested in this development! At the very least, I want a transceiver pair to experiment with a friend, 1.5 miles away (let alone my ISP, which is 3 miles away...). I'm picturing a transmitter/receiver interfaced to an Ethernet card in a pc, either via the AUI or TP ports. This shouldn't be too expensive, and would be of windfall benefit to have a 10Mbps Ethernet connection to the Internet!!! (Ethernet encoding requires 20Mbps bandwidth to deliver 10Mbps data throughput) The telcos won't be bringing us anything near this speed for a long time, and even then it will be outragiously priced. Cable TV companies won't do any better (except for isolated pockets), and again, they're overpriced. TCI receintly announced a big scale-back of their Internet efforts. Free airwaves are the way to go for a 'free' Internet! Talk about bypass!!! I love it for being able to give a thumbed nose and raspberry (complete with wiggling fingers!) to those that should have already provided us with reasonably priced, high speed communications. Such was the spirit that gave birth to MCI and countless (well, hundreds anyway) telcos and long distance carriers. RBOC's fear of losing overpriced leased line suibscribership has and will (IMHO) keep them from delivering high speed comms, allowing their lunch to be eaten (again!!!)!

Please contact me if you have knowledge of or interest in this NII development, equipment to use it, as well as the implied opportunities.

John Duncan
N1MYT
JohnDuncan@msn.com

1690. Twisted pair in place of coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: rohrwerk@pcOnline.com
Message-ID: <rohrwerk-1102972302370001@tsc-p21.pconline.com>
Source record: 97443

In a few references accompanying Rick Campbell's R2/T2 projects, he referred to the possibility of using twisted-pair wiring for some of the RF connections within a project. Based on this cue, I have used it quite frequently now at HF -- tightly twisted small enameled wire is sure a lot easier to solder and move into place in tight quarters. From empirical evidence, things seem to work fine even with some runs of 6-8 inches.

Obviously a twisted pair is a transmission line, but I'm surprised it seems to work tolerably even with unbalanced signals.

Anybody know the limits of this approach? Surely in some situations the shielding would not be sufficient.

In addition, one reference said, "For the ultimate in engineering elegance, place a ferrite bead in the middle of the twisted pair." How does that little bit of ferrite help the situation?

John Seboldt K0JD

1691. YAESU FT-8000 MODS WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: PZVU87A@prodigy.com
Message-ID: <5drmc6$28m2@usenetz1.news.prodigy.com>
Source record: 97444

iF anyone has the mods for the ft-8000 could you please e-mail them to me? I have been looking for a while..thanks!!!!

PZVU87A@PRODIGY.COM

1692. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <33022bea.39324552@news.santafe.edu>
Source record: 97445

measures@mail.vcnet.com (R. L. Measures) wrote:

>ï¿½ Jim: I recently opened a kaput, 8877 that experienced both of these
>problems during operation in an HF amplifier. Before the fatal
>gold-sputtering episode took place, the dc grid current was reportedly
>normal. Since the 8877's gold-plated grid can handle over 40a-rms of RF
>grid current @250MHz, it does not seem likely that normal grid currents
>could be responsible for the gold-sputtering that destroyed the tube.
>
>ï¿½ Interesting.
>Are the YU-141 and YU-176 similar to the Y-518? What are the anode
>dissipation ratings and heater requirements for the YU-141 and YU-176?
>--Rich-- ag6k, 805-386-3734

I don't know the Y-518. as far as I know the YU-141 and YU-176 are the highest power planar triodes made by Eimac. The YU-141 is somewhat similar to the 8941 (which I have also used at 425 MHz), except it has a coaxial base and a longer external arc path. The YU-176 is a scale up of the YU-141 by 150%.

YU-141 6.3 V at 2.225 A heater, Up to 800 W anode dissipation, depending on cooling, 2 W grid dissipation. 20 kW peak power at 1% duty factor (100 us pulse), useful to 2 GHz

YU-176 6.3 V at 3.80 A heater, Up to 800 W anode dissipation, dpending on cooling, 2 W grid disipation, 30 kW peak power at 1% duty factor (100 us pulse), useful to 1.5 GHz.

"Depending on cooler" is an interesting statement. I once tested a YU-176 at 2 kW dissipation with a specially designed anode cooler.

The real limitation is the grid dissipation. The main heat conduction path is the grid support wires. One of the really interesting things about these tubes is that the gain goes way up in low power operation.

A typical am[plifier lineup is Solid State Amplifier to 150 W, one-tube amplifier to 3 kW, 2 tube amplifier to 36 kW, 12 tube amplifier to 360 kW. Or 13 dB gain, 11 dB gain, 10 dB gain. That is conservative. What is observed is 15 dB gain, 13 dB gain and 11 dB gain, all tuning dependent, of course.

Some failure were experienced early on and we disassemble a fairly large number of tubes. Some had holes blown in the grid from too muuch energy in an internal arc. There were ome instances where you couls see that an internal arc had "blown" off the gold, but not punctured the grid. But the most curious thing was that many of the cathodes had a large number of black specs. The engineer speculated that this was a

sign of "parasitic oscillations." I, as t he ampliifer designer and tester, was pretty certain that their were no parasitic oscillations occuring. We finally came up with a mechanism that explained the black specs, although we never tried to prove it. The ampliifer drives an accelerator, which is basically a high Q resonat circuit (like loaded Q = 3000 or so). At the end of the pulse, the energy in the cavity (about 1 joule) comes out of the avity making a big spike in the reflected power. The line length is designed so that this produces a low rf voltage at the anode. But, the resonant cavity looks like a shot circuit at frequencies not close to its resonance. The transmission line was 3-1/8" coax.The coax line has resonances which have fairly high Q because there is no mechanism to absorb their energy. These modes an be excited by the turn off trnasient perhaps, or by a park in the resonant cavity. We believe that some of the modes could have made a high voltage at the tube anode. The tube would break down in a "microdisharge" causing slight damage to the cathode, but not otherwise hurting the tube because the energy was very low. The anode resonant was exteremely tightly coupled to the coax (loade Q of about 10) so it had enough bandwidth to permit high voltages to develop at some of the nearby transmission line modes. (The modes occur at whatever frequency the line is an odd multiple of 1/4 wavelength, in the approximation that the anode end is open and the load cavity end is shorted. There is really some reactance at both ends, so this statment is no exactly true, but the point is that the longer the line the closer the mode spacing.

I don't think that this mechaism is the high frequency amplifier fault mechanism described in this thread because the power levels and energy are probably too low.

I mention it only to cite an example where parasitics were blamed for a more subtle problem. But, I do not doubt that the Eimac engineers had seen instances where high peak voltages due to parasitic bursts had caused that type of cathode damage.

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

1693. Re: WTB: 10mtr CW transmitter strip/Exciter Module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970212180724.7613A-100000@supreme>
Source record: 97446

On Mon, 10 Feb 1997, doug wrote:

> Hi All,
> I need a small 10mtr crystal controlled CW transmitter strip for a
> beacon project. Preferably 5w out or less (1 - 2 watts would be
> perfect), 12vdc powered. Looking for something similar to the ones
> advertised in the ham mags for 20,30,40 and 80mtrs. Transmit only.
>
> Anybody out there have such a beast or know were I can find one????
>

Doug - I think the best solution is to obtain one of those really old AM CBs which used crystal control. One I have for 28 MHz AM used six 37 MHz crystals mixed with a bank of four 10 MHz xtals to produce 23 channels on 27 MHz. I replaced one of the 37 MHz xtals and re-tuned the radio for 4w out on four 28 MHz freqs. Best DX so far was 900-1000km with that rig and a mobile whip.

Alternatively, one of those 27 meg CB handhelds (like Tandy sells) with an appropriate xtal for your frequency would do the job. Add a PNP transistor to switch the supply to the PA - this is for your keying.

Of course you could convert a synthesised CB, but this is a bit of an overkill for one frequency. Also, newer sets are harder to convert to 10 m.

73, Peter VK1PK

1694. Re: How to couple transmitter to antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970212181456.7613B-100000@supreme>
Source record: 97447

On 10 Feb 1997, Joel Govostes wrote:

> Hi. I have an old Thordesen (sp?) transformer catalog, looking to be from
> late 50's/early 60's. It includes several transmitter/exciter and
> modulator circuits, with instructions for building them.
>
> The info is very interesting and nostalgic. However, I noted that the
> transmitter outputs in the schematics are "old-fashioned."
> What I mean is, they don't show 50 ohm or even coaxial-type ouputs.
> Instead, they just show the two leads which are supposed to connect to the
> antenna.
>
> How can you tell what type of antenna is intended? Impedance? Type of
> feedline? There is no mention of it, so I guess it was common knowledge,
> at the time, as to how to couple the antenna, and what impedance of
> antenna you would use.
>
> I'm just used to more modern circuit diagrams, showing the usual co-axial,
> low impedance output. With those, you pretty much can presume they're
> looking for around 50 ohms. How about with the older tx schematics?
>
> Many thanks,
>
> JWG
>
>
Joel - What you probably need is some form of L network to convert the collector impedence to 50 ohms followed by a pi network LPF. Solid State Design for the Radio Amateur gives a very good coverage of the component values required - this
depends on the collector impedence which depends on the supply voltage, and collector current. Alternatively, for higher powers, you may need a 4:1 balun or similar to match to 50 ohms. Follow this by the usual pi network.

73, Peter Parker VK1PK

1695. Re: 10 Ghz device inquiry

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <33017D89.4277@rcru.rl.ac.uk>
Source record: 97448

xTimothy_Shearer@MK.com wrote:
>
> I have (2) 10Ghz alarm motion detector units. I took them apart to see
> what was inside. There is a cavity with the Gunn? diode, a waveguide port
> and on the other side is a cover that had what looked like black
> conductive foam for storing CMOS IC's. It was very dry and crumbled away.

The foam is a load to aid stability. The power output can be more say
10mW. You can frequency modulate them with the power supply voltage and
usually tune them to the 10 GHz band. Such units were popular in the
early 80s for wideband QSOs. They are little use now unless you are
in to 1 way contacts. Ranges of 100km were possible with small dish
aerials.

1696. Re: Filter cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <33017E48.729@rcru.rl.ac.uk>
Source record: 97449

Dave Sublette wrote:
>
> WEll, I didn't get any replies to my last message and I still need
> 30-50ufd at 5500 VDC. Anyone out there know a good source for such a
> thing? I would appreciate an Email reply to k4to@mis.net. Thanks and
> 73,
>
> Dave, K4TO

Have you tried PW Dhal? the component you are after is rare, very rare.
Most people use a stack of electrolytics or a pair of the marginally
less rare 3kV 100uF oil filled capacitors.

1697. IRF 510'S ON SPECIAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5drfqsoad1@zinger.callamer.com>
Source record: 97450

DAN'S SMALL PARTS HAS PUT IRF 510'S ON SPECIAL AT 5 FOR $4.50

CHECK OUT HIS SPECIALS AND REGULAR INTERNET CATALOG AT:

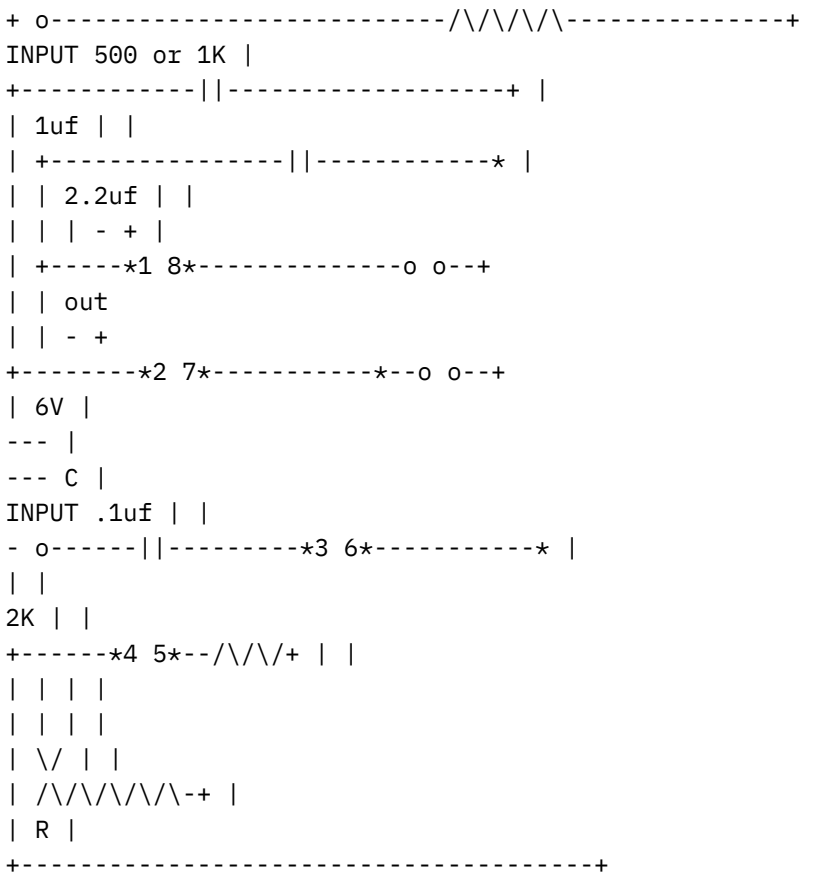
HTTP://WWW.FIX.NET/DANS.HTML

ENJOY,,,JERRY...K

1698. 567 tone decoder chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5dri7b$n2q@news.Hawaii.Edu>
Source record: 97451

I picked up a couple 567 ICs and want to use one for a 1050 Hz tone
decoder (that's the National Weather Service's alert tone). The
decoder circuit I've come across is as follows:



500-1k Resistor: 1K for 3.5 mA, 500 ohms for more (no more than 100 mA)
R: 20-25K
C: .022 uF
Center freq = f = 1.1 / RC
Bandwidth < 14% of f

So the bandwidth should be less than 140 Hz at 1050 Hz.
Is this the standard circuit for the 567 or does someone have one
that will provide less bandwidth? How stable can I expect the decoder
to be?

Thanks in advance,
Jeff KH2PZ

1699. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970212130600.IAA18444@ladder01.news.aol.com>
Source record: 97452

In article <measures-ya02408000R1102970110020001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>&#65533; Jim: I recently opened a kaput, 8877 that experienced both of these
>problems during operation in an HF amplifier. Before the fatal
>gold-sputtering episode took place, the dc grid current was reportedly
>normal. Since the 8877's gold-plated grid can handle over 40a-rms of RF
>grid current @250MHz, it does not seem likely that normal grid currents
>could be responsible for the gold-sputtering that destroyed the tube.

Rich,

Enough is enough. Now you are telling some poor guy trying to ask a legit
question a 8877 grid can handle 40 amperes RMS current without damage.

It's time to come back to earth.

Warning. Never run 40 amperes of grid current in a 8877, as a matter of
fact, never run 0.40 amperes of grid current, or you will ruin the tube in
very short order.

If you doubt me, call the manufacturer.

73 Tom

1700. Re: 2m transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Gabe Nemeth <gabe@bnr.ca>
Message-ID: <3301D1AA.766E@bnr.ca>
Source record: 97453

Mark Lin wrote:
>
> Anyone know where, on the Internet, can I get a schematics for a 2m
> transmitter?
>
> Mark
My .02
I have built a variety of electronic equipment and in my experience
getting parts, making PCBs, aligning the units take time and try my patience and
negotiation skills. This is not due to the exitement of building, but due to lack
of resources in obtaining some parts, $$$, getting access to alignment test gear
and oscilloscopes. Also when ordering parts you are normally requirted to buy a
quantity of 25 before some suppliers will talk to you. For example; try buying a
82c55 in a PLCC package , or a 29c256 flash device. Its a battle!

Expecially, when I call the same suppliers representing my company, then they
perform backsprings better than any circus performer. As a HAM they will not touch
me. Being ethical I won't abuse, so I'm stuck seeing two sides to a coin.

Therefore I have happily resolved to purchasing good quality KITs (TENTEC, RAMSEY,
etc..). I also get a real kick at hamfests when I can purchase a kit that someone
else has tried to build. The kits are easy to build and have been proven in. You
may want to consider this when building you own. The learning experience, and
exitement of building it is still there as well. As far as schematics go
RADIO Electronice had a 2M project a few years ago. Also your local library
that carries QST, QEX may give you leads as well.

Cheers
Gabe, Ve3slj.

1701. WTB: YAESU OPTIONAL AM/FM MODULE FOR FT-102

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: wb6elm@juno.com
Message-ID: <5dsn1l$m9p@poisson.nosc.mil>
Source record: 97454

Hi,
I recently purchased an YAESU FT-102 transceiver. Now I am looking for the optional AM/FM Module that goes in the bottom of the YAESU FT-102. This module activates AM/FM transmission mode. If you have one installed and do not use this mode, please consider selling it to me. I'll put it to good use via my 2 meter transverter.

Sincerely,

Rubin
wb6elm@juno.com

1702. Re: 10 Ghz device inquiry

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <3301DDCB.3ABE@arrl.org>
Source record: 97455

Mike Willis wrote:

> The foam is a load to aid stability. The power output can be more say
> 10mW. You can frequency modulate them with the power supply voltage and
> usually tune them to the 10 GHz band. Such units were popular in the
> early 80s for wideband QSOs. They are little use now unless you are
> in to 1 way contacts. Ranges of 100km were possible with small dish
> aerials.

I often bring along WBFM compatible 10 GHz gear in case someone
wants a contact. I've worked as far as 200 km with 20 dBi horn
antennas,and don't consider 130 km contacts all that unusual.
I've just starting bringing along the 24 GHz gear too.
--Zack Lau W1VT Usual summer fall spot is FN33kd, but have
also made 10 GHz contacts from FN20/31/32/33/42/43/44.

1703. Re: U-NII new unlicensed spectrum - Gear?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: "Russell W. Behne" <russ@otp.illuminet.net>
Message-ID: <3301ED14.E6556A9@otp.illuminet.net>
Source record: 97456
Cross-posted to: rec.radio.amateur,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

John Duncan wrote:
>
> Thomas Edwards <tedwards@access1.digex.net> wrote:
> > I'm totally suprised there hasn't been more talk about the new U-NII
> bands
> I would love to hear from anyone interested in this subject. I am actively
> working on finding/building devices to use this band.

> AUI or TP ports. This shouldn't be too expensive, and would be of windfall
> benefit to have a 10Mbps Ethernet connection to the Internet!!! (Ethernet
> encoding requires 20Mbps bandwidth to deliver 10Mbps data throughput) The
> telcos won't be bringing us anything near this speed for a long time, and
> even then it will be outragiously priced. Cable TV companies won't do any

> Please contact me if you have knowledge of or interest in this NII
> development, equipment to use it, as well as the implied opportunities.

Now THAT sounds interesting. It would be nice to get that kind of speed
without tying up my one phoneline. Tom, could you e-mail whatever info
you have at this time on the subject? Much thanks...

--
Russ Behne, N3GHE (540)659-6924
On Target Promotions - 6 Tall Oaks Ct. - Stafford, Va. 22554

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/ / (_)__ __ ____ __
/ /__/ / _ \/ // /\ \/ / . . . t h e c h o i c e o f a
/____/_/_//_/\_,_/ /_/\_\ G N U g e n e r a t i o n . . .
```

1704. Re: How do Xtals determine transmitter frequency??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: a313@Lehigh.EDU
Message-ID: <5dsp89$201k@ns5-1.CC.Lehigh.EDU>
Source record: 97457

In article <jwg6-1102971758500001@cu-dialup-1821.cit.cornell.edu>, jwg6@cornell.
edu (Joel Govostes) writes:
>Could someone please offer a beginners' explanation as to how a crystal
>determines the freq in an oscillator?
>
>It would seem that a crystal would not allow current to pass, or at least
>dc anyway, so doesn't it "look" like an open circuit?
>Or does the crystal only pass currents at its precise resonant frequency?
>
>The whole point of an oscillator is that some of the output is fed back
>into the input circuit. This results in oscillation. OK,
>but what's to say that the freq of oscillation corresponds to the crystal
>freq.??
>
>Thank you for any info on this.

The circuit uses a small voltage generated via the piezeoelectric effect of
the application of voltage accross the crystal element while it is under
pressure in the holder.
73's Dick K8WHA>

1705. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1202970839350001@news.vcnet.com>
Source record: 97458

In article <19970212130600.IAA18444@ladder01.news.aol.com>, w8jitom@aol.com
wrote:

> In article <measures-ya02408000R1102970110020001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
>
> >ï¿½ Jim: I recently opened a kaput, 8877 that experienced both of these
> >problems during operation in an HF amplifier. Before the fatal
> >gold-sputtering episode took place, the dc grid current was reportedly
> >normal. Since the 8877's gold-plated grid can handle over 40a-rms of RF
> >grid current @250MHz, it does not seem likely that normal grid currents
> >could be responsible for the gold-sputtering that destroyed the tube.
>
> Rich,
>
> Enough is enough. Now you are telling some poor guy trying to ask a legit
> question a 8877 grid can handle 40 amperes RMS current without damage.
>
> It's time to come back to earth.
>
> Warning. Never run 40 amperes of grid current in a 8877, as a matter of
> fact, never run 0.40 amperes of grid current, or you will ruin the tube in
> very short order.
>
> If you doubt me, call the manufacturer.
>
> 73 Tom

If an 8877 is being operated at Eimac's maximum rating of 4kV and 250MHz,
the RF grid current is 2650v-rms/ 63.66 ohms = 41.63 amperes rms.
See article <measures-ya02408000R0602970755420001@news.vcnet.com>, posted
here on 6 Feb. If you can't find it on the AOL news server, let me know
and I will send you a copy, Tom.

Warning: open eyes before opening mouth.
---
e-mail copy to Mr. Rauch

--
--Rich-- ag6k, 805-386-3734

1706. Re: Source for *or* equivalent # for MC145163 (QEX 6/91)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: hduff@ica.net
Message-ID: <3301fa5b.0@lightning.ica.net>
Source record: 97459

sc@webspan.com (Steve) wrote:

>I am looking for a frequency synthesizer chip like the MC145163.
>It appeared in an article in the June 1991 QEX, page 22.
>I have searched the Motorola web site, and the only one that
>appears to come close to it is the MC145170, but it is a serial
>interface, not BCD. I want to use BCD thumb-wheel encoders
>with it. So I guess I am looking for a source for the MC145163
>or the part number for an equivalent chip.

>Thank you,
>Steve

Did you look at the MC145151 or 152 ?
These are parallel programmed PLLs.

BTW, what is the article about ?

Hugh VA3TO

1707. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: blair@skopen.dseg.ti.com
Message-ID: <5dt0ch$m38@sf18.dseg.ti.com>
Source record: 97460

Richard Karlquist (rkarlqu@scd.hp.com) wrote:
: You see this written from time to time. I happen to disagree with
: this opinion, as a general matter. It sounds reasonable to drive
: mixers with a square wave since one is trying to switch the diodes
: on and off. The reality is that square waves do not go through
: transformers very well, so you should really stick with a sine
: wave in most cases. What really makes mixers happy (at least
: below 100 MHz.) is to be driving from a current source of sine
: wave.

Correct me if I'm wrong. But I thought that, in a double balanced
mixer, only the RF & IF ports were fed thru transformers, not the
LO.

: Another problem with square wave drive is that if you don't make
: the duty cycle exactly 50%, you degrade the mixer performance.
: It's easier to make a distortionless sine wave (with a low pass
: filter) than a perfect square wave.

It's been a while, but I recall once having trouble with a DDS
based LO. The DAC in the DDS was generating alot of quantization
spurs. Rather than try to get a high speed umpteen bit DAC I just
used, effectively, a 1 bit DAC, which can run comfortably at a
very high speed. And nothing is more linear than a 1 bit DAC
(nothing digital anyway). Feeding this to the LO port of the
mixer, the end result was alot cleaner.
Art.

1708. Re: Filter cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: jgarver@ichips.intel.com
Message-ID: <5dsv4p$jpn@news.jf.intel.com>
Source record: 97461

In article <33017E48.729@rcru.rl.ac.uk>,
Mike Willis <"mjw "@rcru.rl.ac.uk> wrote:
>Dave Sublette wrote:

>> WEll, I didn't get any replies to my last message and I still need
>> 30-50ufd at 5500 VDC. Anyone out there know a good source for such a
>> thing? I would appreciate an Email reply to k4to@mis.net. Thanks and

>Have you tried PW Dhal? the component you are after is rare, very rare.
>Most people use a stack of electrolytics or a pair of the marginally
>less rare 3kV 100uF oil filled capacitors.

I am currently looking for some filter caps, 450 WVDC or higher, and more
than 100 ufd. I have an old RF amplifier that has 7 of these in series
with a 20Kohm, 10 watt resistor across each for balancing and bleeding
purposes. They are connected across a 2500 VDC power supply. This is
a pretty standard design and probably what the guy needs to do. I've
been looking for a source to replace my caps with but haven't been able
to find much available in axial leaded electrolytics that are rated 450
WVDC and significantly higher than 100 ufd. Even then, they are more
than $10.00 each new. Does anybody have a good source for new or used
high voltage caps?

--
jgarver@ichips.intel.com K7YO I don't speak for Intel

1709. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <33020E55.11BF@kfa-juelich.de>
Source record: 97462

Tom Bruhns wrote:
>
> Peter Parker (parkerp@pcug.org.au) wrote:
>
> : Henry - yes it should be possible. The main limitation would be the
> : extreme deafness of the receiver. You are right in that a crystal set for
> : VHF is just the same as one for MF, but with a smaller tuned circuit
> : (4-6 turns around a pencil and a 2-20pF trimmer should be about right for
> : the air band - but remove the pencil after you've wound the coil).
>
> : It is possible to increase the sensitivity of a crystal set by applying
> : bias to the diode. Also some audio amplification (say using a 741 chip)
> : will be useful.
>
> Although bias is useful for making an AM detector more sensitive, I think
> you can do fine without it. HP makes "zero-bias video detector diodes"
> that are optimized just for this sort of thing. I find that I can detect
> RF on 2 meters down to around .2 millivolts with an unbiased detector,
> and the op amp I have following it isn't all that wonderful about drift.
> I think with a really good op amp (extremely low input bias current and
> extremely low drift) it would be possible to get down to some tens of
> microvolts. (I use this as a sniffer on fox hunts, and find I can
> "hear" a 1-watt transmitter from 1000 meters or more, if it's line of
> sight.) Listening to the demodulated output from an AM signal is easier,
> since you don't need to maintain DC stability. If you do want to use
> bias, be aware that there is an optimum...see the HP application notes
> on video detector diodes for more info. (I wouldn't use the 741 for
> any serious audio-type application...there are much lower noise
> amps available, and be sure to use something optimized for the source
> impedance the detector offers if you want best performance.) One serious
> problem will be that with careful design for _sensitivity_, you are
> likely to find you don't have good enough _selectivity_! A front
> end filter with two coupled resonators is likely to give a lot better
> results if you are in a high-RF area such as a major airport.
>
> --
> Cheers,
> Tom
> tomb@lsid.hp.com
I see no mention of the lack of SELECTIVITY in any answer to the initial
question. How can one ever separate stations, except, perhaps with a
YAGI to do it by direction of the transmitter? With a Q of 400 at 80
MHz the bandwidth is going to a half megahertz, with awful skirts. You
would hear the entire band at one time if everybodys signal arrived at

the same rf level. I do agree, there is a chance to hear "something",
but what?

Bob

1710. Re: Twisted pair in place of coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5dt70e$3pc$2@nadine.teleport.com>
Source record: 97463

In article <rohrwerk-1102972302370001@tsc-p21.pconline.com>,
rohrwerk@pcOnline.com (John Seboldt) wrote:
>In a few references accompanying Rick Campbell's R2/T2 projects, he
>referred to the possibility of using twisted-pair wiring for some of the
>RF connections within a project. Based on this cue, I have used it quite
>frequently now at HF -- tightly twisted small enameled wire is sure a lot
>easier to solder and move into place in tight quarters. From empirical
>evidence, things seem to work fine even with some runs of 6-8 inches.
>
>Obviously a twisted pair is a transmission line, but I'm surprised it
>seems to work tolerably even with unbalanced signals.
>
>Anybody know the limits of this approach? Surely in some situations the
>shielding would not be sufficient.
>
>In addition, one reference said, "For the ultimate in engineering
>elegance, place a ferrite bead in the middle of the twisted pair." How
>does that little bit of ferrite help the situation?
>
>John Seboldt K0JD

The little bit of ferrite acts as a choke to the common-mode currents without affecting the differential-mode currents. This forces the twisted pair to act like a non-radiating transmission line, which is the desired effect. A single bead may not provide enough impedance to make this happen, but 5-10 turns through a typical core almost certainly will. For the HF range, use 70-series or type 43 ferrite (Fair-Rite/Amidon designations) for the greatest impedance.

This is exactly what a "choke" or "current" balun does.

The "shielding", that is the insensitivity to undesired signals, will be a function of how well the common-mode signals are attenuated and how intimately the fields of the differential signals on the wires are linked. There's no way to put an absolute limit on the applicability of this approach, since it depends on how sensitive your particular circuit is to incoming radiation or coupling to other circuits, or how sensitive other circuits are to its radiating. It's a valid approach for many applications.

Roy Lewallen, W7EL

1711. Re: Problem with FT1000 RF output stage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: steve100@dircon.co.uk
Message-ID: <33021fad.673800@news.dircon.co.uk>
Source record: 97464

On Thu, 30 Jan 1997 23:33:52 GMT, steve100@dircon.co.uk (Steve) wrote:

>Hi all,
>Looking at a smoking FT1000, appears that the drivers - MRF486, have
>both burned out. Repeated problem and two dealers and 12 months have
>still failed to trace the cause. I am investigating possible internal
>harmonics of spurious oscillations that may be finding their way into
>the pre-driver stage, incidently it is a push-pull arrangment amp....
>any ideas greatly received!
>Regards
>Steve.
>

1712. Re: ICOM 735 & Transverters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb12.180132.27615@ke4zv.atl.ga.us>
Source record: 97465
Cross-posted to: rec.radio.amateur.space,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <330031C8.354F@rcru.rl.ac.uk> Mike Willis <"mjw "@rcru.rl.ac.uk> writes:
>Gary Coffman wrote:
>
>snip |
>
>Great idea Gary, but it defaces the rig. No help when bowwowing Joe's
>rig on field day. An easy fix is to make up a small buffer amplifier
>using a single transistor, e.g. BF981 or a modamp, operating in a linear
>mode (most important) to boost the low power to about 20mW. Then add a
>filter on the output to ensure a clean drive.
>
>A level setting pot is a good idea as well so you can adjust the power
>input to the transverter, and while you are at it, a relay and two
>sockets to switch the receive line and the signal to the transverter
>pin on the acc1 connector.
>
>Now you can leave the rig wired for HF and have the transverter
>connected. Change bands at the flick of a switch and protect the
>transverter from 100W of HF.
>
>73 Mike

Well, you can certainly do that, Mike. But 1) I don't consider adding
a jack to the back panel "defacing" the rig, and 2) if I'm borrowing
the rig it only takes a couple of minutes to remove the cover and move
the transverter cable over to the pre-driver output jack, and another
couple minutes to put it back when I'm done. No *permanent* changes are
required. This is the quickest, easiest, and cheapest way to allow the
IC735 to work with 10mW input transverters.

I'd use an external box only if it were imperative that neither radio
nor transverter be touched internally. In that case, your idea is an
excellent one. I'd likely use a MAR-4 as the gain element. Note that
you *could* tuck one of these *inside* the 735 or *inside* the transverter
as alternatives. That wouldn't "deface" either piece of equipment, and
eliminates another external box and another level of TR sequencing.

If you're using transverters with a transceive IF port, the best place
to put the extra amp is inside the transverter on the Tx side *after*
the transverter's internal TR. If you're using a transverter with a
split IF, many are this way, then putting the amp in the radio to bring
it up to "standard" transverter levels might make more sense. Especially
if you want to mast mount the transverter, then having the hotter signal
at the other end of the coax becomes very attractive.

There's nothing *wrong* with your approach, it is just that I'm reluctant to build yet another box when I don't have to. That's just more stuff you have to lug along, and another set of cables to add to the tangle, and possibly cause problems, and another level of TR switching to sequence.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1713. Re: 10 Ghz device inquiry

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: "xTimothy_Shearer@MK.com" <xTimothy_Shearer@MK.com>
Message-ID: <5dsstc$g16@esgadm.esg.mk.com>
Source record: 97466

Mike Willis wrote:
>
>> The foam is a load to aid stability. The power output can be 10mW.
>> You can frequency modulate them with the power supply voltage and
>> usually tune them to the 10 GHz band. Such units were popular in the
>> early 80s for wideband QSOs. They are little use now unless you are
>> in to 1 way contacts. Ranges of 100km were possible with small dish
>> aerials.

Zack Lau <zlau@arrl.org> wrote:
>I often bring along WBFM compatible 10 GHz gear in case someone
>wants a contact. I've worked as far as 200 km with 20 dBi horn
>antennas,and don't consider 130 km contacts all that unusual.
>I've just starting bringing along the 24 GHz gear too.
>--Zack Lau W1VT Usual summer fall spot is FN33kd, but have
>also made 10 GHz contacts from FN20/31/32/33/42/43/44.

Can I replace the Foam with some regular conductive black foam?

I am curious to try this band out but (as you've indicated) don't want to spend cash for Down East Microwave or other narrow band gear just yet. I'm sure I could get others from the local club to "co-Operate" with me on this band. I've got a Primestar 3 ft dish to use.

I gather the signals will be wideband (100 khz-more ??) and would not be desired in the narrow band 10 Ghz DX window (does this exist or is 3cm a free for all?). I live in semi rural Ohio. I don't know of any activity on this band but I'm sure it exists. 200Km=120 mile radius from Akron... = Columbus to Detroit to Canada across lake to Pittsburgh, PA to Charleston, WV. There must be someone in that area on 3 cm.

Thanks
Tim KF8XW

1714. Re: WANTED :- MRF 486 matched pair please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: steve100@dircon.co.uk
Message-ID: <33021fc1.693992@news.dircon.co.uk>
Source record: 97467

On Thu, 30 Jan 1997 23:33:39 GMT, steve100@dircon.co.uk (Steve) wrote:

>I'm looking for at least one matched pair of MRF 486 drivers please, I
>have bought from an outlet in Southern UK but found them waaaay too
>expensive (SMC), can anyone point me in a helpful direction?
>Thanks in advance,
>Steve,
>Plymouth UK.
>

1715. Re: ANY MODS FOR TRIO TR751e /a/uk

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: steve100@dircon.co.uk
Message-ID: <33021fb9.685731@news.dircon.co.uk>
Source record: 97468

On Thu, 30 Jan 1997 23:35:28 GMT, steve100@dircon.co.uk (Steve) wrote:

>Anyone have any mods at all for this radio please, I'm particularly
>interested to know how to expand the UK band outside the usual 144.000
>to 146.000
>Thanks in advance,
>Steve.
>

1716. 3ASP1 CRT wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: alanger394@aol.com
Message-ID: <19970212200501.PAA05337@ladder01.news.aol.com>
Source record: 97469

Please can anyone help with the above

Thanks

Allan

1717. Re: Information on GE MASTR II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb12.165216.27319@ke4zv.atl.ga.us>
Source record: 97470

In article <3300DCCC.265A@Bledsoe.net> samjohnson@Bledsoe.net writes:
>Content-Transfer-Encoding: 7bit
>X-Mailer: Mozilla 3.01 (Win95; I)
>
>I'm looking for some detailed info on converting a GE MASTR II UHF for
>amateur use, I have some knowledge in electronics. Can I do this?, or is
>it better to have it done? If it's possible, I'd like to do it myself
>(with the right details) for the fun of it and of course to save money.
> Thanks,
> Sam KF4GQS

Sam, this is an easy conversion. Basically all you have to do is change the channel element crystals and retune the radio. Most of the Mastr II radios you'll find will be operating in the 450-470 MHz range. They'll tune right down into 440-450 MHz with no problem. If you have one that is for 470-512 MHz, then you've got problems. The receiver front end filters won't tune down into the amateur band, so you have to replace them. That's a major job, and you'll be better off looking for another radio.

The first step is to assemble the radio, cables, and control head into a working system on the commercial frequency. Once you have everything checked out, order a set of crystals for the amateur band, put them in, and follow the tune up instructions in the manual. (If you don't have a manual, get one. It will tell you everything you'll ever need to know about the radio.)

These are excellent radios, and well worth the trouble to convert. Many of them serve as repeaters, my repeater uses one, and lots of them are used for base stations or trunk mount mobile operation.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1718. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5dt82f$or4@hpcvsnz.cv.hp.com>
Source record: 97471

Bob Mueller (r.mueller@kfa-juelich.de) wrote:

Concerning a crystal diode VHF receiver:

: I see no mention of the lack of SELECTIVITY in any answer to the initial
: question. How can one ever separate stations, except, perhaps with a
: YAGI to do it by direction of the transmitter? With a Q of 400 at 80
: MHz the bandwidth is going to a half megahertz, with awful skirts. You
: would hear the entire band at one time if everybodys signal arrived at
: the same rf level. I do agree, there is a chance to hear "something",
: but what?

Um, I think it would be 200kHz for a simple single resonator. But if the goal is to listen to the pilot of the commercial plane you are on (where you may not have any electronics turned on at certain times, but seems like such a crystal radio would be OK), then selectivity isn't important at all.

(This hypothetical single-tuned circuit would be about 3dB down 100kHz away from center, 20dB down 1MHz away, 40dB down 10MHz away...)

If you did want some selectivity, you could use a more complicated filter--things would get big fast, but helical resonators in 8cm diameter shields can yield unloaded Q's up around 2000 at 100MHz frequencies, and a set of three of those could conceivably make a decent filter if your "band" isn't too crowded. Remember, this receiver won't be all that sensitive anyway. If such a three-pole filter were 200kHz wide, then the numbers from above would be more like 60dB down 1MHz away, which isn't so terrible. Very difficult to tune over much range though!

As with most engineering, it's a set of tradeoffs. There could be an advantage to such a "zero power" receiver that outweighs the many disadvantages.

--
Cheers,
Tom
tomb@lsid.hp.com

1719. transistor 3sk113 wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: arisk@spidernet.COM.cy
Message-ID: <199702121637.SAA24795@mail0.spidernet.net>
Source record: 97472

Hi all,
I am radio amateur,call 5B4JE and I need urgently a transistor 3SK113 or 3SK97 to fix my VHF preamp on a small VHF linear that i have .Please let me know from where i could get one or bye one for me and send it and i will cover the cost promptly.
My postal Address is :P.O.Box 1723,Limassol,CYPRUS.
Please email me any info.

1720. Re: Source for *or* equivalent # for MC145163 (QEX 6/91)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: sc@webspan.com
Message-ID: <5dtb45$oh4@news.webspan.net>
Source record: 97473

It is for a "synthesized VFO" covering about 5 MHz using only
that chip and about 4 transistors. It uses BCD "thumbwheel"
switches to select the frequency.

I always thought that a circuit like this would be duplicated
hundreds of times over in magazines, but it is almost as if
the magazines have a ban on it.

Wouldn't every homebrewer want a rock solid vfo with a large
frequency span using less parts than a "regular" vfo? I really
don't understand why there isn't more information about these chips.
I have every QST, 73, CQ, Ham Radio magazine, handbooks etc since
1978. (I don't have any from the past year or so)Yet this is the
only article I ever came across that made it so simple with so few
parts. (every synth I have seen uses as least 10 ic!)

I called Motorola when this article first appeared and was told that
this chip will not be sold in the USA. I was hoping that by now it
may have made it's way over!

Steve

In article <3301fa5b.0@lightning.ica.net>, hduff@ica.net says...
>
>sc@webspan.com (Steve) wrote:
>
>>I am looking for a frequency synthesizer chip like the MC145163.
>>It appeared in an article in the June 1991 QEX, page 22.
>>I have searched the Motorola web site, and the only one that
>>appears to come close to it is the MC145170, but it is a serial
>>interface, not BCD. I want to use BCD thumb-wheel encoders
>>with it. So I guess I am looking for a source for the MC145163
>>or the part number for an equivalent chip.
>
>>Thank you,
>>Steve
>
>
>Did you look at the MC145151 or 152 ?
>These are parallel programmed PLLs.
>
>BTW, what is the article about ?
>
>Hugh VA3TO
>
>

1721. AVAST YE SCURVY SWABS!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: amscray23@aol.com
Message-ID: <19970212215500.QAA10729@ladder01.news.aol.com>
Source record: 97474

lookin for fellow swashbucklers to trade info.

1722. Re: Help Required - HV PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <m5yeMDATKjAzEwCR@falstaf.demon.co.uk>
Source record: 97475
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <UBeSCAAe4L$yEw60@falstaf.demon.co.uk>, Robin Birch
<robin@falstaf.demon.co.uk> writes
Dear ALl,
Thanks for the notes. The problem is that I am trying to keep the guts
of the TX itself as original as possible so Ideally I don't want to
affect the circuit.

The idea of shunt regulation had occured to me but my attempt at this
wouldn't regulate properly cos I don't think I understand enough about
circuit design for high power FETs.

If someone has got a sketch for something to do this or a series reg I
would be grateful. The PSU has two stages of leading choke and Cap
filtering after the transformer.

Cheers Again

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

1723. HB 4-1000A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Jerry Booth <jerryjtb@csrlink.net>
Message-ID: <33025164.73AF@csrlink.net>
Source record: 97476

Sell or trade:

Sell or trade HB 4-1000A Rf deck. Vacuum caps tune and load, tuned input, BW 580A tank. Air system socket and Sk-506 chimney, Peter Dahl filament xfmr. Vacuum output TR relay. Comes with full output tube and full output spare 4-1000A. Approximately 17" X 17" x 16" with internal blower. Front panel 19' X 17" to fit table top cabinet supplied. Asking $750.00 or trade.

Tnx,

Jerry W0ZD

1724. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: law@earthlink.net
Message-ID: <3302777F.156@earthlink.net>
Source record: 97477

```
test
```

1725. Crowbar Circuit????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Tanya Fisher <rjagoe@nbnet.nb.ca>
Message-ID: <3302902C.18AC@nbnet.nb.ca>
Source record: 97478

Hello:
I have just purchased a TM-241A 2M radio brand spanking new. A fello ham
told me that if I am going to use a 12V power supply I should have a
crowbar circuit in it. What I would like to know does any body have
plans for this type of circuit? Any other information about it would
also be appriciated. You may mail comments to rjagoe@nbnet.nb.ca
Thank you for your time de VE9BL Ryan.

1726. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com.DELETE-FOR-EMAIL>
Message-ID: <3302857E.36A06126@primenet.com.DELETE-FOR-EMAIL>
Source record: 97479

Arthur P Blair wrote:
>
> Richard Karlquist (rkarlqu@scd.hp.com) wrote:
> : You see this written from time to time. I happen to disagree with

[snip]

>
> Correct me if I'm wrong. But I thought that, in a double balanced
> mixer, only the RF & IF ports were fed thru transformers, not the
> LO.

There are plenty of mixers where the IF frequency extends down to
DC. In those cases the IF port is not transformer coupled - the
transformers are on the RF and LO ports. These mixers are
also useful for phase detectors.

> : Another problem with square wave drive is that if you don't make
> : the duty cycle exactly 50%, you degrade the mixer performance.
> : It's easier to make a distortionless sine wave (with a low pass
> : filter) than a perfect square wave.
>
> It's been a while, but I recall once having trouble with a DDS
> based LO. The DAC in the DDS was generating alot of quantization
> spurs. Rather than try to get a high speed umpteen bit DAC I just
> used, effectively, a 1 bit DAC, which can run comfortably at a
> very high speed. And nothing is more linear than a 1 bit DAC
> (nothing digital anyway). Feeding this to the LO port of the
> mixer, the end result was alot cleaner.

I don't beleive that this works in general. Generating a digital
signal with 'a high speed umpteen bit DAC', de-aliasing it
properly, and squaring it is _not_ the same as generating
the signal with a 1 bit DAC.

If you think about it, the anti-alias filter is needed to
interpolate between the two digital samples near the zero
crossing - without it the 1 bit DAC changes synchronously
with the clock frequency. The result contains significant
phase noise. I can probably steer you to an ap-note that
expounds if you are interested...

> Art.

Bob
WA3TGF

1727. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <3302B767.50B9@wenzel.com>
Source record: 97480

Stephen E. Muther wrote:
>
> I recall an article in a magazine once where a crystal VHF receiver
> like this was built inside a Radio Shack mini amplified speaker (the
> one that looks like a transistor radio). The system was ideal for
> listening in while onboard an aircraft since there was nothing
> like an LO that would radiate.
>
> Steve Muther
> WF6R

Here is a typical schematic: http://www.wenzel.com/pdffiles/aircraft.pdf

1728. Re: Q:Where to get SCA Adapter Circuits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-12 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970212142953.11932B-100000@Ocean.CAM.ORG>
Source record: 97481

There is quite a FAQ about the GE Superadio. I saw it posted once
on rec.radio.shortwave. I just looked for it with yahoo, and you
can find the FAQ at:

GE Superadio FAQ General Information
http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.

A simple search of FAQ's did not turn it up as a file somewhere, though
it might be non-html form elsewhere.

It's quite a nice FAQ; makes me want to get a Superradio.

It does have a section on adding SCA adaptors, but unless I didn't
look close enough, it does not give the details of adding it.

There were other sites that came up with Yahoo, so maybe doing
a better search, or using a different keyword, would turn up
the details you need.

Michael VE2BVW

On Mon, 10 Feb 1997, MICHAEL J DRUM wrote:

>
> Could someone tell me where in circuit I can install an SCA adapter in
> the GE Superadio III. I don't have a schematic so a description of
> the install tap-off point would be greatly appreciated.
>
> Thank You.
>
> Mike Drum>
>
>
>

1729. Re: Crowbar Circuit????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <33032073.156D@staffnet.com>
Source record: 97293

Tanya Fisher wrote:
>
> Hello:
> I have just purchased a TM-241A 2M radio brand spanking new. A fello ham
> told me that if I am going to use a 12V power supply I should have a
> crowbar circuit in it. What I would like to know does any body have
> plans for this type of circuit? Any other information about it would
> also be appriciated. You may mail comments to rjagoe@nbnet.nb.ca
> Thank you for your time de VE9BL Ryan.

Be sure to place a fuse between the filter capacitor and the crowbar! My Astron supply did not have the fuse. The pass transistor shorted. When the crowbar fired, shorting the LARGE filter capacitor, the crowbar simply opened allowing about 25 VDC to be sent on the the transceiver.

1730. Looking for a 3CX5000A7

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: davek@medphys.ucl.ac.uk
Message-ID: <1997Feb13.151837.52169@ucl.ac.uk>
Source record: 97294

Does anyone have one of the above tubes gathering dust ? If so, let me know as I want a spare for the one I have.

Dave Kirkby
Dept of Medical Physics,
University College London,
11-20 Capper St,
London WC1E 6JA
Tel: 0171-209 6406
Fax: 0171-209 6269

1731. Looking for SC plugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: davek@medphys.ucl.ac.uk
Message-ID: <1997Feb13.152021.58523@ucl.ac.uk>
Source record: 97295

Does anyone have any SC type RF plugs that will fit onto cables such as
UR67, RG213, RG214 or similar ?

Dave Kirkby
Dept of Medical Physics,
University College London,
11-20 Capper St,
London WC1E 6JA
Tel: 0171-209 6406
Fax: 0171-209 6269

1732. Re: 10 Ghz device inquiry

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <33033225.282B@rcru.rl.ac.uk>
Source record: 97296

xTimothy_Shearer@MK.com wrote:

> Can I replace the Foam with some regular conductive black foam?
No, not really. You can try but it is not the same stuff. Yuo can order bits of foam from DEM cheaply.

I can't help you with activity, but Zack might be able to. Wideband is almost completely dead in the UK. 100mw to a 3ft dish is about right for 100km wideband QSOs over clear paths

1733. amateur radio in Switzerland

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: pjbenner@worldonline.nl
Message-ID: <5dvhcq$j7j$9@neptune.worldonline.nl>
Source record: 97297

Hi All!

I'd like to get some information about amateur radio in
Switzerland.
I'd like to know about the legal aspects as well as about
the necesary equipment and its possibilities.
Also links to other newsgroups or sites where I could get
more information are welcome.
Reactions preferably by e-mail.
Met vriendelijke groet / With kind regards
Paul Benner

1734. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1302970927220001@news.vcnet.com>
Source record: 97298

In article <330271bd.122747974@news.santafe.edu>, jpotter@jpaw.com wrote:

> measures@mail.vcnet.com (R. L. Measures) wrote:
>
>
> >If an 8877 is being operated at Eimac's maximum rating of 4kV and 250MHz,
> >the RF grid current is 2650v-rms/ 63.66 ohms = 41.63 amperes rms.
> > See article <measures-ya02408000R0602970755420001@news.vcnet.com>, posted
> >here on 6 Feb.
>
> The aticle referenced is not on my news server.

From past experiences, I found that there are many ISPs whose UUNET Newsgroup replenishment cycle is incomplete. If this is the case with your provider, tell them about the problem. If such a problem is not fixed in a week, I would strap on a parachute.

> About all I can agree with is that 2650 divided by 63.66 = 41.63 .
>
> Where do these numbers come from?

Has anyone ever pondered why Eimac does not specify a maximum grid current rating for the 8877 or any of the other tubes that are designed for Class AB2 g-g service?

The 8877 has an anode to grid C of 10pF. The 4kV/1A maximum ratings for the 8877 apply up to 250MHz. At 250MHz, 10 pF has 63.66 ohms of capacitive reactance. According to Eimac *CURVE 4250*, the 8877 begins to saturate at an anode to grid potential of about 250v. Therefore, with an anode supply voltage of 4000V, the peak AC anode voltage is about 4000v -250v = 3750v during the conduction half-cycle when the cathode is driven negative. The AC rms anode voltage = 1/2^0.5 *3750v = 0.7071*3750v = 2651V-rms. When 2651V-rms is applied to capacitor whose reactance is 63.66 ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.

...Sure, 41A is an eyebrow-raising amount of grid current, but this is the case according to standard AC Circuit-Analysis, which applies in all parts of the universe, with the exception of one rather unique place in the State of Georgia. However, this place IS exceptional. For instance: the boiling point of gold is apparently lower there than elsewhere in the universe.

...snip...
>
> According to your numbers the grid dissipation is 2650^2/63.66 or 110
> kW. How can that be?

Jim: Is the dissipation in a capacitor equal to E^2/Reactance (ohms)---or is it I^2*ESR (ohms)?

With 96, paralleled, gold-plated flat grid-wires, the ESR of an 8877 grid must be extraordinarily low. The idea of less than 0.5A DC boiling the gold plating off a grid that Eimac designed to carry over 40A of AC---is about as believable as chipping golf balls on the front lawn at 10pm with the lights off. On second throught, maybe the defense should have argued that he was practicing for a night-time golf tournament. ..... However, I'll plead guilty to Monday-morning quarterbacking.

--
--Rich-- ag6k, 805-386-3734

1735. Re: L/C/R Circuit to emulate crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5dvm95$2mbq@info4.rus.uni-stuttgart.de>
Source record: 97299

>I've been thinking about it and theoreticly it should be possible to
>build a tunable, plug-in L/C/R circuit to replace a radios crystals, that
>emulates a crystal in every way except frequency stability.
>
>If this is correct, I'd like to find some info on it. I have an old
>crystal controlled 12 channel Standard 2-Meter mobile that someone gave
>me and none of the crystals are for frequencies that I use.

You can certainly not emulate the L,C, and R value of a crystal,
but if you figure out the oscillator diagram you can
find the same type of oscillator as RC circuit, amd implement it.

It might "sort of" work on receive, but it is bound to be completely
unusable on transmit. There are the following alternatives:

1) buy one set of crystals for the calling channel, and use the others as they
are,

2) move the the crystal oscillators by 50 to 100 KHz by adding capacitors or
coils

3) you can change the frequency of a crystal by removing it from it's
can and altering the slab somehow (adding or removing weight).

good luck, Moritz DL5UH

1736. Re: Frequency Doubler ICs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3305f2a1.2933631368@news.sci.fi>
Source record: 97300

Michael Black <blackm00@CAM.ORG> wrote:

>In the old days, you'd see single-transistor doubler stages. There
>was a time when Doug DeMaw would describe double-ended doubler stages,
>and at one point he was showing them using CA3028 differential amplifiers.
>
>One form of doubler that hasn't got much press, presumably due to parts
>count, is using a double-balance modulator/mixer. Feed the input
>signal into both inputs, and they mix together giving a DC output
>(for the difference frequency), and the sum, which is twice the input
>(f+f=2f). CIrcuit balance determines how much of the original signal
>feeds through to the output.

As described, this is in fact an absolute value circuit (full wave
rectifier). Overdrive the other mixer input to get a clean switching
waveform. As with ordinary full wave rectifiers, the output contains
the DC component and the 2f component and a lot of higher harmonics.
However, these are quite easy to filter out.

>
>This has traditionally been rather bulky, since you need a
>bunch of discrete components, or something like an MC1496 and all of
>it's external components. Nowadays, with NE602's so common, the
>scheme could be implemented as easily and as cheaply as some other
>form of doubler. Of course, the NE602 has that transistor on one
>fo the inputs meant for use as an oscillator, so that might get in
>the way of really good balance for this scheme.

If you operate the MC1496 in the linear mode as a 4 quadrant
multiplier and multiply two sine waves (at the same frequency), then
the output is the trigonometric relation sin(x)*sin(x) =
0.5*(1-cos(2x)), i.e. a DC component and the 2f component and nothing
else. However, an MC 1496 circuit published a few years ago, you could
only get a decent performance in the audio range and slightly above.
The performance was very sensitive to the input level.

Paul OH3LWR

1737. Re: Can a Panadaptor be modified?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: tedh@xcelco.on.ca
Message-ID: <5dvnm7$rgf@nr1.toronto.istar.net>
Source record: 97301

Richard Valentine <tde@ntplx.net> wrote:

>Can anyone offer a way to modify a 455Kc IF Panadaptor to work with an
>FT-1000? The FT's IF output is 73.62 MHz. I'd be willing to pay for a
>conversion. -- N1SQJ
Cannot find the article but in a older magazine there was a piece on
building a mixer for this purpose. The Heathkit SB620 has a port for
injecting a a signal in to use a different IF. Might be a bit of
work but quite a possible mode if your willing to deal with an
outboard mixer.

73's Ted

1738. Re: L/C/R Circuit to emulate crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5dvse5$694$1@nadine.teleport.com>
Source record: 97302

In article <Pine.BSF.3.91.970213034809.18189N-100000@prog1.caprica.com>,
Ted <ted@kill-spam.net> wrote:

>I've been thinking about it and theoreticly it should be possible to
>build a tunable, plug-in L/C/R circuit to replace a radios crystals, that
>emulates a crystal in every way except frequency stability.
>
>If this is correct, I'd like to find some info on it. I have an old
>crystal controlled 12 channel Standard 2-Meter mobile that someone gave
>me and none of the crystals are for frequencies that I use. Crystals cost
>about $13 plus tax each these days and I'll be darned if I am going to pay
>$366 plus S&H to recrystal an old 12 channel boat anchor!
>
A very good reference is _Introduction to Radio Frequency Design_ by Wes
Hayward. In it, he shows an equivalent circuit for a crystal of a seriel
RLC, with shunt C across the whole lot. He gives typical values for the
series components for a 5 MHz crystal of L = 95 mH, C = 11 fF, and R = 30
ohms. Good luck!

Roy Lewallen, W7EL

1739. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <33035d8f.183127261@news.santafe.edu>
Source record: 97303

measures@mail.vcnet.com (R. L. Measures) wrote:

>Has anyone ever pondered why Eimac does not specify a maximum grid current
>rating for the 8877 or any of the other tubes that are designed for Class
>AB2 g-g service?

>The 8877 has an anode to grid C of 10pF. The 4kV/1A maximum ratings for
>the 8877 apply up to 250MHz. At 250MHz, 10 pF has 63.66 ohms of
>capacitive reactance. According to Eimac *CURVE 4250*, the 8877 begins to
>saturate at an anode to grid potential of about 250v. Therefore, with an
>anode supply voltage of 4000V, the peak AC anode voltage is about 4000v
>-250v = 3750v during the conduction half-cycle when the cathode is driven
>negative. The AC rms anode voltage = 1/2^0.5 *3750v = 0.7071*3750v =
>2651V-rms. When 2651V-rms is applied to capacitor whose reactance is 63.66
>ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.

> ...Sure, 41A is an eyebrow-raising amount of grid current, but this is the
>case according to standard AC Circuit-Analysis, which applies in all parts
>of the universe, with the exception of one rather unique place in the State
>of Georgia. However, this place IS exceptional. For instance: the
>boiling point of gold is apparently lower there than elsewhere in the
>universe.

>Jim: Is the dissipation in a capacitor equal to E^2/Reactance (ohms)---or
>is it I^2*ESR (ohms)?

>With 96, paralleled, gold-plated flat grid-wires, the ESR of an 8877 grid
>must be extraordinarily low. The idea of less than 0.5A DC boiling the
>gold plating off a grid that Eimac designed to carry over 40A of AC---is
>about as believable as chipping golf balls on the front lawn at 10pm with
>the lights off. On second throught, maybe the defense should have argued
>that he was practicing for a night-time golf tournament. .... However,
>I'll plead guilty to Monday-morning quarterbacking.

>--
>--Rich-- ag6k, 805-386-3734

We apparetnly are dealing with an apples/oranges problem here.
Undoubtedly there is a small contribution to the grid dissipation from
the ESR of the grid. However, that is normally ignored because it is
small compared to the normal grid dissipation. Most of the heat being
generated by the reactive grid curent is in this newsgroup.

Grid dissipation arises not from the grid current flowing through the
equivalent series resistance of the grid, but from the energy of the
electrons stopped by the grid (grid interception). This grid current
is measurable as a direct current since the grid stops electrons, bur

normally doesn't emit them. The energy of the grid is determined by the grid voltage and is also a function of the time it takes the electrons to travel from the cathode to the grid (transit time factor). Ignoring the transit time factor the grid dissipation is related to teh integral of the voltage times the curent over the rf cycle. While this can be calculated from the tube characteristic curves, it cannot easily be measured.

Generally, we call the product of the dc grid voltage times the dc grid current the dissipation, it is only an estimate. As an example, I have a calculation for the grid dissipation of a YU-176 operating at 10 kW output. The grid bias voltage is -70 volts. The peak instantaneous grid voltage is +41 volts. The calculated grid dissipationis 11 W. But if I multiply the average grid current, which is what I measure with my grid current meter, times the bias voltage, I get 23 W which overestimates the grid dissipation by a factor of 2. The factor of 2 is not a rule of thumb, since it varies, depending on the operating conditions. However, I believe that the dc method always overestimates the actual grid dissipation.

What will really boil the gold of the grid is too many energetic electrons hitting it. One way for this to happen is for the plate tank to be too lightly loaded. Then the plate voltage swings to a low value and does not pull as many electrons through the grid and more electrons hit the grid. Another way is excess grid drive, which can arise from the external source or internally from self oscillation (parasitics).

A general rule of thumb is to operate the amplifier with heavy loading,sacrificing efficiency for lower grid dissipation.

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

1740. L/C Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <330383D7.2CD7@aade.com>
Source record: 97304

Looking for a superb L/C Meter at a low price?
try http://www.aade.com

neil

1741. 4cx150 + sockets FS.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: kj4uo@aol.com
Message-ID: <19970213221200.RAA08838@ladder01.news.aol.com>
Source record: 97305

I have two sockets and two 4cx150 pulls, please best offer:

KJ4UO@AOL.COM

Thanks

1742. Re: Twisted pair in place of coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <5e08km$2ls4@news.doit.wisc.edu>
Source record: 97306

w7el@teleport.com (Roy Lewallen) wrote:

>In article <rohrwerk-1102972302370001@tsc-p21.pconline.com>,
> rohrwerk@pcOnline.com (John Seboldt) wrote:

>>Obviously a twisted pair is a transmission line, but I'm surprised it
>>seems to work tolerably even with unbalanced signals.

>>In addition, one reference said, "For the ultimate in engineering
>>elegance, place a ferrite bead in the middle of the twisted pair." How
>>does that little bit of ferrite help the situation?
>>
>>John Seboldt K0JD

>The little bit of ferrite acts as a choke to the common-mode currents
>without affecting the differential-mode currents. This forces the twisted
>pair to act like a non-radiating transmission line, which is the desired
>effect.

It's probably important to note that this forces it to be a balanced
line.

Jim

Melissa Kepner Jim Adney
mgkepner@facstaff.wisc.edu jim.adney@mpcug.com
Laura Kepner-Adney
Madison, Wisconsin

1743. WTB Icom Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: Raj Singh <singhraj@cadvision.com>
Message-ID: <3303C766.7239@cadvision.com>
Source record: 97307

Hi:

I am looking for Icom filters FL45 and FL52A. Drop me a note if you have
either or both.

Thanks
Raj VE6RAJ

1744. Re: Crowbar Circuit????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: cpierce@usit.net
Message-ID: <cpierce-1302972046480001@col-max10.dynamic.usit.net>
Source record: 97308

In article <33032073.156D@staffnet.com>, rlewis@staffnet.com wrote:

> Tanya Fisher wrote:
> >
> > Hello:
> > I have just purchased a TM-241A 2M radio brand spanking new. A fello ham
> > told me that if I am going to use a 12V power supply I should have a
> > crowbar circuit in it. What I would like to know does any body have
> > plans for this type of circuit? Any other information about it would
> > also be appriciated. You may mail comments to rjagoe@nbnet.nb.ca
> > Thank you for your time de VE9BL Ryan.
>
> Be sure to place a fuse between the filter capacitor and the crowbar! My
> Astron supply did not have the fuse. The pass transistor shorted. When
> the crowbar fired, shorting the LARGE filter capacitor, the crowbar
> simply opened allowing about 25 VDC to be sent on the the transceiver.

I have had the same problem with my power supply and the crowbar was hid
in a tube filled with exopy, without a schematic and after about two sets
of pass xtrs I found the crowbar and chunked it for now. Be shure and fuse
before the crowbar.

Charles

1745. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: tsw@3do.com
Message-ID: <tsw-1302971927270001@cypher.3do.com>
Source record: 97309
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <32E4282C.4561@earthlink.net>, csteger@earthlink.net wrote:

> David Holstein wrote:
> >
> > Does anyone know of a mod to make the Realistic HTX-212 transmit out
> > of band??? I want to be able to use this radio on my boat on the
> > marine band instead of buying another radio.
> >
> > Thanx for any help.
> > David, N3NGB@KE3GP.MD.USA.NOAM
> > holstein@erols.com
> > dholstein@comcastpc.com
>
> The HTX-212 will not X-mit out of band, with the exception of MARS/CAP.
> Why do you need to X-mit out of band anyway?

The marine band is in the 160+ MHz range, while 2m is in the 146MHz range. Unfortunately most transmitters can't over this wide of range unless they are specially built. Most ham transcievers aren't in this catagory (in fact I don't know of any that might be). To span this range you are talking about tuning over+10% in frequency. This isn't easy with high Q output stages.

I won't get into receive problems, but with 10.7 MHz IF's iimmaaggeess come to mind as being especially troublesome.

As always, your mileage will vary.

The cheaper solution is to buy another radio, IMHO.

--
Tom Watson
tsw@3do.com (Home: tsw@johana.com)

1746. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: Tom Sharples <sharples@hooked.net>
Message-ID: <3303E450.524B@hooked.net>
Source record: 97310
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

A Yaesu FT-2500 will easily do this. The mod is in the Artsci books- you just cut a green wire. I've used this rig on the marine bands with no problem. Also have done the same with a Yaesu FT10 HT.

1747. Re: Crowbar Circuit????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: J&J Mac <jmacd@wco.com>
Message-ID: <3303E824.FFA@wco.com>
Source record: 97311

Tanya Fisher wrote:
>
> Hello:
> I have just purchased a TM-241A 2M radio brand spanking new. A fello ham
> told me that if I am going to use a 12V power supply I should have a
> crowbar circuit in it. What I would like to know does any body have
> plans for this type of circuit? Any other information about it would
> also be appriciated. You may mail comments to rjagoe@nbnet.nb.ca
> Thank you for your time de VE9BL Ryan.

If you have a FAX number, I'll fax you a simple schematic that I have
used in dozens of power supplies.

Jim.. KB6ZOP

1748. Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <330255FA.454@ping.be>
Source record: 97482
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

The official Kenwood TH-79E/A modifications can be found on my homepage.
Those are JPG files that you can download and vieuw with a picture
viewer.

Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz

Good luck,

William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

1749. Re: VHF crystal diode receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: stevem@vax.area.com
Message-ID: <5dtm8e$i40@nixon.area.com>
Source record: 97483

I recall an article in a magazine once where a crystal VHF receiver like this was built inside a Radio Shack mini amplified speaker (the one that looks like a transistor radio). The system was ideal for listening in while onboard an aircraft since there was nothing like an LO that would radiate.

Steve Muther
WF6R

>Um, I think it would be 200kHz for a simple single resonator. But if the >goal is to listen to the pilot of the commercial plane you are on (where >you may not have any electronics turned on at certain times, but seems >like such a crystal radio would be OK), then selectivity isn't important >at all.

1750. SM645 TO-3 device what is it

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Message-ID: <330269AD.3D414575@juts.ccc.amdahl.com>
Source record: 97484

A fellow ham here has a number of these and would like to know what
they are.
It's a TO-3 case with 3 insulated pins on the under side.
Thanks and Regards
--
... Sid Boyce...Amdahl(UK)...szb50@juts.ccc.amdahl.com

Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

1751. Re: Filter cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5dtvea$dib@mtinsc03.worldnet.att.net>
Source record: 97485

Try C&H Sales (surplus) in Pasadena, CA. Don't know what they
currently have in stock, but they have had similar caps before...
Woody

Dave Sublette wrote:
>
> WEll, I didn't get any replies to my last message and I still need
> 30-50ufd at 5500 VDC. Anyone out there know a good source for such a
> thing? I would appreciate an Email reply to k4to@mis.net. Thanks and
> 73,
>
> Dave, K4TO

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

1752. Re: Crowbar Circuit????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5dtv6b$dib@mtinsc03.worldnet.att.net>
Source record: 97486

A crowbar is a circuit which goes across the power supply output, after the fuse. It is intended to monitor the output voltage and apply a short circuit (hence "crowbar") across the output if the output exceeds a predetermined value. This will then blow the fuse, isolating the $$$ equipment from the faulty pwr supply. Typically the circuit is a heavy duty SCR across the output with the gate connected to a control circuit. The control circuit can be as simple as a few resistors and a zener diode (poor response) to one using an ic like the LM311 comparator. I have seen commercial ("brick") modules as well. Check an SCR applications manual of possibly LM311 applications notes for more specific circuit details. Haven't looked, but I bet the ARRL Handbook has a circuit. _Woody_

Tanya Fisher wrote:
>
> Hello:
> I have just purchased a TM-241A 2M radio brand spanking new. A fello ham
> told me that if I am going to use a 12V power supply I should have a
> crowbar circuit in it. What I would like to know does any body have
> plans for this type of circuit? Any other information about it would
> also be appriciated. You may mail comments to rjagoe@nbnet.nb.ca
> Thank you for your time de VE9BL Ryan.

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

1753. www.hamradio-online.com: The Decline of Amateur Radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: vbook@vbook.com
Message-ID: <5du2jl$62c@kanga.accessone.com>
Source record: 97487
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Visit http://www.hamradio-online.com

License data, technological, demographic, political and economic change (such as spectrum auctions) demand a dramatic rethinking of all aspects of Amateur Radio as we find our place in the 21st century. Do not underestimate the challenges we face - if we continue down our present course, Amateur Radio may fade into the static of history. We present a wide ranging, no-holds barred set of critical questions to encourage you to understand the problem and then think through the solutions.

Did you know, for instance, that the FCC rules actually prohibit innovation in modern digital communications? Did you know that our own "voluntary" band plans stifle innovation and tend to create unused bands ripe for the picking by other radio services?

43% of all hams are now Technician class licenses who operate mostly at VHF/UHF. According to a W5YI report, in 1996, the combined total of General+Advanced+Extra class hams actually declined - yet our "incentive" licensing system has all of the incentives at HF - does this make any sense?

We ask a lot of tough questions and we'd like your opinion.

Visit Ham Radio Online (its free - we run the web site entirely as a hobby) at http://www.hamradio-online.com

or go straight to the opinion column at http://www.hamradio-online.com/1997/feb/opinion.html

Thanks for stopping by.

Ed (KF7VY) and Kim (N7VPL) Mitchell
email to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

1754. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <330271bd.122747974@news.santafe.edu>
Source record: 97488

measures@mail.vcnet.com (R. L. Measures) wrote:

>If an 8877 is being operated at Eimac's maximum rating of 4kV and 250MHz,
>the RF grid current is 2650v-rms/ 63.66 ohms = 41.63 amperes rms.
> See article <measures-ya02408000R0602970755420001@news.vcnet.com>, posted
>here on 6 Feb.

The aticle referenced is not on my news server.

About all I can agree with is that 2650 divided by 63.66 = 41.63 .

Where do these numbers come from? I have before me Eimac typical constant current characteristics for the 3CX1500A7/8877 in grounded grid operation. The maximum instantaneous grid current displayed on these curves is 1.0 A. At an instantaneous grid-cathode voltage of +100 volts, the grid current is 1 A,, the plate-to-grid voltage is about 500 volts and the instantaneous peak plate current is 5.0 A.

According to your numbers the grid dissipation is 2650^2/63.66 or 110 kW. How can that be?

Where does the 2650 volts come from? The amplification factor of the tube is 200, not 1, which 2560 rms (3750 peak) suggests, The cathode area of that tube is around 10 cm^2. I have pulsed a 3 cm^2 cathode to about 25 A which was all I could get. Extrapolating this suggests you might get as much as 83 A total peak cathode current. And, half of that is going to the grid? Again, I do not understand.

The planar triodes I work with (YU-141 and YU-176) operate at about 1 to 1,5 A pulsed grid current with 4 to 5 A pulsed cathode current with 9 kV plate voltage and 100 v peak grid-cathode. The pulsed grid power is less than 200 W and the tube is putting out 20 to 30 kW pulsed. And these guys have a lot of grid interception, 25 % of the cathode current goes to the grid.

There is a pulse version, the 3CPX1500A7 that I have run with 7 kV on the plate and achieved 50 kW peak power output at 2 MHz. The grid-cathode voltage was pulsed to about +400 volts instantaneous peak with a power MOSFET switch in the cathode circuit. This corresponds to about 17 A instantaneous peak plate current, and the load impedance is about 360 ohms. The cathode impedance is about 20 ohms for these operating conditions.

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210

2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

1755. L/C/R Circuit to emulate crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: Ted <ted@kill-spam.net>
Message-ID: <Pine.BSF.3.91.970213034809.18189N-100000@prog1.caprica.com>
Source record: 97489

```
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
* The email address in my "From" header is incorrect! *
* It was changed to defeat spam-bots that send email. *
* To email me, please use my CORRECT email address: *
* *
* Email : ted@caprica.com *
* Webpage: http://www.caprica.com/~ted *
* *
* My Email is neither a newsgroup or a public forum! *
* I do NOT want any advertizing via Email. Who ever *
* sends unsolicited advertizing via Email risk prompt *
* cancelation of internet service without refund and *
* possible prosecution for harrassment and/or fraud! *
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
```

I've been thinking about it and theoreticly it should be possible to build a tunable, plug-in L/C/R circuit to replace a radios crystals, that emulates a crystal in every way except frequency stability.

If this is correct, I'd like to find some info on it. I have an old crystal controlled 12 channel Standard 2-Meter mobile that someone gave me and none of the crystals are for frequencies that I use. Crystals cost about $13 plus tax each these days and I'll be darned if I am going to pay $366 plus S&H to recrystal an old 12 channel boat anchor!

1756. Directional Couplers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: mramos@originet.COM.BR
Message-ID: <199702131348.KAA01524@netra01.origin.com.br>
Source record: 97490

Hi all:

Some time ago I posted a msg. looking for some information about
RF pick-up using striplines. There was some answers but I lost
them in a HD crash.
Well, still dealing with this subject and:

-Is there any program (basic, spread-sheet, executable) to perform
such calculations?
-Where to find the "math." solution, say, formulas and some explanation?

I intend to make some samplers (directional couplers) to 902/1296/2304
MHz to SWR/Power measurements using G10 or Teflon PCB. And what
about broadbanding, using any - or none - core, more or less the same
approach used at HF/some VHF? And the detector diodes(HPs, zero-bias,
etc...)?
I allready have some literature, from ARRL Handbooks, magazines, Microwa-
ve Experimenter Handbook, etc. But most of them falls on HF aplications,
the only exception is some Directional Copuler to VHF that appears on
several ARRL Handbooks and Antenna Handbooks(already contructed and
still working).

Any comments?
Best Rergards.
Marcus Ramos, PY3CRX
(actually hbrewing ATV repeater, 2304 xverter, 10.25GHz xverter, 1296
pwr amp, ...)
<mramos@originet.com.br>

1757. BLW34

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: mramos@originet.COM.BR
Message-ID: <199702131349.KAA01661@netra01.origin.com.br>
Source record: 97491

Hi:

I'm looking for the caracteristics of the BLW34 transistor. Came in a
UHF TV repeater, manufactured by Richard Hirshmann Electric.
I got two of such equipment, they're working but want to know how much
pwr I can expect from them. One is already modified to 903.25MHz, running
1.2W peak, spurious & IMD at -58dBc.

Thanks in advance.
Marcus Ramos, PY3CRX
<mramos@originet.com.br>

1758. Simple shortwave morse code transmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-13 00:00:00 UTC
From: Fran Jarnjak <ljarnjak@zg.tel.hr>
Message-ID: <01bc1a03$46bf56a0$8bcd64ce@ljarnjak>
Source record: 97492

Please I am searching for schema about it.
If you have one, please send it to me. (it must be cheap to build).
Fran
P.S Reply via E-mail to: ljarnjak@zg.tel.hr

1759. What is a MCL SBL-1 -10??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Tom Sedlack <toms@superman.cig.mot.com>
Message-ID: <3304D317.21AF@superman.cig.mot.com>
Source record: 97243
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have an old Mini-Circuits mixer stamped MCL SBL-1 and right
below that is printed -10. I believe the device is a level 7
mixer but I'm thrown by the -10 that is printed on top.
Could this be a special mixer for a -10 dBm LO?? Any help
would be appreciated.

```
___________
| MCL SBL-1 | <-- Stamped in the metal can itself
| -10 | <-- Printed with ink
|___________|
```

Thanks,

Tom

Tom Sedlack - Lead Test Engineer
toms@superman.cig.mot.com
Motorola, Inc.
Advanced Products Division
Cellular Infrastructure Group

1760. Mobile HF - Noise from the Car Air-conditoner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Abdul Jamel Bin Pawanteh <jamel95@ppp.nasionet.net>
Message-ID: <33055BAD.6C4E@ppp.nasionet.net>
Source record: 97244

I need some help to solve the problem of noise from the car
air-conditioner when operating mobile.
All the fun of operatinf on mobile is being spoilt the moment the
car airconditoner is switched on.

I have tried many commercially available noise suppresion kits
connected between the battery and the rig but with no success.

Anyone can help please email me at email: jamel95@ppp.nasionet.net

Many thanx in anticipation,

de 9M2JP

jamel

1761. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5e0aug$rog@hpscit.sc.hp.com>
Source record: 97312

In article <5dt0ch$m38@sf18.dseg.ti.com>,
Arthur P Blair <blair@skopen.dseg.ti.com> wrote:
>Richard Karlquist (rkarlqu@scd.hp.com) wrote:
>: You see this written from time to time. I happen to disagree with
>: this opinion, as a general matter. It sounds reasonable to drive
>: mixers with a square wave since one is trying to switch the diodes
>: on and off. The reality is that square waves do not go through
>: transformers very well, so you should really stick with a sine
>: wave in most cases. What really makes mixers happy (at least
>: below 100 MHz.) is to be driving from a current source of sine
>: wave.
>
>Correct me if I'm wrong. But I thought that, in a double balanced
>mixer, only the RF & IF ports were fed thru transformers, not the
>LO.

The RF and LO ports are fed thru transformers.
The IF port also couples to the diodes via the secondaries of
the transformers, but not as a straightforward transformer
coupling. (Referring here to a conventional DBM).

>It's been a while, but I recall once having trouble with a DDS
>based LO. The DAC in the DDS was generating alot of quantization
>spurs. Rather than try to get a high speed umpteen bit DAC I just
>used, effectively, a 1 bit DAC, which can run comfortably at a
>very high speed. And nothing is more linear than a 1 bit DAC
>(nothing digital anyway). Feeding this to the LO port of the
>mixer, the end result was alot cleaner.

This is a common misconception about DDS's. You really do
need those umpteen bits. If you use just the MSB, it will
have severe jitter, due to aliasing. See any tutorial paper
on DDS's for an explanation.

>Art.

Rick Karlquist, N6RK
rkarlqu@scd.hp.com

1762. Re: L/C/R Circuit to emulate crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5e0b87$s15@hpscit.sc.hp.com>
Source record: 97313

In article <Pine.BSF.3.91.970213034809.18189N-100000@prog1.caprica.com>,
>
>I've been thinking about it and theoreticly it should be possible to
>build a tunable, plug-in L/C/R circuit to replace a radios crystals, that
>emulates a crystal in every way except frequency stability.
>
>If this is correct, I'd like to find some info on it. I have an old
>crystal controlled 12 channel Standard 2-Meter mobile that someone gave
>me and none of the crystals are for frequencies that I use. Crystals cost
>about $13 plus tax each these days and I'll be darned if I am going to pay
>$366 plus S&H to recrystal an old 12 channel boat anchor!

When I was young and foolish (and held a Novice license), I
built a "VFO" for my crystal controlled rig by plugging a tank
circuit into the crystal socket. It "worked", but the frequency
stability was predictably poor!

Nowadays, even a Novice can build a little synthesizer to plug
into the crystal socket and get good results. Maybe you should
try that.

Rick Karlquist, N6RK (ex-WN9QXT)
rkarlqu@scd.hp.com

1763. Re: code

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc1a12$7cb37340$f4c1e1ce@cstevens.usr.com>
Source record: 97314

jeffreyh@hawaii.edu.nuts2u wrote in article <5dsru3$g8r@news.Hawaii.Edu>...
> Carl R. Stevenson <carl@ais.net> wrote:
>
> >Correction #2 ... the knowledge is something we should all be acquiring
> >in order to meet the goals of 97.1 and the ITU ... there is no excuse
for
> >falling further and further behind the technological power curve.
>
> Okay, give me a tutorial on how I can construct custom ICs.

One of the easiest ways is to invest $99.00 in a PC-based software
package called "Warp" from Cypress semiconductor (not to be confused
with OS/2 Warp, the operating system from IBM) ... it's a complete design
system including VHDL compiler, simulation, etc. for all of Cypress's
programable logic and FPGA parts ... it even includes a very good
book to teach yourself the basics of VHDL (VHDL is a hardware description
language ... and IEEE standard ... which allows custom integrated circuits
to be designed in software, then "targeted" to any of a variety of
architectures
or processes from PALS to CPLDs to FPGAs to full-custom ASICs ...)

Numerous other vendors of PLDs, CPLDs, and FPGAs (Lattice, Phillips,
Altera,
Atmel, Xilinx, et al) will happily send you a free CDROM with their
"starter set"
of development tools ... many are based on the Scenario system from Data
I/O ...

I can support/target designs to about 8 vendors' architectures and
processes.

Further instruction is beyond the scope of this post, but if you're really
interested
in designing your own ASICs, it *IS* within your reach ... or the reach of
anyone
who truly wants to ... you can even get full-custom parts processed
through a
special foundry service called MOSIS for a few thousand dollars (for a
modest run
of prototype parts) if your design is not amenable to implementation in
CPLDs or
FPGAs.

>
> >Correction #3 ... the vast majority of parts are not custom, but rather
> >are entirely generic ... WRT ICs, most of what you'll find are more

> >general purpose "building blocks" and "merchant market" parts.
> >Full custom ASICs are rather expensive to develop and most ham
> >hear is sold in such small quantities that it's probably hard to justify
> >the development cost for very many true custom ICs ...
>
> I need my above-mentioned custom ICs due to having two unrepairable
> 80s-era radios; custom ICs were used in those rigs and are no longer
> available.

Any radio from the 80s is far enough behind the times that it's likely not worth
repairing, even if the parts are easy to find ... toss it and build/buy something
more up-to-date ... maybe even something more advanced than a beeper.

>
> >Correction #4 ... even if there is a truly custom IC, you can order the
> >part
> >and replace it yourself a lot faster than sending the rig in for repair
>
> "Supplies are exhausted" was the response from the factory.
>

It's hard to find most tubes any more too ... they've been obsoleted by
better things. Learn to live with progress and move forward, instead of
clinging to the past.

Hell, I have a 486-25 computer (no-name notebook) that I can't find parts
for either ... I'll end up scavenging what I can from it to build something

else, but it'll never live as a notebook again ...

Carl - wa6vse
carl@ais.net

1764. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: "Michael St. Angelo" <mstangelo@worldnet.att.net>
Message-ID: <5e0itl$qjp@mtinsc03.worldnet.att.net>
Source record: 97315

Interesting comment. Where can I find your tutorial.
I'd like to read it.

Mike St. Angelo N2MS

email: mstangelo@worldnet.att.net

rkarlqu@scd.hp.com (Richard Karlquist) wrote:
>In article <5dt0ch$m38@sf18.dseg.ti.com>,
>Arthur P Blair <blair@skopen.dseg.ti.com> wrote:
>>Richard Karlquist (rkarlqu@scd.hp.com) wrote:
>>: You see this written from time to time. I happen to disagree with
>>: this opinion, as a general matter. It sounds reasonable to drive
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>>: transformers very well, so you should really stick with a sine
>>: wave in most cases. What really makes mixers happy (at least
>>: below 100 MHz.) is to be driving from a current source of sine
>>: wave.
>>
>>Correct me if I'm wrong. But I thought that, in a double balanced
>>mixer, only the RF & IF ports were fed thru transformers, not the
>>LO.
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>The RF and LO ports are fed thru transformers.
>The IF port also couples to the diodes via the secondaries of
>the transformers, but not as a straightforward transformer
>coupling. (Referring here to a conventional DBM).
>
>>It's been a while, but I recall once having trouble with a DDS
>>based LO. The DAC in the DDS was generating alot of quantization
>>spurs. Rather than try to get a high speed umpteen bit DAC I just
>>used, effectively, a 1 bit DAC, which can run comfortably at a
>>very high speed. And nothing is more linear than a 1 bit DAC
>>(nothing digital anyway). Feeding this to the LO port of the
>>mixer, the end result was alot cleaner.
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>This is a common misconception about DDS's. You really do
>need those umpteen bits. If you use just the MSB, it will
>have severe jitter, due to aliasing. See any tutorial paper
>on DDS's for an explanation.
>
>>Art.
>
>Rick Karlquist, N6RK

>rkarlqu@scd.hp.com

1765. Re: 567 tone decoder chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: arm@intr.net
Message-ID: <5e0jhj$ivp@news.intr.net>
Source record: 97316

Jeffrey Herman (jeffreyh@Hawaii.Edu) wrote:

: I picked up a couple 567 ICs and want to use one for a 1050 Hz tone
: decoder (that's the National Weather Service's alert tone). The
: decoder circuit I've come across is as follows:
: +--------------------------------------+
[snip]
: 500-1k Resistor: 1K for 3.5 mA, 500 ohms for more (no more than 100 mA)
: R: 20-25K
: C: .022 uF
: Center freq = f = 1.1 / RC
: Bandwidth < 14% of f

: So the bandwidth should be less than 140 Hz at 1050 Hz.
: Is this the standard circuit for the 567 or does someone have one
: that will provide less bandwidth? How stable can I expect the decoder
: to be?

The biggest problem is the thermal characterists of the
capacitor. C=.022uf is probably more like c=.022 +/-20% +/-.002/degF
If you use a variable resistor, you also need to worry about
the thermal characteristics of that resistor.

: Thanks in advance,
: Jeff KH2PZ

--
Andy Mitz (WA3LTJ)
arm@helix.nih.gov

1766. Re: IC706 Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Wyzyrd@useless.com
Message-ID: <5e0l1f$32p@camel5.mindspring.com>
Source record: 97317

If your radio is "stock", it only recievs on bands other than AMATEURE. So whats the problem??? If it is a modified version that transmits out of band, chances are one of (I can't remember right off hand which) the chip diodes have been removed. Unless you have a very intricate solder station, restoration of the diode will require factory re-installation. If you want more info on which diode...contact me thru the newsgroup. 73/Mike

1767. -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: holstein@erols.com
Message-ID: <5e0v8s$ehq@boursy.news.erols.com>
Source record: 97318
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

(A copy of this message has also been posted to the following
newsgroups:
rec.radio.amateur.misc,
rec.radio.amateur.equipment,rec.radio.amateur.homebrew)

In article <32E4282C.4561@earthlink.net>, csteger@earthlink.net wrote:

> David Holstein wrote:
> >
> > Does anyone know of a mod to make the Realistic HTX-212 transmit out
> > of band??? I want to be able to use this radio on my boat on the
> > marine band instead of buying another radio.
> >
> > Thanx for any help.
> > David, N3NGB@KE3GP.MD.USA.NOAM
> > holstein@erols.com
> > dholstein@comcastpc.com
>
> The HTX-212 will not X-mit out of band, with the exception of MARS/CAP.
> Why do you need to X-mit out of band anyway?

>The marine band is in the 160+ MHz range, while 2m is in the 146MHz
>range. Unfortunately most transmitters can't over this wide of range
>unless they are specially built. Most ham transcievers aren't in this
>catagory (in fact I don't know of any that might be). To span this range
>you are talking about tuning over+10% in frequency. This isn't easy with
>high Q output stages.

>I won't get into receive problems, but with 10.7 MHz IF's iimmaaggeess
>come to mind as being especially troublesome.

>As always, your mileage will vary.

>The cheaper solution is to buy another radio, IMHO.

>--
>Tom Watson
>tsw@3do.com (Home: tsw@johana.com)

What do you mean you don't know of any radios tha can go from 2m to
the marine band??? Most of the new Kenwood HTs can, such as the
th-22, th078, and for that matter the alinco 2m ht's can just by
snipping a wire.

Look people. I asked for help! I would like to modify a ham rig for
use on the marine band for emergency use so I don't have to waste a

bunch of money on a MARINE rig I'll never use. I am sick and tired of all the unsolicited e-mails from cranky old men who have nothing better to do than to tell me this is illegal (which it is not).

If you cannot offer me the help I ask for but would rather treat me like an unintelligent fool than KEEP YOUR FUCKING MOUTHS SHUT.

Oh...I guess I'll get hate mail for that...

Whatever...I give up on getting help from ham operators...you are all a bunch of turn-of-the-century jack-asses who cannot handle progress and new technology.

From on generation X-er, I can't wait 'till you all die.

David Holstein, Jr.
holstein@erols.com
N3NGB@KE3GP.MD.USA.NOAM

1768. Re: Sites w/ schematics and projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: kb9oce@aol.com
Message-ID: <19970214062600.BAA01693@ladder01.news.aol.com>
Source record: 97319

LAZY!!!!! You told me that you couldn't build anything....thats why you wanted yours built! JEEZ! Can't trust anyone anymore! LOL KB9OCE

1769. GIF, JPEG scanning service. FREE OFFER! A picture is worth a thousand words! (bnFEpJ)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: scanning@XXX1324noreply.com
Message-ID: <e75eRHhG8GA.219@uptgmsnb01>
Source record: 97320

Why don't you print or save this info in case you need it in the future?

Hello Friends,
It's time to take full advantage of the online medium by having your photographs scanned today! Once your pictures are scanned into one of three formats (GIF, JPEG, or BMP) you can do many exciting things with them.

-You'll easily be able to attach them to emails and send them to people your chatting with online. No more having to try and explain what you look like!

-You can also use your photos in all kinds of fun projects: build web pages; design your own greeting cards; make personalized stationary,desktops, and screen savers- the list is endless!

- Scan pictures of yourself, your pet, your vacation, or whatever you choose!

Cyber Services will scan ANY photograph, drawing, magazine clipping, or other artwork to an image file, and email or US mail it (on disk) back to you within 24 hours of its receipt. (You must be able to receive file attachments to get your file(s) via email. Check with your ISP if your not sure.) PRIVACY & CONFIDENTIALITY ARE ASSURED. You'll also receive helpful technical tips on everything from renaming your file to saving time when sending it to people via email.

We scan all our images in 16.7 million colors for best quality. For just $1 extra we can enlarge or crop your photo, blur out a body part, or ad text (such as your name or email address).

Best of all, as a FREE GIFT to you (limited time only), IF YOU CHOOSE TO, we'll reserve you a FREE PAGE (or pages) in our "Internet Date-Site" (Now under construction!!!). This web site contains pages classified by local area and sexual preference. There's also a erotic image gallery (must be legal age to enter), and a "special interests" section. That's right, you can have your own page on the internet for just $4! (Note: You're responsible for answering your dog's email!) Your free page(s) will include any or all of the following: Your scanned photo(s) (You pick which ones- You can have some, none or all of your photos posted on your page), your email address with an icon visitors can click to send you mail, and a brief profile about you. We'll remove or modify your page, at your request, at anytime! When the "Date-Site" opens for business, you'll receive an email notifying you of the address of your personal web page. You can give the address to people and they can view it from any internet
connection! There are millions and millions of people on the internet.It's

time you start meeting them! (This service won't be free for long so act now!)

If you have any questions regarding our services, please call us at (541)744-5718.

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(bnFEpJ)

1770. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Philk5pc@connect.net
Message-ID: <855912473.16268@dejanews.com>
Source record: 97321

In article <33035d8f.183127261@news.santafe.edu>,
jpotter@jpaw.com wrote:
> .....snip.....
>> Grid dissipation arises not from the grid current flowing through the
> equivalent series resistance of the grid, but from the energy of the
> electrons stopped by the grid (grid interception). This grid current
> is measurable as a direct current since the grid stops electrons, bur
> normally doesn't emit them. The energy of the grid is determined by
> the grid voltage and is also a function of the time it takes the
> electrons to travel from the cathode to the grid (transit time
> factor). Ignoring the transit time factor the grid dissipation is
> related to the integral of the voltage times the curent over the rf
> cycle. While this can be calculated from the tube characteristic
> curves, it cannot easily be measured.
>
>..snip..... But if I multiply the average grid current, which
> is what I measure with my grid current meter, times the bias voltage,
> I get 23 W which overestimates the grid dissipation by a factor of 2.
> The factor of 2 is not a rule of thumb, since it varies, depending on
> the operating conditions. However, I believe that the dc method always
> overestimates the actual grid dissipation.
>
> What will really boil the gold of the grid is too many energetic
> electrons hitting it. One way for this to happen is for the plate tank
> to be too lightly loaded. Then the plate voltage swings to a low value
> and does not pull as many electrons through the grid and more
> electrons hit the grid. Another way is excess grid drive, which can
> arise from the external source or internally from self oscillation
> (parasitics).
>
> A general rule of thumb is to operate the amplifier with heavy
> loading,sacrificing efficiency for lower grid dissipation.
>
> Very well said, Jim! It is only a matter of time before one will, in
the heat of battle, select a wrong antenna, band switch position, or
the wrong tuning/loading cap. settings, turning the poor 8877 grid
into a very expensive, very low power dummy load. A 100 watt exciter
can easily crispy-critter the grid under the above conditions. This is
why the installation of a grid-trip circuit is absolutely necessary
unless one is independantly wealthy or has a friend @ Eimac! I set
mine to trip @ 70ma per tube...easier to push reset button than to
change the tube! This makes an amp one more step toward idiot-proof!

(((73)))
Phil, K5PC
>

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

1771. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1402970244500001@news.vcnet.com>
Source record: 97322

In article <33035d8f.183127261@news.santafe.edu>, jpotter@jpaw.com wrote:

> measures@mail.vcnet.com (R. L. Measures) wrote:
...snip...

> We apparetnly are dealing with an apples/oranges problem here.
> Undoubtedly there is a small contribution to the grid dissipation from
> the ESR of the grid. However, that is normally ignored because it is
> small compared to the normal grid dissipation. Most of the heat being
> generated by the reactive grid curent is in this newsgroup.
>
> Grid dissipation arises not from the grid current flowing through the
> equivalent series resistance of the grid, but from the energy of the
> electrons stopped by the grid (grid interception)
. ...snip...
Agreed.

> What will really boil the gold of the grid is too many energetic
> electrons hitting it. One way for this to happen is for the plate tank
> to be too lightly loaded. Then the plate voltage swings to a low value
> and does not pull as many electrons through the grid and more
> electrons hit the grid. Another way is excess grid drive, which can
> arise from the external source or internally from self oscillation
> (parasitics).
>
Interesting dissertation, Jim. Is the grid effected by electrons that
bounce off the anode?

I have a recently-opened 8877 that failed in an HF amplifier. With 30x
magnification, I see areas of pooled gold on the grid wires. I see areas
where gold has apparently pooled and evaporated--baring the gray tungsten
(?) base-metal. The gold pools and evaporated areas are in the lower 30%
of the grid--i.e., the end of the grid that is nearest the (grounded)
grid-collet. In the top 70% of the grid, I see no pooled gold or areas
where gold evaporated. This damage pattern is similar to what I saw on the
grid of the 8877 that is shown in Figure 4 on page 16 in the September 1990
issue of *QST* magazine. I have seen this pattern before in other kaput
8877s that failed in HF service. However, IMO, such a damage pattern is
not consistent with HF current distribution.
I have one unopened, kaput 8877 that has loose gold according to the
Funderburg Test. If I get around to removing the anode, I will report the
results here.

An update from Rick, KC0UH:

Sent: 2/12/1997 8:37 AM
Received: 2/12/1997 10:23 AM
From: KC0HH, rjmay@iguana.ruralnet.net
To: Rich Measures, measures@vc.net

Hi Rich,

Tha AL-80A is working fine. I have not experienced any "snap crackles or pops" from the amp at all. The one thing I do notice is that it seems to tune smoother. I talked to Ray (NE1Y) yesterday and he said he noticed the same effect in his TL-922A after installing the suppressors.

See Ya

Rick
--

Rick May - KC0HH

Note: Rick uses the AL-80A exclusively on 80M to drive the same Delta Loop he was using when bandswitches #1 and #2 apparently arced and some contacts evaporated. Rick is currently using bandswitch #3. Photographs of bandswitches #1 and #2 can be found at Figure 15 on my Web site:

http://www.vcnet.com/measures/

---
e-mail copy to Mr. Potter

--
--Rich-- ag6k, 805-386-3734

1772. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1402970441000001@news.vcnet.com>
Source record: 97323

In article <855912473.16268@dejanews.com>, philk5pc@connect.net wrote:
...snip,,,

> > Very well said, Jim! It is only a matter of time before one will, in
> the heat of battle, select a wrong antenna, band switch position, or
> the wrong tuning/loading cap. settings, turning the poor 8877 grid
> into a very expensive, very low power dummy load. A 100 watt exciter
> can easily crispy-critter the grid under the above conditions.
...snip...

Is it likely that 100 watts of drive could evaporate gold from an 8877 grid? Each of the 96 gold-plated rectangular grid wires is 0.85 inches in length. Even if half of the drive power could be directed into the grid, that works out to 0.52 watts per grid wire. Does this seem likely to be enough energy to melt gold?

Maximum tank voltage and maximum grid current occur only at tank resonance. If the tank is resonant on a band other than the drive frequency, tank voltage and grid current would seemingly be minimal, Phil. I tried switching a SB-220 and a TL-922 to the wrong band. The amount of cathode drive was minimal in either case because: 1. the TS-440S throttles back due to high SWR, and 2. the tuned input circuit effectively blocks energy for other bands. The bottom line is that there wasn't much of anything going on when I selected the wrong bandswitch position and drove each amplifier.

Phil: does your 70mA grid-trip circuit trip when the bandswitch is set to the wrong band and the amplifier is driven?

---
e-mail copy to Mr. Clements

--
--Rich-- ag6k, 805-386-3734

1773. Re: L/C Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Tony Seaton <tony.seaton@turner.com>
Message-ID: <33047874.749D@turner.com>
Source record: 97324

Neil Heckt wrote:
>
> Looking for a superb L/C Meter at a low price?
> try http://www.aade.com
>
> neil
I bought one of these a couple of months ago and it is indeed superb and well worth the money.I have other L/C meters that I paid many times more and do not have the accuracy nor the low end range available on this unit.

Tony W4SX

1774. Re: 567 tone decoder chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Burt Lang <burt@rocler.qc.ca>
Message-ID: <33043E9D.3FAF@rocler.qc.ca>
Source record: 97325

Andrew R. Mitz wrote:
>
> Jeffrey Herman (jeffreyh@Hawaii.Edu) wrote:
>
> : I picked up a couple 567 ICs and want to use one for a 1050 Hz tone
> : decoder (that's the National Weather Service's alert tone). The
>How stable can I expect the decoder
> : to be?
>
> The biggest problem is the thermal characterists of the
> capacitor. C=.022uf is probably more like c=.022 +/-20% +/-.002/degF
> If you use a variable resistor, you also need to worry about
> the thermal characteristics of that resistor.
> --
> Andy Mitz (WA3LTJ)
> arm@helix.nih.gov

The supply voltage to the circuit can also be a serious stability
problem. The data sheets show (and experience proves) that the most
stable operation is obtained at a supply voltage of 5.6-6.0 volts.
Regulate the supply to somewhere in that range if possible.

Burt VE2BMQ>>>

1775. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Doug Robbins <doug.robbins@worldnet.att.net>
Message-ID: <01bc1a8c$a5ef5380$8c0a92cf@globalyst-630>
Source record: 97326
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David -

Good thing you have given up on getting any further help
from the Ham community because if you were still expecting
some you would be very disappointed.

73,
Doug - W2DR

David Holstein <holstein@erols.com> wrote in article
<5e0v8s$ehq@boursy.news.erols.com>...
> (A copy of this message has also been posted to the following
> newsgroups:
> rec.radio.amateur.misc,
> rec.radio.amateur.equipment,rec.radio.amateur.homebrew)
>
> In article <32E4282C.4561@earthlink.net>, csteger@earthlink.net wrote:
>
> > David Holstein wrote:
> > >
> > > Does anyone know of a mod to make the Realistic HTX-212 transmit out
> > > of band??? I want to be able to use this radio on my boat on the
> > > marine band instead of buying another radio.
> > >
> > > Thanx for any help.
> > > David, N3NGB@KE3GP.MD.USA.NOAM
> > > holstein@erols.com
> > > dholstein@comcastpc.com
> >
> > The HTX-212 will not X-mit out of band, with the exception of MARS/CAP.
> > Why do you need to X-mit out of band anyway?
>
> >The marine band is in the 160+ MHz range, while 2m is in the 146MHz
> >range. Unfortunately most transmitters can't over this wide of range
> >unless they are specially built. Most ham transcievers aren't in this
> >catagory (in fact I don't know of any that might be). To span this
range
> >you are talking about tuning over+10% in frequency. This isn't easy
with
> >high Q output stages.
>
> >I won't get into receive problems, but with 10.7 MHz IF's iimmaaggeess
> >come to mind as being especially troublesome.
>

> >As always, your mileage will vary.
>
> >The cheaper solution is to buy another radio, IMHO.
>
> >--
> >Tom Watson
> >tsw@3do.com (Home: tsw@johana.com)
>
>
> What do you mean you don't know of any radios tha can go from 2m to
> the marine band??? Most of the new Kenwood HTs can, such as the
> th-22, th078, and for that matter the alinco 2m ht's can just by
> snipping a wire.
>
> Look people. I asked for help! I would like to modify a ham rig for
> use on the marine band for emergency use so I don't have to waste a
> bunch of money on a MARINE rig I'll never use. I am sick and tired of
> all the unsolicited e-mails from cranky old men who have nothing
> better to do than to tell me this is illegal (which it is not).
>
> If you cannot offer me the help I ask for but would rather treat me
> like an unintelligent fool than KEEP YOUR FUCKING MOUTHS SHUT.
>
> Oh...I guess I'll get hate mail for that...
>
> Whatever...I give up on getting help from ham operators...you are all
> a bunch of turn-of-the-century jack-asses who cannot handle progress
> and new technology.
>
> From on generation X-er, I can't wait 'till you all die.
>
> David Holstein, Jr.
> holstein@erols.com
> N3NGB@KE3GP.MD.USA.NOAM
>
>
>

1776. Silver Plated Strap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Russ Ellsworth <russcwv@cyberhighway.net>
Message-ID: <330474D3.E64@cyberhighway.net>
Source record: 97327

I am in the process of building a HF Amp and need to find some copper strap, hopefully silver plated for tank circuit connections. The silver plating is more for looks than efficiency at HF but it would fit better with the other components than plain copper. Any ideas??
Thanks, Russ Ellsworth..WA6CWV, Boise Idaho

1777. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <33047bc8.256410791@news.santafe.edu>
Source record: 97328

measures@mail.vcnet.com (R. L. Measures) wrote:

>Interesting dissertation, Jim. Is the grid effected by electrons that
>bounce off the anode?
>

That is certainly possible. Such an effect would have to occur at high enough frequencies that the anode-grid potential reverses before the electrons get to the anode. The time it takes the electrons to traverse the tube is called the transit time. This is what generally limits the upper frequency of operation since the efficiency falls off rapidly when the transit time is a significant fraction of an rf cycle. There are other frequency limiting factors such as the inductance of the internal connections and the length of the electrodes (in cylindrical electrode tubes.)

The discussion above is limited to triodes. Secondary emiission from the anode is a problem with tetrodes, especially when the instantaneous anode voltage drops below the screen voltage. The suppressor grid was invented to help this proablem. Personally, for UHF in particular, I like triodes for their simplicity.

>I have a recently-opened 8877 that failed in an HF amplifier. With 30x
>magnification, I see areas of pooled gold on the grid wires. I see areas
>where gold has apparently pooled and evaporated--baring the gray tungsten
>(?) base-metal. The gold pools and evaporated areas are in the lower 30%
>of the grid--i.e., the end of the grid that is nearest the (grounded)
>grid-collet. In the top 70% of the grid, I see no pooled gold or areas
>where gold evaporated. This damage pattern is similar to what I saw on the
>grid of the 8877 that is shown in Figure 4 on page 16 in the September 1990
>issue of *QST* magazine. I have seen this pattern before in other kaput
>8877s that failed in HF service. However, IMO, such a damage pattern is
>not consistent with HF current distribution.

Two things could cause a distribution of heat damage as you describe it. One is that there was more dissipation in the damage area. The other is that the cooling was better in the undamaged area. The available cooling mechanisms are conduction and radiation. The bottom end is the only part with conduction cooling, through the grid support struccture. Radiation cooling would be to the anode. The distribution would depend on the distribution of temperature on the anode, and other factors, such as the emissivity of the anode and grid as a function of position. The end might be different from the sides, for example.

However, I don't see an obvious big difference in the grid cooling from one end to the other, except for conduction through the support structure which would add cooling to the bottom end (unless, through some perverse circumstances it was the source of heat.)

The upshot of all this is that a distribution of dissipation is a good possible explanation for more damage at the low end of the tube. Any open circuited rf structure will have a high impedance at the open end. The voltage will fall off as the cosine of the electrical distance from the open end and the current will increase as the sine of the electrical distance (fraction of wavelength, measured in degrees.) If the wavelength is comparable to the structure length, a current maxima would occur within the structure at the quarter wave point.

If standing waves are the source of the heating, they would obviously be from some unwanted source, i.e. parasitic oscillations. I don't know how long the grid structure is, but if you assume that it is a quarter-wave long, you can estimate the frequency of the standing wave. 2" is a quarter wavelength at 1bout 1500 MHz and 3" for 1000 MHz. Of course heat damage could occur before the quarter wave point so this sets an upper limit on the frequency. It could perhaps be half of that.

These are pretty high frequencies, but not impossible. However the upper frequency limit of the tube has been stated as 250 MHz. If the transit time factor is coming into play at 250 MHz, the gan of the tube will be pretty well shot at 500 MHz.

This is not inconsistent with what is observed becasue it is difficult to pin the frequency down that closely with a lot of arm-waving arguments.

If the frequency of a parasitic is on the order of 500 MHz, all discussions of resonant impedances and relative effectiveness of parasitic suppressors are arm-waving as well. Without knowing the voltage and current distribution in the spurious resonant circuits, which are affected by the parasitic suppressor itself, any attempt to de-Q the parasitic resonance so oscillations don't occur, is cut-and-try at best.

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

1778. Re: L/C/R Circuit to emulate crystals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <0nXAJXAAmFBzEwol@ddwyer.demon.co.uk>
Source record: 97329

In article <Pine.BSF.3.91.970213034809.18189N-100000@prog1.caprica.com>,
Ted <ted@kill-spam.net> writes
>* *
>* The email address in my "From" header is incorrect! *
>* It was changed to defeat spam-bots that send email. *
>* To email me, please use my CORRECT email address: *
>* *
>* Email : ted@caprica.com *
>* Webpage: http://www.caprica.com/~ted *
>* *
>* My Email is neither a newsgroup or a public forum! *
>* I do NOT want any advertizing via Email. Who ever *
>* sends unsolicited advertizing via Email risk prompt *
>* cancelation of internet service without refund and *
>* possible prosecution for harrassment and/or fraud! *
>* *
>
>I've been thinking about it and theoreticly it should be possible to
>build a tunable, plug-in L/C/R circuit to replace a radios crystals, that
>emulates a crystal in every way except frequency stability.
>
>If this is correct, I'd like to find some info on it. I have an old
>crystal controlled 12 channel Standard 2-Meter mobile that someone gave
>me and none of the crystals are for frequencies that I use. Crystals cost
>about $13 plus tax each these days and I'll be darned if I am going to pay
>$366 plus S&H to recrystal an old 12 channel boat anchor!
>
The answer is probably to build a frequency synthesiser to supply the
frequency instead of the crystal careful design required for the vco.

The synthetic crystal approach is not so daft!
The crystal is represented as an L+C +r in series with a C shunting the
lot.
You cant achieve the values the crystal gives but you can achieve the
same resonant frequency and R. You wont get crystal like stability
either but you should be able to repeat to a few ppm/second with careful
design. If you can put up with the size I would propose a helical
resonator with some dust iron in the core to increase inductance reduce
size. Basically you need to minimise coupling to the LC to reduce
circuit pulling.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

1779. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970214170200.MAA20404@ladder01.news.aol.com>
Source record: 97330

Hi Rich,

Before you go off into Oz with the gold again, can you answer this question?

In article <measures-ya02408000R0402970132530001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:

>In other words, the arcing that destroyed the original bandswitch and
>the replacement bandswitch in Rick May's AL-80 can not be explained by a
load
>fault. The only thing that was altered after bandswitch #3 was the
>VHF-Rp of the VHF suppressor in the AL-80.

Measure then claims....

>The original suppressor has an Rp of
>about 166 ohms at the anode resonant frequency of 160MHz.

That's the stock suppressor, 166 ohms (by the way 160 MHz is NOT the
frequency an AL-80 oscillates at if the suppresor is removed).

>The replacement suppressor has an Rp that is around 101 ohms at 160MHz.

That's his nichrome suppressor, 101 ohms.

>Since voltage gain is essentially Mu*Rp, decreasing VHF-Rp decreases VHF
voltage gain.

Rich is very plainly claiming LOWERING parallel (Rp he calls it)
resistance of the
suppressor will decrease VHF gain and increase VHF stability. He cites
that as
proof damage was from a parasitic.

We can deduce the following:

1.) If a lower Rp suppressor (such as in the suppressor Measures touts)
results in more system stability, the ultimate reduction in Rp will occur
with a dead short for a suppressor.

2.) If Measures is correct in his claims, the highest Rp would result from
an open anode lead, or a very high resistance in series with the anode
lead.

According to Measure's theory, if we connect a 5000 ohm resistor in series
with the anode it would make the PA less stable than with a zero ohm
series resistor. From that we can conclude removing suppressors from
equipment and replacing them with shorts will result in maximum VHF gain
reduction and maximum stability.

We all know this is untrue. The reason why the higher resistance value of Rp increases stability is because it is part of a larger system that has a finite impedance larger than zero ohms.

The only case where his suppressor would help is if the impedance of the anode path is very low, and the original suppressor has an even lower Rp than his suppressor. In the case of the AL-80, Rich's suppressor actually decreased stability....you can bet on it.

There is absolutely no technical reason for using nichrome, since even the slightest adjustment in inductance and resistance in a convetional suppressor will produce much more predictable results. The correct way to go is to increase the parallel impedance and resistance of the suppressor, not decrease it, if we need more stability.

73 Tom

1780. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: smd@ma.ultranet.com
Message-ID: <5e2ebg$mj5$2@decius.ultra.net>
Source record: 97331
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Doug Robbins" <doug.robbins@worldnet.att.net> wrote:

>David -

> Good thing you have given up on getting any further help
>from the Ham community because if you were still expecting
>some you would be very disappointed.

The funny thing is, his radio can't be modified. Never could.
The one good thing about the 212 is the narrow filtering. So
he never got the answer he wanted because that wasn't the answer!

Steve

1781. Schematic Entry Program Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: vincebucc@aol.com
Message-ID: <19970214210200.QAA00959@ladder01.news.aol.com>
Source record: 97332

I am looking for a simple shareware/freeware program that will allow me to draw schematic diagrams and save them to disk for later printout on a dot matrix printer.

Any suggestions, names of programs available ??

73s,
WA2RSX

1782. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb14.212645.8108@ke4zv.atl.ga.us>
Source record: 97333
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5e2ebg$mj5$2@decius.ultra.net> smd@ma.ultranet.com (Steve D'Amelio) writes:
>"Doug Robbins" <doug.robbins@worldnet.att.net> wrote:
>>David -
>
>> Good thing you have given up on getting any further help
>>from the Ham community because if you were still expecting
>>some you would be very disappointed.
>
>The funny thing is, his radio can't be modified. Never could.
>The one good thing about the 212 is the narrow filtering. So
>he never got the answer he wanted because that wasn't the answer!
>
>Steve

Don't confuse the excellent front end filtering of the HTX202
with the mediocre filtering of the HTX212. The latter *will* receive
out of band, and suffers the intermod which commonly accompanies
such a "feature" (I'm tempted to say "such a defect"). It will
also transmit out of band (MARS/CAP enabled), but not very far
out of band. The firmware won't let it operate on Marine channels
(where it would be illegal to use anyway since it isn't Type
Accepted for that service).

I'd like to add that it is important for amateurs to fight against
this sort of misuse of amateur equipment by people operating in
other services. We should all recall the uncomfortable restrictions
placed on amateur amplifiers due to misuse by members of the CB service.
We are likely to see similarly uncomfortable restrictions placed on
amateur VHF/UHF equipment if it continues to be misused by operators
in other services such as the public safety, land mobile, or marine
services.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1783. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970214213500.QAA02603@ladder01.news.aol.com>
Source record: 97334

In article <33047bc8.256410791@news.santafe.edu>, jpotter@jpaw.com (Jim Potter) writes:

>
>If the frequency of a parasitic is on the order of 500 MHz, all
>discussions of resonant impedances and relative effectiveness of
>parasitic suppressors are arm-waving as well. Without knowing the
>voltage and current distribution in the spurious resonant circuits,
>which are affected by the parasitic suppressor itself, any attempt to
>de-Q the parasitic resonance so oscillations don't occur, is
>cut-and-try at best.
>
>73 de K9GXC, Jim

Right on Jim.

You are telling him the same thing I and a dozen
others have tried to tell him for years.

73 Tom

1784. PCMCIA Scanning Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: JEREMY <publicsafety@earthlink.net>
Message-ID: <01bc1abc$779bbc00$b4252399@safety>
Source record: 97335

Does anyone know of any companies that make a PCMCIA scanning receiver.
publicsafety@earthlink.net

1785. Re: 567 tone decoder chip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb14.215500.8316@ke4zv.atl.ga.us>
Source record: 97336

In article <5dri7b$n2q@news.Hawaii.Edu> jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:
>
>I picked up a couple 567 ICs and want to use one for a 1050 Hz tone
>decoder (that's the National Weather Service's alert tone).

Jeff, you should be aware that the long tone alerting system will be phased out shortly. As of July 1 1997, the new digital EAS alerting system will be mandatory (it is already in place voluntarily starting Jan 1 1997). This uses a short digital data burst to activate alert receivers (it also transmits the text of alert messages to receivers equipped to decode it). Thus the old long alerting tones will soon be history.

[diagram snipped]
>So the bandwidth should be less than 140 Hz at 1050 Hz.
>Is this the standard circuit for the 567 or does someone have one
>that will provide less bandwidth? How stable can I expect the decoder
>to be?

This isn't a very stable circuit, but if coupled to a one-shot qualifier to eliminate falsing on short snatches of 1050 Hz, it will suffice for the old tone alert system (a real alert tone has a duration of 8 seconds, anything shorter is a false alarm). But you really need to build the new EAS decoder instead. That can be embedded in a single chip microcontroller. One of the cheap little PIC processors will do.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1786. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970214232501.SAA07757@ladder01.news.aol.com>
Source record: 97337

Hi Rich--

Glad to hear Rick May's amplifier tunes more smoothly. Could that be because the Q of the pi-network in his AL-80 has been compromised at HF by installing your product--reducing its harmonic surpression? Do you own a spectrum analyzer? Also, have you ever tested your line of aftermarket chokes for this effect using a spectrum analyzer? If so, can you provide credible data toward that end?

Rick K1BQT

1787. WTB : KENWOOD TSU-6

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: john <sandersj@swbell.net>
Message-ID: <3304F5DE.1232@swbell.net>
Source record: 97338

I am looking for 2 Kenwood TSU-6 Ctcss boards, please write if you
have 1 or 2 for sale...thanks John

1788. Re: Schematic Entry Program Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <330501E3.486A@aade.com>
Source record: 97339

vincebucc@aol.com wrote:
>
> I am looking for a simple shareware/freeware program that will allow me to draw schematic diagrams and save them to disk for later printout on a dot matrix printer.
>
> Any suggestions, names of programs available ??
>
> 73s,
> WA2RSX
check "my favorite links" at my web site http://www.aade.com for links
to many demo schematic and pcb cad programs.

neil

1789. HAM SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33052A13.3378@cyberramp.net>
Source record: 97340

http://cyberramp.net/~rnewland

1790. Re: 2m transmitter schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: longwave160m@juno.com
Message-ID: <MPG.d6ecd0731b874b8989687@news.infoave.net>
Source record: 97341

In article <3300DCDB.30AA@vcd.hp.com>, donh@vcd.hp.com says...
> Mark Lin wrote:
> >
> > Anyone know where, on the Internet, can I get a schematics for a 2m
> > transmitter?
> >
> > Mark
>
> Hi Mark,
>
> Rather than asking for "schematics" on the internet, I suggest you
> will have much better luck looking in appropriate magazines and
> handbooks for transmitter construction projects. A schematic, by
> itself, if of little use in building a VHF transmitter. Mechanical
> arrangement of the parts is critical also. Look in any ARRL handbook in
> recent decades for starters. Why this is so will also be explained to
> you as you educate yourself by reading about transmitters in general, in
> these books. The internet will never be a substitute for studying and
> READING to learn about a subject. It takes effort to learn enough
> so that you can then ask specific questions.
>
> 73 and GL,
>
> Don, W6JL
>

I think the point Mark is trying to make is that since he pays a fee to use the Internet, and almost everything one could possibly want to find is there- that it's all available for the fee he's already paying- it only makes sense to rationalize that somewhere on the Internet- there's a schematic (with accompanying diagrams for the construction thereof) for anything that anyone would wish to build. (Whew!-) So- why should he pay for a book or magazine when he can get it for "free"? Can you blame him?

1791. Re: How do Xtals determine transmitter frequency??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-14 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.d6ecf5b9382f26989688@news.infoave.net>
Source record: 97342

Excellent treatise! I learned a lot from reading that...

On the off chance that Joel was asking something of a different meaning, I offer an explanation from a different perspective:

There are FUNDAMENTAL oscillators and MIXED oscillators. In a fundamental circuit, the circuit operates at the same frequency as the crystal. In a mixed circuit (more than one crystal to get a "mixed" frequency), there exists the fundamental frequency of each crystal, the SUM of the two crystal, and the DIFFERENCE between the two crystals. They're usually used at the frequency of either the sum or difference, and the offending "other" frequencies are filtered away.

i.e. an 8MHz crystal and a 10MHz crystal would produce, for example, both 18MHz and 2MHz. (the subject is much more complex than that, but this is merely an example...) 73, Web Williams- KR4WM

1792. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1502971551480001@news.vcnet.com>
Source record: 97193

In article <1997Feb15.203248.13312@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> In article <measures-ya02408000R1302970927220001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
> >The 8877 has an anode to grid C of 10pF. The 4kV/1A maximum ratings for
> >the 8877 apply up to 250MHz. At 250MHz, 10 pF has 63.66 ohms of
> >capacitive reactance. According to Eimac *CURVE 4250*, the 8877 begins to
> >saturate at an anode to grid potential of about 250v. Therefore, with an
> >anode supply voltage of 4000V, the peak AC anode voltage is about 4000v
> >-250v = 3750v during the conduction half-cycle when the cathode is driven
> >negative. The AC rms anode voltage = 1/2^0.5 *3750v = 0.7071*3750v =
> >2651V-rms. When 2651V-rms is applied to capacitor whose reactance is 63.66
> >ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.
> >
> > ...Sure, 41A is an eyebrow-raising amount of grid current, but this is the
> >case according to standard AC Circuit-Analysis, which applies in all parts
> >of the universe, with the exception of one rather unique place in the State
> >of Georgia.
>
>
> Well, that sort of "AC Circuit-Analysis" may work in your universe
> (far, far, away), but not in the Real World(TM). Kirchhoff's law
> requires a closed path for current flow, and the topology of a GG
> vacuum tube amplifier doesn't provide a closed path including grid
> and plate which *only* includes the grid-plate capacitance, so your
> simple Ohm's law "AC Circuit-Analysis" fails.
...snip...

While it is true that no net displacement of electrons flows through a capacitor, nevertheless, an equal and opposite displacement of electrons flows back and forth that produces an I^2*ESR loss in real watts. Some people call AC an apparent current.

The next time you receive your monthly electric bill, Gary, try arguing that, since no real current---i.e., no net displacement of electrons---flowed through your residence, you could not possibly have consumed any electric power whatsoever.

>The full mesh also includes the plate tank circuit, and that's
>about 5000 ohms, ...snip...

The output Z of an amplifier tube in linear service is approximately equal to the anode supply voltage divided by two times the avg. anode current. For an 8877 at full-tilt, that would be 4000v/(2*1a)=2000 ohms. 5000 ohms does not win the teddy bear, Gary---however, you may choose between a

6-ounce bottle of "Babe" shampoo or a 5lb. bag of Bandini.

I stand by my answer of 41.63A-rms.

--
--Rich-- ag6k, 805-386-3734

1793. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Tom Rauch <w8jitom@worldnet.att.net>
Message-ID: <33068E8C.4AE9@worldnet.att.net>
Source record: 97194

> I stand by my answer of 41.63A-rms.
>
> --
> --Rich-- ag6k, 805-386-3734

Let's give this stuff the once over.

Measures wrote:

>Has anyone ever pondered why Eimac does not specify a maximum grid
>current rating for the 8877 or any of the other tubes that are designed for
>Class AB2 g-g service?

The real reason is because grid heating is primarily due to kinetic energy heating of the grid. Virtually none of it is related to I squared R losses in the conductor. Only I squared R heating or current limited by emission could have a current rating. This has been mentioned dozens of times.

>The 8877 has an anode to grid C of 10pF.

In grid driven service, but that figure includes all the capacitances. Those capacitances include those from the anode cooler to the tube's grid ring, internal grid support cone, grid support wires, and so on as determined in a special test fixture.

The actual capacitance to the grid wires is much less than ten pF.

Eimac's data sheet 2206 (3/91) lists Cgp in grounded grid at .1 pF. I have some question if it is really that low in practice, but certainly a figure of ten pF is far from correct for the capacitance of the anode to the grid wires themselves.

Figures in the data are mainly to insure tube interchange ability, are NOT to be used in calculating internal performance of the tube.

>The 4kV/1A maximum ratings for the 8877 apply up to 250MHz. At
>250MHz, 10 pF has 63.66 ohms of capacitive reactance. According to
>Eimac *CURVE 4250*, the 8877 begins to saturate at an anode to grid
>potential of about 250v. Therefore, with an anode supply voltage of 4000V,
>the peak AC anode voltage is about 4000v -250v = 3750v during the
>conduction half-cycle when the cathode is driven negative.
>The AC rms anode voltage = 1/2^0.5 *3750v = 0.7071*3750v =
>2651V-rms.

OK there.

>When 2651V-rms is applied to capacitor whose reactance is 63.66
>ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.

Eimac says 0.1 pF for Cgp, in grounded grid. That's 6366 ohms or .416 amperes. The data I have seen indicates Cgp of .1 pF and a OUTPUT capacitance of ten pF.

I am not qualified to say how much current is induced in the grid from capacitance, and how that current is distributed in the grid. Neither is Richard Measures. The truth is neither of us have any idea how much capacitance there is from the grid wires themselves to the anode INSIDE the tube, nor do we have any idea what the ESR or current distribution would be. So all your data, and any arguements about it, are a waste of everyone's time.

>Sure, 41A is an eyebrow-raising amount of grid current, but this is the
>case according to standard AC Circuit-Analysis, which applies in all parts
>of the universe, with the exception of one rather unique place in the State
>of Georgia.

Garbage in to the calculation, garbage out. That's the rule here.

>However, this place IS exceptional. For instance: the
>boiling point of gold is apparently lower there than elsewhere in the
>universe.

Indeed, your place is exceptional. In your place, the grid is heated by I squared R heating. Using your theories, the anode would take hundreds or thousands of amperes before heating to the point of damage.

Rich if you are correct, why is anode dissipation plate current times plate voltage in a dc state? Why is grid dissipation the same? Why for RF, is dissipation the integrated value of element current and voltage to the electron source (usually the cathode) over the time period the element is conducting current?

Your argument is beyond silly Richard. Even a mildly competent designer knows anode dissipation is I times E and the resistance of the conductor is unimportant in the calculation.

>With 96, paralleled, gold-plated flat grid-wires, the ESR of an 8877 grid
>must be extraordinarily low. The idea of less than 0.5A DC boiling the
>gold plating off a grid that Eimac designed to carry over 40A of AC---is
>about as believable as chipping golf balls on the front lawn at 10pm with
<snip>

Richard, how much current will the filament carry? How much current will the anode support? Do you really believe Eimac designed the grid to carry 40 amperes, or are you just pulling our legs?

Rich, put money where your mouth is. If I run 10 amperes of dc into a 8877 grid, will you agree to pay for every tube whose grid burns out? I'll run ONE ampere dc into a 8877 grid. Will you agree to pay for every 8877 that evaporates, flakes or sputters the gold grid plating off the grid?

Richard, you have to be doing this on purpose just to keep an argument going. Certainly you are not this stupid. You must know full and well the primary heating mechanism is the kinetic energy of the electrons bombarding the grid and anode, because any beginner generally knows that. To calculate anode

dissipation, it is simply I times E integrated over the period when the anode is conducting. Grid dissipation is calculated exactly the same way.

If this was not the case, Eimac WOULD give current limits for the grid. As it is, the grid dissipation must be calculated from grid to cathode voltage times current integrated over the conducting portion of the RF grid current cycle.

Output capacitance includes all the capacitances in parallel, and most of this capacitance is NOT to the grid wires themselves. Not only that, you certainly are smart enough to understand the entire amount of grid terminal current can not possibly flow over the entire length of the grid structure.

Are you mixing models and data to confuse other people, or are you really confused by tubes, circuits, and PA's? Is this intentional game playing, or is it something pathological you can't control?

1794. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Tom Sharples <sharples@hooked.net>
Message-ID: <33067F71.611B@hooked.net>
Source record: 97195
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

(this is a copy of my response on this subject to jeffreyH, Busybody)
Well, aren't we self-righteous today! In any event, as it happens I do own a marine radio. It is not portable, and is attached to my large boat. Therefore, it is not suitable for use in a small boat of the sort I rented on my last vacation. The FT-11 was much more appropriate, and, when the engine conked out in my rental boat in the middle of Puget Sound, I was able to call for help! So sorry I didn't use a "type approved" radio- I suppose it would have been much better for my family and I to row the ten nautical miles or so to the coast. In addition, Jeffrey, you really don't have the slightest idea what you are talking about with respect to performance- I have a fully equipped radio communications shop including a Service Monitor and both a HP and Advantest spectrun analyzer and shielded room. I've looked at both of the radios with respect to deviation, spurs, and frequency stability- they are fully the equal of my Midland marine radio. In fact many of the ham rigs are based on commercial designs or vice versa- for example the IC02 and the essentially identical Aircraft HT's.
So go mind your own business Jeffrey.

1795. Re: Source for *or* equivalent # for MC145163 (QEX 6/91)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970215213122.22053A-100000@Ocean.CAM.ORG>
Source record: 97196

I think it's the times, rather than a ban.

Years ago, when IC's first made digital synthesizers practical and inexpensive for the home builder, and the growth of 2M FM provided a need for a stable crystal replacement, the ham magazines were full of PLL synthesizer articles. Many of them were made with discrete TTL, though as time went on, higher scale integration did start fitting into the articles.

But by the time greatly integrated synthesizer IC's started to become greatly available, the need for building synthesizers for 2M rigs disappeared because most rigs were by then synthesized.

You can see a similar thing in the lack of 2M transmitter or receiver circuits being published. Year's ago, they were all over the place; if you went by the magazine articles today, nobody is building them. That might be true, but of course it brings up the question of which comes first? The lack of articles or the lack of building?

There never was a lot of interest in building HF synthesizers. Probably because LC oscillators were stable enough at that frequency range, and because it's so much harder to build a synthesizer with small channel spacing. You have to have a good loop filter, and you have to have some means of tuning it (BCD switches worked fine on 2M, but you want and need a tuning knob for HF use) and unless you can get really fine steps, you'll keep having odd sounding SSB.

Again, there isn't the "need" that occurred with 2M, since it's been a really long time since there weren't commercially available amateur transmitters/receivers/tranceivers that weren't VFO-tuned, and synthesizers were in the commercial rigs before they had really been explored in the homebrew arena.

SO there isn't a wealth of amateur-level information about HF synthesizers out there, which leads to low interest in building such things.

At least, with DDS there have been some articles published in the ham magazines. Presumably because it is a very new thing, so it has interested some in trying them out. With time, they too may "get lost" just as 2M rigs and 2M synthesizer construction articles have been lost.

Michael VE2BVW

On 12 Feb 1997, Steve wrote:

> It is for a "synthesized VFO" covering about 5 MHz using only
> that chip and about 4 transistors. It uses BCD "thumbwheel"
> switches to select the frequency.
>
> I always thought that a circuit like this would be duplicated
> hundreds of times over in magazines, but it is almost as if
> the magazines have a ban on it.
>

1796. Re: Cold Solder Joints - Why?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: "Douglas \"Lonely Planet Boy\" Shawhan" <lysdexia@evansville.net>
Message-ID: <Pine.SOL.3.91.970215232930.5759H-100000@world.evansville.net>
Source record: 97197

On 15 Feb 1997, CooperJim wrote:

> of scrapping the boards. Instead I and 3 techs spent the better part of a
> couple days resoldering every joint by hand on 25 large boards using the
> special technology vocabulary appropriate to describe the situation.

Hmmmmm, I checked my copy of the _Heathkit Electronics Learning Dictionary_ and all my Graf books... No mention of this vocabulary. I cannot find any mention of it anywhere.... Hmmm. May I however suggest that one might substitute many of the phrases and words from _Ye Olde Farmers Booke of Epithets and Sulphurous Statements_ by Maledictus MacRanter. I am especially fond of "May all your rich neighbors sheep take their ease in your beard, Ye great lover of blended whiskey!"

I have found this phrase to be especially useful in the case of cold solder joints..

Hope this helps!

d

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1797. Anti-Static Wrist Straps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: wendyemm <wendyemm@prodigy.net>
Message-ID: <33069EE2.4D79@prodigy.net>
Source record: 97198

http://www.mtechnologies.com/mthome for ham software, kits, the CQC homepage, and more!

I've come by a supply of disposable anti-static wrist straps, which are a great (and safe) way to make sure that you are grounded when working with static-sensitive devices such as CMOS integrated circuits. Sure, you can run a clip lead from your wrist-watch or ear lobe to a convenient ground, and that will take care of static. But it will also route any high-current electricity that you happen to come in contact with, and is a bit like working with your bare feet on a wet floor. The SAFE way to do it, as with these straps, is to incorporate a current-limiting resistance so that static will be grounded off without an increased risk of electrocution.

While I've started including one at no charge with the Island Keyer kits, I've got more than I really know what to do with. So here's the deal--

Send me One Dollar ($1.00) and an SASE with 55 cents postage on it and I will send you FOUR wrist straps.

I'll also include some product literature since it won't increase the postage cost. Or if you are ordering something from Milestone Technologies via the web site (url below) or by phone just mention this to get any number of wrist straps at 4/$1 with no additional postage cost.

By the way, these are genuine 3M 2209's in original sealed packaging, and they are UL certified. They include the wrist strap, paper lead with embedded conductor and resistance, and copper foil tape to attach to a convenient ground.

Send your dollar and an SASE with 55 cents postage to:

Milestone Technologies
3140 S. Peoria St. Unit K-156
Aurora CO 80014-3155

PLEASE if you need more info e-mail me direct at aa0xi@mtechnologies.com rather than take up bandwidth in the newsgroup!

73
Marshall
AA0XI
http://www.mtechnologies.com/mthome

1798. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Bob Doyle <doyle@primenet.com.DELETE-FOR-EMAIL>
Message-ID: <3306B04E.39EA6AAF@primenet.com.DELETE-FOR-EMAIL>
Source record: 97199

Peter Figielski wrote:
>
> >> It's been a while, but I recall once having trouble with a DDS
> >> based LO. The DAC in the DDS was generating alot of quantization
> >> spurs. Rather than try to get a high speed umpteen bit DAC I just
> >> used, effectively, a 1 bit DAC, which can run comfortably at a
> >> very high speed. And nothing is more linear than a 1 bit DAC
> >> (nothing digital anyway). Feeding this to the LO port of the
> >> mixer, the end result was alot cleaner.
>
> >I don't beleive that this works in general. Generating a digital
> >signal with 'a high speed umpteen bit DAC', de-aliasing it
> >properly, and squaring it is _not_ the same as generating
> >the signal with a 1 bit DAC.
>
> >If you think about it, the anti-alias filter is needed to
> >interpolate between the two digital samples near the zero
> >crossing - without it the 1 bit DAC changes synchronously
> >with the clock frequency. The result contains significant
> >phase noise. I can probably steer you to an ap-note that
> >expounds if you are interested...
>
> >> Art.
>
> >Bob
> >WA3TGF
> The the use of MSB of DDS is OK at the lower end of DDS range
> where the noise sidebands might be tolerable. As you approach the
> upper limit (1/2 clock frequency) the phase noise sidebands amplitude
> will be very close to the amplitude of the carrier and you will not be
> able to filter the sidebands out with low pass "brick wall" filter.
> There will be frequencies where there is no fractional division and
> the carrier will be clean at those frequencies.

You are exactly correct - but I think these are mostly pathological
cases. I don't think that what you describe is what the original
author described though.

Bob

1799. C-10026/USQ ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Shiloe <triabby@snowcrest.net>
Message-ID: <33067299.1C05@snowcrest.net>
Source record: 97200

I just purchaced an C-10026/USG Control, Reciever for $5.00 I dont have a power supply for it. I need to know the power reqirements for it. nor do i know much else about it. anything will help. thanks in advance
Shiloe

1800. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5e3124$1rcu$1@news-s01.ny.us.ibm.net>
Source record: 97245

In message <measures-ya02408000R1202970839350001@news.vcnet.com> -
measures@mail.vcnet.com (R. L. Measures) writes:
:>
:>
:>If an 8877 is being operated at Eimac's maximum rating of 4kV and
:>250MHz, the RF grid current is 2650v-rms/ 63.66 ohms = 41.63 amperes
:>rms.

Since the maximum rating of the 8877 grid is 25 Watts, you have to
be kidding about 40+ Amps of grid current. The grid structure
certainly has an resistance greater than 16 milli-Ohms (25/40^2).

Considering that grid current flows for a very short time, the
actual peak current is even higher ... If heating didn't kill grids
at 40 A the grid leads would certainly fuse.

The maximum PLATE rating is 1.0 Amp ... do you expect us to believe
the grid current is 40 TIMES the place current?

Sounds like more pathalogical science ...

==
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<subich@compuserve.com>
==

1801. LNB Cambridge Juno II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Michael Deppner <m.deppner@mail.telepac.pt>
Message-ID: <33057231.7233@mail.telepac.pt>
Source record: 97246

Frank Albrecht (CT1/DB7WO)
Vale dos Alhos
S. Miguel
P-7630 S. Teotonio
Portugal
E-Mail: m.deppner@mail.telepac.pt

Dear YL's, XYL's and OM's

which of you is working on the SHF (GHz-)bands and can help me with a circuit diagram for the LNB Cambridge Juno II, to recycle it for amateur use. Or have an adress, where I can get this paper.
Any advice to the above E-mail adress is very welcome. Thanks!

Many 73's

Frank
(CT1/DB7WO)

1802. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: bill harris <billharr@pop.flash.net>
Message-ID: <5e354g$3ig$2@excalibur.flash.net>
Source record: 97247
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

holstein@erols.com (David Holstein) wrote:
>(A copy of this message has also been posted to the following
>newsgroups:
>rec.radio.amateur.misc,
>rec.radio.amateur.equipment,rec.radio.amateur.homebrew)
>
>In article <32E4282C.4561@earthlink.net>, csteger@earthlink.net wrote:
>
>> David Holstein wrote:
>> >
>> > Does anyone know of a mod to make the Realistic HTX-212 transmit out
>> > of band??? I want to be able to use this radio on my boat on the
>> > marine band instead of buying another radio.
>> >
>> > Thanx for any help.
>> > David, N3NGB@KE3GP.MD.USA.NOAM
>> > holstein@erols.com
>> > dholstein@comcastpc.com
>>
>> The HTX-212 will not X-mit out of band, with the exception of MARS/CAP.
>> Why do you need to X-mit out of band anyway?
>
>>The marine band is in the 160+ MHz range, while 2m is in the 146MHz
>>range. Unfortunately most transmitters can't over this wide of range
>>unless they are specially built. Most ham transcievers aren't in this
>>catagory (in fact I don't know of any that might be). To span this range
>>you are talking about tuning over+10% in frequency. This isn't easy with
>>high Q output stages.
>
>>I won't get into receive problems, but with 10.7 MHz IF's iimmaaggeess
>>come to mind as being especially troublesome.
>
>>As always, your mileage will vary.
>
>>The cheaper solution is to buy another radio, IMHO.
>
>>--
>>Tom Watson
>>tsw@3do.com (Home: tsw@johana.com)
>
>
>What do you mean you don't know of any radios tha can go from 2m to
>the marine band??? Most of the new Kenwood HTs can, such as the

>th-22, th078, and for that matter the alinco 2m ht's can just by
>snipping a wire.
>
>Look people. I asked for help! I would like to modify a ham rig for
>use on the marine band for emergency use so I don't have to waste a
>bunch of money on a MARINE rig I'll never use. I am sick and tired of
>all the unsolicited e-mails from cranky old men who have nothing
>better to do than to tell me this is illegal (which it is not).
>
>If you cannot offer me the help I ask for but would rather treat me
>like an unintelligent fool than KEEP YOUR FUCKING MOUTHS SHUT.
>
>Oh...I guess I'll get hate mail for that...
>
>Whatever...I give up on getting help from ham operators...you are all
>a bunch of turn-of-the-century jack-asses who cannot handle progress
>and new technology.
>
>From on generation X-er, I can't wait 'till you all die.
>
>David Holstein, Jr.
>holstein@erols.com
>N3NGB@KE3GP.MD.USA.NOAM
>
>

I think you should post your queries over on the CB group. I think you
fit better there

--
****
* Bill Harris *
* Bill's Antique Radio Emporium - http://www.flash.net/~billhar *
* To e-mail, remove the second 'r' from my address. This was *
* added to discourage junk e-mail. *
****

1803. looking for help !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Ted <Ted@cyberus.ca>
Message-ID: <5e3c4n$aub@cybernews.cyberus.ca>
Source record: 97248

Hi,

I want to increase the gain of a small loop antenna
for 217 Mhz.I got to deal with an omnidirectional antenna to
be sure picking up every low power (1-2dBm) transmitter from
100 feet area.
Any idea will be welcome.Do I need to switch to some other type
of antenna ? (whip,beateregg,turnstill, etc ...)
Also, I'm looking for a very low noise RF amplifier for 217 Mhz.
The receiver is suposed to work indoor ... a nasty problem from
begining. I cannot increase the sensitivity of the receiver below
-95dBm with a small loop, and an RF (18dB) Front End Filter.

Thanks in advance !
Ted

1804. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970215041600.XAA22287@ladder01.news.aol.com>
Source record: 97249

In article <33047bc8.256410791@news.santafe.edu>, jpotter@jpaw.com (Jim Potter) writes:

>
>Two things could cause a distribution of heat damage as you describe
>it. One is that there was more dissipation in the damage area. The
>other is that the cooling was better in the undamaged area. The
>available cooling mechanisms are conduction and radiation. The bottom
>end is the only part with conduction cooling, through the grid support
>struccture. Radiation cooling would be to the anode. The distribution
>would depend on the distribution of temperature on the anode, and
>other factors, such as the emissivity of the anode and grid as a
>function of position. The end might be different from the sides, for
>example.

This is what Eimac gives as the main reason heat damage occurs
in one area. It is virtually impossible to ensure equal grid current
over the entire grid area when the tube is overdriven.

In normal operation, the grid wires remain outside the banded areas
of cathode. Grid interception of electrons is low, and since electron
bombardment is the primary heating mechanism ithe grid runs cool.

If the tube is overdriven, some areas of the grid attract electrons
much quicker than others and get hotter faster.

I think Rich argues against himself in his example about grid
currents of 41 amperes. He ignores several things (as usual) in his
theory.

He ignores the fact that MOST of the capacitance is outside the grid area
and really between the cooler (anode) and tube internals like the grid
support. Most important he falsely concludes the capacitance directly
relates to the anode voltage in calculating some sort of RMS current
that signifcantly heats in the grid.

Besides that, heating is a function of time and electron bombardment,
By the time the parasitic reached levels and duration times to cook the
grid, the current it would plainly show on the grid and plate meters.

The whole parasitic theory Rich offers is far beyond rational science
and never has been supported by anyone else in the industry, including
the tube manufacturer. To justify his wild claims, Rich stated the 25 watt
grid of an 8877 would dissipate 500 watts or more when driven with
HF RF. I have no idea where his latest voo doo about 41 ampere currents
in the grid is supposed to take us, but it won't be down the path of science.

Rich, if your suppressors work as you claim by having a low Rp value, the lowest Rp value is a short. Are you suggesting we remove suppressors and replace them with one-size-fits-all shorts?

73 Tom

1805. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970215051800.AAA25413@ladder01.news.aol.com>
Source record: 97250

In article <19970214232501.SAA07757@ladder01.news.aol.com>, k1bqt@aol.com (K1BQT) writes:

>
>Glad to hear Rick May's amplifier tunes more smoothly. Could that be
>because the Q of the pi-network in his AL-80 has been compromised at HF by
>installing your product--reducing its harmonic surpression?

Careful Rick,

We were told lots of other things that weren't true.

Remember his misquotes about:
broadcast transmitters, my comments about the B plus resistor,
Marv Born and the 1500, Buzz's employment history, the 922,
the claims he had never seen an arc caused by a load fault,
the 500 watt 8877 grids, the cat who's whiz smells like Chanel No 5,
and the thing about 41 ampere grids.

The whole thing might not be true.

73 Tom

1806. Tubes and Test Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Kevin Harlan <harlan@deltanet.com>
Message-ID: <01bc196b$99e5caa0$29cab2cc@Psrklein>
Source record: 97251

USED TUBES,UNTESTED BY US, SOLD "AS IS,WITHOUT WARRANTY",
These tubes were part of the estate of a long time radio
repairman,who was in business in the San Francisco area
from the 1930's to the 1970's.The tubes were bulk packaged
in large boxes marked "tested ok", however we have not
checked any of these tubes. We have been advised by one
of our customers that some of the tubes we shipped were
duds. These tubes have been priced accordingly.

****
* Shipping for the below tubes to anyplace in the USA: *
* 1 to 6 tubes, $3.00 // 7 or more tubes, shipping free.*
****

****
Used Tubes for $1.00 each:

OA2, 0C3, 1A7GT, 1H5GT, 1H5GT/G, 1LH4, 1R5, 1S5, 1T5GT,
1X2B, 1T4, 1U4, 1B3GT, 1N5G, 1N5GT, 3BC5, 3Q5GT, 3Q5GT/G,
3S4, 5AT8, 5AW4, 5T8, 5654, 5814A,6AG5, 6AK5, 6AL5, 6AU6,
6AU6A, 6BC5, 6BC6A, 6BH6, 6BJ6, 6CB6, 6CB6A, 6DA4, 6H6,
6H6GT/G, 6J4, 6J6, 6SJ7, 6T8, 6W4GT, 6X4, 6X4WA, 6AB4,
6AC7, 6AT8, 6AX4GT, 6AX4GTB, 6BQ6GA/6CU6, 6BQ6GT,
6BQ6GTB/6CU6, 6CL6, 6KT8, 6S4A6SA7, 6U10, 6W6GT, 7A8,
7Z4, 9003, 9006, 12AX4GTA, 12AX4GTB, 12D4, 12J5GT, 12Q7GT,
14B6, 25W4GT, UY85, 0Z4, 12AT7, 12AU7, 12AV6, 12AV7, 12AX7,
12SC7, 12SK7, 12SK7GT, 12SK7GT/G, 14Q7, 35C5, 50B5,
****
Used Tubes for 1.50 each:

1LN5, 1N6G, 3Q4, 5V4, 5W4G, 5Y4G, 6AQ5, 6AS8, 6AV5GT, 6AW8A,
6BG7, 6BN4, 6BQ7A, 6BS8, 6BU8, 6BZ7, 6C5, 6C6, 6CM7, 6CN7
6CS6, 6DT3, 6J7GT, 6K7, 6K7G , 6K7GT, 6K8G, 6L7G, 6SQ7,
6SQ7GT6SQ7GT/G, 6SR7, 6U7G, 6U8, 6V6GT, 6V6GTA, 6V6GT/G,
6V6GTY,6X5GT, 7A6, 7A7, 7C7, 7W7, 12BA6, 12BE6, 12K7GT,
14A7/12B7, 14B6, 14H7, 35W4, 35Y4, 35Z3, 39/44, 50A5, 50C5,
56, 57, 77, 78, 85, 117Z3, 117Z6, 117Z6GT, 5751, UF89
****
Used Tubes for $2.00 each:

2E26, 6AN8A, 6AS7G, 6AU5GT, 6BL7GT, 6CG8A, 6K6GT,
6K6GT/G,6Q7, 6Q7GT, 6SK7, 6V6G, 12SA7, 14F8, 35Z5GT,
35Z5GT/G, 1LB4, 5T4, 6A8, 6D6, 6DA5/EM81, 6DE7, 6EW7, 6F5,
6J5, 6J5GT, 7C6, 12A6GT, 12AT7WA, 12DQ6A, 12DT8, 12SQ7,
12SQ7GT, 12SQ7GT/G, 25CU6, 25EC6, 25L6G, 25L6GT, 25L6GT/G,
25Z6GT, 35L6GT, 35L6GT/G, 76, 117L7/M7GT, ECC81/12AT7

****
Used Tubes for $3.00 each:

6SN7GT, 6SN7GTA, 6SN7GTB, 6SN7WGTA, 3V4, 6CD6G, 6DQ6B,
6GW6/6DQ6B, 7C5, 27, 35, 37, 43, 50L6GT, 80
****
Used Tubes for $4.00 each:

6A7, 6BG6G, 6CG7, 6E05, 6F6GT, 6JA5, 6LX6, 7F8, 7N7,
24, 24A, 41, 47, 6AF6G, 6FQ7/6CG7, 75
****
Used Tubes for $5.00 each:

5V4G, 224, 226, 227, 239, 327
****
Used Tubes for $6.00 each:

5AS4A, 5U4GB, 6F6G, 124 ARCTURUS, 127 ARCTURUS, 301A
****
Used Tubes for $7.50 each:

5U4G, 26, 42
****
Misc used tubes cost per tube listed:

6U5 = $9.00, 171A = $11.25,180 = $15.00, 280 = $15.00,
247 = $18.75
****
****
Coaxial Connectors, TNC male for RG-59 and RG-62 size
cable, NEW, in original bags.

Amphenol 31-5061, clamp attachment, 99 available, $.75 each

Amphenol 31-5157, crimp attachment, 76 available, $.75 each

Shipping for above connectors to anyplace in the USA :
1 - 19 connectors $3.00, 20 or more connectors shipping free.

****
!NEW! 8,000 available. $0.10 each

JAN 6186W, Equal to 6AG5WA, Sharp cut-off, pentodes, 7 pin
miniature, made by Philips in the USA in 1986.

Shipping in USA 1-199 tubes $3.00, 200 or more shipping free.
****

Used Test Equipment Shipping free in continental USA:

(1) Power Mate BPA-40G, regulated power supply, 0 to 40 volts,
12 amps.Checked, working, but may need calibration and minor
repairs. $150.00

(1) Power mate BPG-40G, same as above,but not checked,
line cord cut,fuse and fuse holder cap missing,otherwise
looks clean. Offered "as is" for $50.00

(1) HP 628A, Signal generator, 15 to 21 Ghz, checked, working,
but may need calibration and minor repairs, $75.00

(1)BIRD 72-2 COAXIAL SWITCH,MANUAL,2 circuit,2 position,
850 W @ 100 MHz, N (f) $50.00

(2)HP G281A,WAVEGUIDE TO COAX ADAPTER,3.95 to 5.85 GHz,
UG-149A to N (f), $7.50 each

(4)HP J281A,WAVEGUIDE TO COAX ADAPTER,5.85 to 8.2 Ghz,
UG-344 to N (f), $7.50 each

(1)HP J370C,WAVEGUIDE FIXED ATTENUATOR,10 DB,5.85 to 8.2 GHz,
WR-137,UG-344, $10.00

(1)HP X375A,WAVEGUIDE ATTENUATOR,VARIABLE,8.2 to 12.4 Ghz,
0 to 25 DB,UG-39, $40.00

(1)HP G382A,WAVEGUIDE ATTENUATOR,VARIABLE,3.95 to 5.85 GHz,
0 to 50 DB,UG-149A, $50.00

(2)HP H382A,WAVEGUIDE ATTENUATOR,VARIABLE,7.5 to 10 GHz,
0 to 50 DB,UG-51, $40.00 each

(2)HP J382A,WAVEGUIDE ATTENUATOR,VARIABLE,5.85 to 8.2 GHz,
0 to 50 DB,UG-344, $40.00 each

(2)HP J424A, CRYSTAL DETECTOR MOUNT,UG344/BNC f,
$15.00 each

(1)HP J487B, THERMISTOR MOUNT, 5.85 to 8.2 GHz,
UG-344 / BNC (f), $15.00

(1)HP R752A,WAVEGUICE DIRECTIONAL COUPLER,10 DB,
26.5 to 40 GHz, missing termination, $25.00

(5)HP X752A,WAVEGUIDE DIRECTIONAL COUPLER,3 DB,
8.2 to 12.4 GHz, WR-90,UG-39, $10.00 each

(1)HP G914A,WAVEGUIDE TUNABLE LOAD,3.95 to 5.85 GHz,
WR-187,UG-149A, $10.00

(1)HP J920A,WAVEGUIDE MOVING SHORT,7.5 to 10 GHz,
knob tuned,UG-51, $10.00

(1)HP 8436A, BANDPASS FILTER, 8 TO 12.4 GHz,
N(m)to N(f),$50.00

(3)HP 11523A,LOAD RESISTOR, feedthrough termination for
HP 420 series detectors, $5.00 each

(3)JFW 50F-006, COAXIAL ATTENUATOR, 6 dB, DC to 2 GHz,
TNC connect, new never used, $10.00 each

(2)NARDA 47G2,WAVEGUIDE ATTENUATOR,
VARIABLE 0 to 40 dB, $25.00 each

(2)NARDA 4773-20 SMA COAXIAL ATTENUATOR, 20 dB,
DC to 6 GHz, $20.00 each

(4)NORSAL 12104 MIXER, SMA CONNECTORS,
NEW NEVER USED, $15.00 each

(1)WAVELINE 60562,WAVEGUIDE ATTENUATOR,VARIABLE, $25.00

Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks,
or cash by registered mail.

Thank you!!

Kevin
harlan@deltanet.com

****
{B} means "bulk class mail", we put that there so you
will able to tell you have bulk mail without having to
open it. You can also filter us out if you wish. Please
put REMOVE in the subject box and send reply to
harlan@deltanet.com if you do not wish to receive
mail from us again. Thank you!

1807. Tubes and Test Equipment for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Kevin Harlan <harlan@deltanet.com>
Message-ID: <01bc1afe$3a6a6d80$21cab2cc@Psrklein>
Source record: 97252

USED TUBES,UNTESTED BY US, SOLD "AS IS,WITHOUT WARRANTY",
These tubes were part of the estate of a long time radio
repairman,who was in business in the San Francisco area
from the 1930's to the 1970's.The tubes were bulk packaged
in large boxes marked "tested ok", however we have not
checked any of these tubes. We have been advised by one
of our customers that some of the tubes we shipped were
duds. These tubes have been priced accordingly.

****
* Shipping for the below tubes to anyplace in the USA: *
* 1 to 6 tubes, $3.00 // 7 or more tubes, shipping free.*
****

****
Used Tubes for $1.00 each:

OA2, 0C3, 1A7GT, 1H5GT, 1H5GT/G, 1LH4, 1R5, 1S5, 1T5GT,
1X2B, 1T4, 1U4, 1B3GT, 1N5G, 1N5GT, 3BC5, 3Q5GT, 3Q5GT/G,
3S4, 5AT8, 5AW4, 5T8, 5654, 5814A,6AG5, 6AK5, 6AL5, 6AU6,
6AU6A, 6BC5, 6BC6A, 6BH6, 6BJ6, 6CB6, 6CB6A, 6DA4, 6H6,
6H6GT/G, 6J4, 6J6, 6SJ7, 6T8, 6W4GT, 6X4, 6X4WA, 6AB4,
6AC7, 6AT8, 6AX4GT, 6AX4GTB, 6BQ6GA/6CU6, 6BQ6GT,
6BQ6GTB/6CU6, 6CL6, 6KT8, 6S4A6SA7, 6U10, 6W6GT, 7A8,
7Z4, 9003, 9006, 12AX4GTA, 12AX4GTB, 12D4, 12J5GT, 12Q7GT,
14B6, 25W4GT, UY85, 0Z4, 12AT7, 12AU7, 12AV6, 12AV7, 12AX7,
12SC7, 12SK7, 12SK7GT, 12SK7GT/G, 14Q7, 35C5, 50B5,
****
Used Tubes for 1.50 each:

1LN5, 1N6G, 3Q4, 5V4, 5W4G, 5Y4G, 6AQ5, 6AS8, 6AV5GT, 6AW8A,
6BG7, 6BN4, 6BQ7A, 6BS8, 6BU8, 6BZ7, 6C5, 6C6, 6CM7, 6CN7
6CS6, 6DT3, 6J7GT, 6K7, 6K7G , 6K7GT, 6K8G, 6L7G, 6SQ7,
6SQ7GT6SQ7GT/G, 6SR7, 6U7G, 6U8, 6V6GT, 6V6GTA, 6V6GT/G,
6V6GTY,6X5GT, 7A6, 7A7, 7C7, 7W7, 12BA6, 12BE6, 12K7GT,
14A7/12B7, 14B6, 14H7, 35W4, 35Y4, 35Z3, 39/44, 50A5, 50C5,
56, 57, 77, 78, 85, 117Z3, 117Z6, 117Z6GT, 5751, UF89
****
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35Z5GT/G, 1LB4, 5T4, 6A8, 6D6, 6DA5/EM81, 6DE7, 6EW7, 6F5,
6J5, 6J5GT, 7C6, 12A6GT, 12AT7WA, 12DQ6A, 12DT8, 12SQ7,
12SQ7GT, 12SQ7GT/G, 25CU6, 25EC6, 25L6G, 25L6GT, 25L6GT/G,
25Z6GT, 35L6GT, 35L6GT/G, 76, 117L7/M7GT, ECC81/12AT7

****
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24, 24A, 41, 47, 6AF6G, 6FQ7/6CG7, 75
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5V4G, 224, 226, 227, 239, 327
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5U4G, 26, 42
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(1) Power mate BPG-40G, same as above,but not checked,
line cord cut,fuse and fuse holder cap missing,otherwise
looks clean. Offered "as is" for $50.00

(1) HP 628A, Signal generator, 15 to 21 Ghz, checked, working,
but may need calibration and minor repairs, $75.00

(1)BIRD 72-2 COAXIAL SWITCH,MANUAL,2 circuit,2 position,
850 W @ 100 MHz, N (f) $50.00

(2)HP G281A,WAVEGUIDE TO COAX ADAPTER,3.95 to 5.85 GHz,
UG-149A to N (f), $7.50 each

(4)HP J281A,WAVEGUIDE TO COAX ADAPTER,5.85 to 8.2 Ghz,
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WR-187,UG-149A, $10.00

(1)HP J920A,WAVEGUIDE MOVING SHORT,7.5 to 10 GHz,
knob tuned,UG-51, $10.00

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(3)HP 11523A,LOAD RESISTOR, feedthrough termination for
HP 420 series detectors, $5.00 each

(3)JFW 50F-006, COAXIAL ATTENUATOR, 6 dB, DC to 2 GHz,
TNC connect, new never used, $10.00 each

(2)NARDA 47G2,WAVEGUIDE ATTENUATOR,
VARIABLE 0 to 40 dB, $25.00 each

(2)NARDA 4773-20 SMA COAXIAL ATTENUATOR, 20 dB,
DC to 6 GHz, $20.00 each

(4)NORSAL 12104 MIXER, SMA CONNECTORS,
NEW NEVER USED, $15.00 each

(1)WAVELINE 60562,WAVEGUIDE ATTENUATOR,VARIABLE, $25.00

Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks,
or cash by registered mail.

Thank you!!

Kevin
harlan@deltanet.com

1808. Wanted: Audio Notch Filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: hansfong@ms.hinet.net
Message-ID: <5e3iu4$g4e@netnews.hinet.net>
Source record: 97253

Hello everybody,

Some ten years ago I build an audio notch filter plugged into my earphone socked to filter out those nasty shortwave heterodynes my mother couldn't stand. I just recently pulled out my shortwave radio again, but the notch filter has long gone.

I moved from Holland to Taiwan and there isn't much available here with respect to Ham magazines, libraries or contacts. So does anyone of you have a diagram to build one, or know a place to get one? Ideally it would be available on-line, otherwise maybe someone could be so kind to make a xerox and send it to me (all costs reimburst + a nice gift, of course).

You can mail me directly at hansfong@ms2.hinet.net

Thanks a bunch. Greetings from Taiwan.

Hans van den Boogert

1809. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: au@ix.netcom.com
Message-ID: <5e3lbv$897@sjx-ixn4.ix.netcom.com>
Source record: 97254
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

>I'd like to add that it is important for amateurs to fight against
>this sort of misuse of amateur equipment by people operating in
>other services. We should all recall the uncomfortable restrictions
>placed on amateur amplifiers due to misuse by members of the CB
service.
>We are likely to see similarly uncomfortable restrictions placed on
>amateur VHF/UHF equipment if it continues to be misused by operators
>in other services such as the public safety, land mobile, or marine
>services.

I might add that unless the radio's that are modified to operate in
other bands cause a problem, the manufacturers have no incentive to
prevent the mods. It took an act of congress to get the scanner/ham
radio's to not scan cell band easily. Yes I know that there are lots
of them that can do that still.

The FCC doesn't look over your shoulder to see what kind of radio you
operate. People are always looking for the cheapest way to get a job
done. If that means getting a ham radio instead of an expensive
commerical, they will do it. The mods are all over the net.

I'm not saying its ok to do this, but that is how the market these days
is geared. The mods have proven to be a very popular feature and will
continue to be included in the radio's.

George

1810. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: NOSPAM.wessel@via.nl
Message-ID: <5e41nr$13f$1@news.via.nl>
Source record: 97255
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

William Vynck <RACO@ping.be> wrote:

>The official Kenwood TH-79E/A modifications can be found on my homepage.
>Those are JPG files that you can download and vieuw with a picture
>viewer.

>Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz

Be aware that these file contain obvious errors. Look at table 2: the E and E3 units seem to be electronically identical, yet their frequency coverages differ.
Mmmm.... Wonder what else is wrong!

1811. Re: Equipment designation on old QSL cards --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: philk5pc@connect.net
Message-ID: <5e4ajv$qli@dallas1.connect.net>
Source record: 97256

In article <jwg6-1002971419010001@cu-dialup-0823.cit.cornell.edu>, jwg6@cornell.edu (Joel Govostes) says:
>
>...snip....
>
>Question is this:
>
> On many of the oldest cards, transmitters and receivers were listed
>separately (no compact transceivers back then!). BUT they don't give the
>tube names. All they will have is a set of numbers, separated by hyphens,
>denoting the circuits used.
>
>What do these numbers stand for? Are they prefixes to the tube types or
>something? How can you tell what the circuit was like just by these sets
>of numbers?
>
>...snip....

Hi, Joel...give some examples and we old coots will take a stab at 'em!

(((73)))
Phil, K5PC

1812. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1502970550520001@news.vcnet.com>
Source record: 97257

In article <33047bc8.256410791@news.santafe.edu>, jpotter@jpaw.com wrote:

> measures@mail.vcnet.com (R. L. Measures) wrote:
>
> >Interesting dissertation, Jim. Is the grid effected by electrons that
> >bounce off the anode?
> >
>
> That is certainly possible. Such an effect would have to occur at high
> enough frequencies that the anode-grid potential reverses before the
> electrons get to the anode
. ...snip...

> >I have a recently-opened 8877 that failed in an HF amplifier. With 30x
> >magnification, I see areas of pooled gold on the grid wires. I see areas
> >where gold has apparently pooled and evaporated--baring the gray tungsten
> >(?) base-metal. The gold pools and evaporated areas are in the lower 30%
> >of the grid--i.e., the end of the grid that is nearest the (grounded)
> >grid-collet. In the top 70% of the grid, I see no pooled gold or areas
> >where gold evaporated. This damage pattern is similar to what I saw on the
> >grid of the 8877 that is shown in Figure 4 on page 16 in the September 1990
> >issue of *QST* magazine. I have seen this pattern before in other kaput
> >8877s that failed in HF service. However, IMO, such a damage pattern is
> >not consistent with HF current distribution.
>
> Two things could cause a distribution of heat damage as you describe
> it. One is that there was more dissipation in the damage area. The
> other is that the cooling was better in the undamaged area. The
> available cooling mechanisms are conduction and radiation. The bottom
> end is the only part with conduction cooling, through the grid support
> struccture.

However, the end of the grid that is supported/presumably-cooled by the
grid collet is the end that exhibits missing gold.

...snip...

> However, I don't see an obvious big difference in the grid cooling
> from one end to the other, except for conduction through the support
> structure which would add cooling to the bottom end (unless, through
> some perverse circumstances it was the source of heat.)

This seems unlikely since the grid collet is grounded to the chassis with
finger-stock.

> The upshot of all this is that a distribution of dissipation is a good
> possible explanation for more damage at the low end of the tube. Any
> open circuited rf structure will have a high impedance at the open
> end. The voltage will fall off as the cosine of the electrical
> distance from the open end and the current will increase as the sine
> of the electrical distance (fraction of wavelength, measured in
> degrees.) If the wavelength is comparable to the structure length, a
> current maxima would occur within the structure at the quarter wave
> point.
>
> If standing waves are the source of the heating, they would obviously
> be from some unwanted source, i.e. parasitic oscillations. I don't
> know how long the grid structure is,

The length and the diameter of the 8877's grid are about one-inch each.
The grid-collet, contact-ring and finger-stock contact-ring grounding
collet (p/n135305) might add another inch or so.

>but if you assume that it is a
> quarter-wave long, you can estimate the frequency of the standing
> wave. 2" is a quarter wavelength at 1bout 1500 MHz and 3" for 1000
> MHz. Of course heat damage could occur before the quarter wave point
> so this sets an upper limit on the frequency. It could perhaps be half
> of that.
>
If the grid is behaving somewhat like a vertical antenna, the proximity of
the anode certainly provides plenty of 'top-loading' to reduce the resonant
frequency. However, such is well beyond the capability of my Kenwood
dipmeter.

> These are pretty high frequencies, but not impossible. However the
> upper frequency limit of the tube has been stated as 250 MHz. If the
> transit time factor is coming into play at 250 MHz, the gan of the
> tube will be pretty well shot at 500 MHz.

Possibly---however, the 8938, which is rated at 4kV/1A/1500w-diss./500MHz,
appears to essentially be a coaxial base version of the 8877, but with a Mu
of 125 vs. the 8877's Mu of 200. So, perhaps the 8877 does have a modicum
of gain at 500MHz.

> This is not inconsistent with what is observed becasue it is difficult
> to pin the frequency down that closely with a lot of arm-waving
> arguments.
>
> If the frequency of a parasitic is on the order of 500 MHz, all
> discussions of resonant impedances and relative effectiveness of
> parasitic suppressors are arm-waving as well. Without knowing the
> voltage and current distribution in the spurious resonant circuits,
> which are affected by the parasitic suppressor itself, any attempt to
> de-Q the parasitic resonance so oscillations don't occur, is
> cut-and-try at best.
>
> 73 de K9GXC, Jim

>
I agree. At VHF and UHF, the complexities can be enormous. Perhaps this is why not many articles on calculating the design of parasitic-oscillation suppressors have been published in QST magazine. The only such article I know of is the one I wrote for the March, 1989 issue.

How many amplifier construction articles explain their design of their VHF suppressors?
I can not recall seeing one in QST or in any publication. Typically, such authors only say something like: wind 5 turns of #18 on a 47 ohm resistor--period ..... To me, this treatment, or lack thereof, has the earmarks of 'cut-and-try' as well as a lack of understanding of what is going on in the VHF-resonant anode circuit of HF amplifiers. This sort of thing bears a certain similarity to the so-called "cures" for bubonic plague that were being sold in the streets of Europe in centuries past.
---
e-mail copy to Mr. Potter

--
--Rich-- ag6k, 805-386-3734

1813. Re: Crowbar Circuit????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5e4grg$pg2@mtinsc04.worldnet.att.net>
Source record: 97258

BTW Tanya,

Re my (and other) posts. In my homebrew 100 amp 13v PS, I DO have a
fuse in the Output. The "fast blow", large, cartridge fuses offer the
least voltage drop for the most protection. _Woody_

Tanya Fisher wrote:
>
> Hello:
> I have just purchased a TM-241A 2M radio brand spanking new. A fello ham
> told me that if I am going to use a 12V power supply I should have a
> crowbar circuit in it. What I would like to know does any body have
> plans for this type of circuit? Any other information about it would
> also be appriciated. You may mail comments to rjagoe@nbnet.nb.ca
> Thank you for your time de VE9BL Ryan.

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

1814. Re: Silver Plated Strap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5e4h3j$pg2@mtinsc04.worldnet.att.net>
Source record: 97259

Russ,
I sheared strips from roofing (copper) flashing. The Ag plating can
then be done using a kit called (I think ?) "Cool-Amp". The kit isn't
cheap, but should be more economical than a plating shop for just a few
feet of strap. 73, Woody

Russ Ellsworth wrote:
>
> I am in the process of building a HF Amp and need to find some copper
> strap, hopefully silver plated for tank circuit connections. The silver
> plating is more for looks than efficiency at HF but it would fit better
> with the other components than plain copper. Any ideas??
> Thanks, Russ Ellsworth..WA6CWV, Boise Idaho

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

1815. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1502970629330001@news.vcnet.com>
Source record: 97260

In article <19970214232501.SAA07757@ladder01.news.aol.com>, k1bqt@aol.com (K1BQT) wrote:

> Hi Rich--
>
> Glad to hear Rick May's amplifier tunes more smoothly. Could that be
> because the Q of the pi-network in his AL-80 has been compromised at HF by
> installing your product--reducing its harmonic surpression?

>Do you own a
> spectrum analyzer?
snip...
Nope---but I do own a television receiver, AND I am married. Reception is via a TV antenna. If my suppressor-modified SB-220 and my suppressor-modified TL-922 were putting out harmonics, Rick, let me assure you that this fact would be made abundantly clear to me in no uncertain terms.

If you have access to a spectrum analyzer, perhaps you could provide some data to back up your (and Mr. Rauch's) unmathematically-based and somewhat-weary allegations that the sky is falling from a burden of harmonics.

The smoothness that is reported means less tuning anomalies. If you were tuning up an amplifer, and at resonance on one particular band you noticed that there were two peaks in power output as you rotated the Tune capacitor, would you be concerned, Rick?
---
e-mail copy to Mr. Frederick H. Littlefield, K1BQT

--
--Rich-- ag6k, 805-386-3734

1816. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970215150401.KAA13522@ladder01.news.aol.com>
Source record: 97261

Hi RIch--

In your last post to me you wrote:

(Rick) >Do you own a
> spectrum analyzer?
snip...
(Rich) "Nope---but I do own a television receiver, AND I am married.
Reception is
via a TV antenna."

Rich, if your TV set picks up the second and third harmonic of an amplifier operating on 80 meters, it must have much wider coverage than mine. Does it also feature a wide-range RSSI meter so you can measure how far down those harmonics are? Don't you think it is a little irresponsible to market a product for installation in high-power FCC type-accepted equipment and have no idea--other than a grid-dip meter and your wife's TV set--what the effect of that device is on spectral purity?

BTW, the other day, I soldered a DC blocking capacitor onto a lead connected to my spectrum analyzer--and the display went wild. Does this mean my soldering iron has VHF parasitics? Do you also make a nichrome choke to fix this?

Rick K1BQT

1817. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Tim Shearer <xTimothy_Shearer@MK.com>
Message-ID: <5e4ikt$4oh@esgadm.esg.mk.com>
Source record: 97262
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Tom Sharples <sharples@hooked.net> wrote:
>A Yaesu FT-2500 will easily do this. The mod is in the Artsci books- you
>just cut a green wire. I've used this rig on the marine bands with no
>problem. Also have done the same with a Yaesu FT10 HT.

I hope everyone understands this is against FCC regulations. Amateur tranceivers are not TYPE ACCEPTED for this service. There are reasons for this. I take it no out of amateur band transmissions will be made until a bonfide life and death situation occurs.

You should not publically admit to federal offenses. You admissions are being permanently recorded in archives like DejaNews.

1818. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1502970650490001@news.vcnet.com>
Source record: 97263

In article <5e3124$1rcu$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe Subich) wrote:

> In message <measures-ya02408000R1202970839350001@news.vcnet.com> -
> measures@mail.vcnet.com (R. L. Measures) writes:
> :>
> :>
> :>If an 8877 is being operated at Eimac's maximum rating of 4kV and
> :>250MHz, the RF grid current is 2650v-rms/ 63.66 ohms = 41.63 amperes
> :>rms.
>
> Since the maximum rating of the 8877 grid is 25 Watts, you have to
> be kidding about 40+ Amps of grid current. The grid structure
> certainly has an resistance greater than 16 milli-Ohms (25/40^2).
>
> Considering that grid current flows for a very short time, the
> actual peak current is even higher ... If heating didn't kill grids
> at 40 A the grid leads would certainly fuse.
>
> The maximum PLATE rating is 1.0 Amp ... do you expect us to believe
> the grid current is 40 TIMES the place current?

I did not expect anyone who does not understand AC Circuit Analysis to believe it.

. When did Joe Subich become the authorized spokesperson for "Us"? Do you have a frog in your pocket?

--
--Rich-- ag6k, 805-386-3734

1819. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5e4jn7$j3i@news1.mnsinc.com>
Source record: 97264
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

You can also find MODS on the Internet via:

http://www.mnsinc.com/bry/hamlynx/hammods.htm

Tom Sharples <sharples@hooked.net> whistled a happy tune like:

|>A Yaesu FT-2500 will easily do this. The mod is in the Artsci books- you
|>just cut a green wire. I've used this rig on the marine bands with no
|>problem. Also have done the same with a Yaesu FT10 HT.

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

1820. Re: IRF 510'S ON SPECIAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5e4jn5$j3i@news1.mnsinc.com>
Source record: 97265

BUT WHY ARE WE *** SHOUTING *** ?

jparker@fix.net (Jerry Parker) whistled a happy tune like:

|>DAN'S SMALL PARTS HAS PUT IRF 510'S ON SPECIAL AT 5 FOR $4.50

|>CHECK OUT HIS SPECIALS AND REGULAR INTERNET CATALOG AT:

|> HTTP://WWW.FIX.NET/DANS.HTML

|>ENJOY,,,JERRY...K

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

1821. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.d6f9bd69f031485989689@news.infoave.net>
Source record: 97266
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> Does anyone know of a mod to make the Realistic HTX-212 transmit out
> of band??? I want to be able to use this radio on my boat on the
> marine band instead of buying another radio.

Have you looked on the QRZ Website? I've found quite a few mods there.

Now, as an answer to some of the complaints you're receiving about the pros and cons of amateur radios having the capability to transmit out of band-

I am a career firefighter. I work in a <paid> department, and do it for a living. I'm not some yahoo volunteer out to make a name for myself by doing stupid things. (Yeah right, like going into a burning building while others are coming out isn't stupid, but hey, somebody has to do it!) When I got my amateur license, it was then that I found out that certain ham radios could be modified to work out-of-band. At the time, our department was stiffed for funds, and occasionally, some of us would be inside a burning building with no way to communicate with the outside (lack of radios). It was a godsend that I obtained permission from our department's chief to use my amateur HT and mobile to transmit on the fire department frequencies! He understood the EMERGENCY nature of my use, and consented without me even having to use my cattle prod! I've also used my mobile rig when I was off-duty to call the F.D. Dispatcher and inform them of auto accidents that may have gone unreported for long periods of time. Or to let them know that no emergency response was necessary, saving the wear and tear on our engines. At $700 per run, it adds up. Yes, all things considered, it costs about $700 to put a fire truck in the street for EACH CALL! And since we run first-responder medical as well as fire calls, and ran over 5000 calls last year- well, you get the picture. I've only used my mobile to call in accidents four times in 5 years. It's not like I abuse it. I don't call the dispatcher to ask what time it is- it's ONLY FOR EMERGENCIES! If this fellow wants to use his radio in a like manner, WHO CARES!?!? Our department now has more radios, and I no longer must carry my HT into fires. It is my opinion that my use of my amateur HT/mobile on frequencies AUTHORIZED by my department probably saved time, money, and lives. How can you argue with success? 73, Web Williams, KR4WM, City of Myrtle Beach Fire Department, Myrtle Beach, SC

1822. Cold Solder Joints - Why?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: John Lockhart <jlockj@minn.net>
Message-ID: <01bc1b5c$387898e0$27c99dcc@default>
Source record: 97267

Hello to the Group!

Any ideas out there why cold solder joints often manifest themselves four or five years after the soldering took place? I used to think a cold solder joint wouldn't work or would be intermittent from day one. Experience with some Kenwood transceivers and this week with a Sony TV is showing me otherwise. Is it related to wave soldering with solders that melt at lower temperatures? Or ?????

Thanks,

John W0DC

1823. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <330601C4.6E02@crpl.cedar-rapids.lib.ia.us>
Source record: 97268

R. L. Measures wrote:
>
> In article <5e3124$1rcu$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe
> Subich) wrote:
>
> > :>If an 8877 is being operated at Eimac's maximum rating of 4kV and
> > :>250MHz, the RF grid current is 2650v-rms/ 63.66 ohms = 41.63 amperes
> > :>rms.

I have a question about plate to grid capacitance.

Since there is also a fairly large grid to cathode capacitance, doesn't a large part of the plate to grid capacitance current pass on to the cathode, rather than out through the grid terminal, especially if the cathode is grounded and the grid is not grounded, but instead is at some impedance, say 50 ohms, above ground?

If this is true, then doesn't the question of grid current disspation due to plate-grid capacitance become a lot more complicated?

Bill W0IYH

1824. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Jim Daneke <daneke@ix.netcom.com>
Message-ID: <3305E8D7.2989@ix.netcom.com>
Source record: 97269
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Tim Shearer wrote:
>
> Tom Sharples <sharples@hooked.net> wrote:
> >A Yaesu FT-2500 will easily do this. The mod is in the Artsci books- you
> >just cut a green wire. I've used this rig on the marine bands with no
> >problem. Also have done the same with a Yaesu FT10 HT.
>
> I hope everyone understands this is against FCC regulations. Amateur
> tranceivers are not TYPE ACCEPTED for this service. There are reasons for
> this. I take it no out of amateur band transmissions will be made until a
> bonfide life and death situation occurs.
>
> You should not publically admit to federal offenses. You admissions are
> being permanently recorded in archives like DejaNews.
>
THe FCC, with all their people and funds is now searching the DejaNews
archives to find out who has admitted to federal offenses. They will
then go before an OJ Simpson kind of Grand Jury and get a warrrant for
arrest. The FCC will get a plane ticket and show up to your door and
confront you with your e-mail admission. They will search your house and
confiscate your radios and computers. So make sure not to admit to
violating out of band rules!

Jim, N0JD

1825. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9702150859184064@atdbbs.com>
Source record: 97270

>>The funny thing is, his radio can't be modified. Never could.
>>The one good thing about the 212 is the narrow filtering. So
>>he never got the answer he wanted because that wasn't the answer!

Steve - the funny thing is...you're dead wrong.

From the manual pp.17-18 of the HTX-212:

You can extend the memory and transmit frequency range from its
standard 144.6 - 148.0 to 143.0 - 149.0 by holding down the F
and DTMF buttons while turning on the unit. Either way, the
VFOs will tune 136-174.

BTW, being a new ham myself, I just couldn't pass up this Radio Shack
discontinued model. A bunch of features like PLs and DTMF in and out
are standard. Very few of them left out there[1], but when you DO find
them, they are at $200 bucks! And if you take one that may be a display
unit, they will double the one year warranty to two years at no charge!

Now, how could I beat that? :)

John M. Yellenic - N3YPR
<yellenic@epix.net>

NOTES:

[1] - My sources advise me that there are thousands of these units
available "in the system" as of 02/97. -Clint Bradford, KE6LCS

Clint Bradford, KE6LCS/KAF3359 909.681.6210 Voice sysop@atdbbs.com
ATTENTION to Details 909.681.6221 BBS ftp@atdbbs.com

1826. Need copy of Service manual for TR-8400 and TR-7400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: gerwitz@inficad.com
Message-ID: <5e4pjb$b7l$2@news.inficad.com>
Source record: 97271

Can anyone help me locate a copy of a service manula for a TR-7400 and another manual for a TR-8400? I need to align both of my radios and need the alignment procedure. I will pay reasonable copy and mailing costs. Please respond to: gerwitz@inficad.com

Thank you. I appreciate the help.

Jim
N7QHK

1827. [Q] 2 Meter Transciever Kits???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: buster <lathrop@azstarnet.com>
Message-ID: <330585BC.1451@azstarnet.com>
Source record: 97272

Been entertaining the notion to build my own radio.

I've been operating for a little while now, and have been having lot's of fun with SSB on 6,2 and 1296. Weak signal terrestrial has been a blast. I just would like something more.

I was going to pick up a Downeast 70cm transverter kit to play with, but I just purchased an ICOM 451 for 70cm.

I'd like to build a 2 meter transciever. I've checked out the ten tec homepage and the 2m FM kit is just a bit than what I want, and I'd prefer SSB.

I'd like to build a 2-meter, SSB transciever. It doesn't have to be much. A couple of watts output. Maybe xtaled on 144.2 with a little bit of tuning from there(144.150-144.250??). Analog tuning, I don't need any digital stuff. I'd like to eventually get the unit smaller and smaller.

I've heard about the Mihizu vhf ssb "handhelds". I like the idea, just Mihizu's are hard to find, and don't have much output.

I'd like to get a SSB 2m kit to get some experience. Maybe someday I'd work my way to the compact radio...

Anyone make one????

Buster C.

1828. Re: Cold Solder Joints - Why?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970215181800.NAA22912@ladder01.news.aol.com>
Source record: 97273

In article <01bc1b5c$387898e0$27c99dcc@default>, "John Lockhart" <jlockj@minn.net> writes:

>
>Hello to the Group!
>
>Any ideas out there why cold solder joints often manifest
>themselves four or five years after the soldering took place?
>I used to think a cold solder joint wouldn't work or would be
>intermittent from day one. Experience with some Kenwood
>transceivers and this week with a Sony TV is showing me
>otherwise. Is it related to wave soldering with solders that
>melt at lower temperatures? Or ?????
>
>Thanks,
>
>John W0DC
>
>
>
>-

Probably related to a lack of flux, Oxidized solder mix in the wavesolderer,
and improper temperatures.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

1829. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: jlkolb@sd.cts.com
Message-ID: <5e4vf5$53i@bogus.cts.com>
Source record: 97274

Arthur P Blair (blair@skopen.dseg.ti.com) wrote:

: Correct me if I'm wrong. But I thought that, in a double balanced
: mixer, only the RF & IF ports were fed thru transformers, not the
: LO.

The RF and LO ports are the two that are transformer coupled and the
direct coupled port is called the IF port on the assumption that
the IF freq will normally be the lowest of the three freqs - not
a valid assumption for up-conversion.

As long as the IF freq is within the freq range rating of the LO
port connection, the LO port could be used for the IF output, and the
IF port used for a square wave LO.

John Kolb KK6IL

1830. need source for type FT-243 novice xtals 80/40/15

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: popskull@pipeline.com
Message-ID: <5e500h$mmn@camel0.mindspring.com>
Source record: 97275

i am looking for a source for these xtals

please email me if you can help

thanks!!!!!!!!!!!!!!!!!!!!!

michael

1831. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <33060A26.19E1@ping.be>
Source record: 97276
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bart Wessel wrote:
>
> William Vynck <RACO@ping.be> wrote:
>
> >The official Kenwood TH-79E/A modifications can be found on my homepage.
> >Those are JPG files that you can download and vieuw with a picture
> >viewer.
>
> >Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz
>
> Be aware that these file contain obvious errors. Look at table 2: the E and E3
> units seem to be electronically identical, yet their frequency coverages
> differ.
> Mmmm.... Wonder what else is wrong!

Ask Kenwood for it, those are official papers from Kenwood
You know better ? Work for Kenwood.

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

1832. Re: Cold Solder Joints - Why?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: cooperjim@aol.com
Message-ID: <19970215193601.OAA27276@ladder01.news.aol.com>
Source record: 97277

Hi John

A cold solder joint can make an electrical connection much the same way you could join two components by wrapping solder around their leads without melting the solder. It would work, but there will always be the danger that vibration or something would shake it apart. Maybe not today or tomorrow, but sometime.

If you see a cold solder joint, even if the circuit is working, resolder it, and make sure to use enough heat to get it to wet both the component and the board trace. You dont know when or if it will cause you trouble.

I once had a batch of boards that were wave soldered and looked good at a casual glance. When I tried to get them to work, I found that the solder had wetted to the leads of the ICs fine, but not to the board traces. Each IC lead had a little ball of solder that looked shiny and kinda pushed against the pads on the board without wetting and sometimes made connection. Since the prototype was on a tight schedule, I got talked out of scrapping the boards. Instead I and 3 techs spent the better part of a couple days resoldering every joint by hand on 25 large boards using the special technology vocabulary appropriate to describe the situation.

1833. Re: good source for amplifier tips

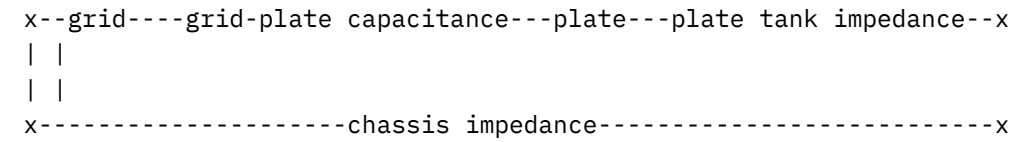
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb15.203248.13312@ke4zv.atl.ga.us>
Source record: 97278

In article <measures-ya02408000R1302970927220001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>The 8877 has an anode to grid C of 10pF. The 4kV/1A maximum ratings for
>the 8877 apply up to 250MHz. At 250MHz, 10 pF has 63.66 ohms of
>capacitive reactance. According to Eimac *CURVE 4250*, the 8877 begins to
>saturate at an anode to grid potential of about 250v. Therefore, with an
>anode supply voltage of 4000V, the peak AC anode voltage is about 4000v
>-250v = 3750v during the conduction half-cycle when the cathode is driven
>negative. The AC rms anode voltage = 1/2^0.5 *3750v = 0.7071*3750v =
>2651V-rms. When 2651V-rms is applied to capacitor whose reactance is 63.66
>ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.
>
> ...Sure, 41A is an eyebrow-raising amount of grid current, but this is the
>case according to standard AC Circuit-Analysis, which applies in all parts
>of the universe, with the exception of one rather unique place in the State
>of Georgia.

Well, that sort of "AC Circuit-Analysis" may work in your universe (far, far, away), but not in the Real World(TM). Kirchhoff's law requires a closed path for current flow, and the topology of a GG vacuum tube amplifier doesn't provide a closed path including grid and plate which *only* includes the grid-plate capacitance, so your simple Ohm's law "AC Circuit-Analysis" fails.

The full mesh also includes the plate tank circuit, and that's about 5000 ohms, and the chassis return to the grid contact, hopefully a very low impedance, but perhaps as much as a few hundred ohms at VHF. So the peak current in that mesh would be at most 2651/5063.66 = 0.52 ampere, not 41 amperes as you erroneously calculated.

In other words, the AC current mesh looks like this:



The DC supply isn't part of the AC current mesh because the plate choke effectively blocks it from participating in AC current flow. Applying Kirchhoff's law, grid-plate capacitance is in *series* with the other circuit impedances, and a current calculation must use the *sum* of those impedances.

The *DC* mesh is different, and further constrained due to the fact that electrons in a vacuum tube can only flow from a source of electron

emission to a receptor of higher potential. In the DC case, the only
significant source of electron emission is the cathode, so grid current
can *never* exceed cathode current. And for the 8877 that's limited to
about 10 amperes peak by cathode material characteristics.

In practice, grid current will be proportional to the ratio of the
grid to cathode potential and the plate to cathode potential, plus
a geometric factor depending on tube construction. For a triode,
that will typically be on the order of 10 to 100 depending on whether
the tube is low mu or high mu, so grid current will be on the order
of 10 to 100 times less than plate current, or put another way, less
than 1/10th to 1/100th of cathode current.

In no case can grid current ever approach 41 amperes. That's pure
fantasy (unless you suffer a catastrophic short of course).

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1834. Re: Winter 97 issue

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <330623F8.54B6@calweb.com>
Source record: 97279

Hi Folks,

When does the Winter 97 issue come out?

Thanks

Bob

>
>
> Peter Bertini K1ZJH
> Senior Technical Editor, Communications Quarterly Magazine
> "The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

1835. Re: [Q] 2 Meter Transciever Kits???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb15.205308.13472@ke4zv.atl.ga.us>
Source record: 97280

In article <330585BC.1451@azstarnet.com> lathrop@azstarnet.com writes:
>Been entertaining the notion to build my own radio.
>
>I've been operating for a little while now, and have been having
>lot's of fun with SSB on 6,2 and 1296. Weak signal terrestrial has
>been a blast. I just would like something more.
>
>I was going to pick up a Downeast 70cm transverter kit to play with,
>but I just purchased an ICOM 451 for 70cm.
>
>I'd like to build a 2 meter transciever. I've checked out the ten tec
>homepage and the 2m FM kit is just a bit than what I want, and I'd
>prefer SSB.
>
>I'd like to build a 2-meter, SSB transciever. It doesn't have to be
>much. A couple of watts output. Maybe xtaled on 144.2 with a little
>bit of tuning from there(144.150-144.250??). Analog tuning, I don't
>need any digital stuff. I'd like to eventually get the unit smaller
>and smaller.
>
>I've heard about the Mihizu vhf ssb "handhelds". I like the idea,
>just Mihizu's are hard to find, and don't have much output.
>
>I'd like to get a SSB 2m kit to get some experience. Maybe someday
>I'd work my way to the compact radio...
>
>Anyone make one????

Buster, this sounds like a readymade excuse to buy the R2 and T2
kits from Kanga. These are the Rick Campbell phasing SSB receiver
and transmitter featured in the newest Handbooks. They'll operate
anywhere from 2 MHz to 500 MHz depending on the LO you provide.
A simple VXO should do nicely for the area around the 144.2 MHz
SSB calling frequency. A 1/4-wave (electrical) length of RG-174
will provide the quadrature phasing required. You don't really
need to buy the kits, these radios are simple enough to build
dead bug style on a piece of circuit board. You'll need a PA
for the transmitter, but one of the hybrids from RF Parts will
fill that bill nicely.

This is what I'd call a "weekender" project (unless you want to
make it "pretty", then you could spend more time packaging it
than building it and making it work).

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1836. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: jeffreyh@hawaii.edu.semper.paratus
Message-ID: <5e5akv$l2g@news.Hawaii.Edu>
Source record: 97281
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Tom Sharples <sharples@hooked.net> wrote:
>A Yaesu FT-2500 will easily do this. The mod is in the Artsci books- you
>just cut a green wire. I've used this rig on the marine bands with no
>problem. Also have done the same with a Yaesu FT10 HT.

"With no problem"???? How do you you aren't causing problems?
I cannot begin to tell you the grief you cheapskates cause(d) with
your modified radios for those us of who work(ed) in maritime comms.
Suffice it to say that transmissions with radios that aren't type-accepted
are documented whenever possible* and forwarded on to the proper
authorities. Those authorities are sometimes like sleeping giants, but
when they awake you will feel their wrath!

Don't be so damn cheap, Sharples - go buy a VHF marine band radio. West
Marine sells an all-channel rig for around $120.

Jeff KH2PZ (former Coast Guard radio officer)

* USCG coastal stations monitor many channels at once - when your trans-
missions come over two channels at the same time it's easy to determine
some penny-pinching ham is using a modified HT. Hopefully he's not as
cheap in properly outfitting the rest of his boat.

1837. Radio theory

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: paul <kcsut@tgi.net>
Message-ID: <3306363C.7A972AF1@tgi.net>
Source record: 97282

Does anyone know of a web site where I can get information on radio
Theory?

1838. Re: Anybody know of a mod for the HTX-212?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5e5b0n$7f2@news1.mnsinc.com>
Source record: 97283
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Jim Daneke <daneke@ix.netcom.com> whistled a happy tune like:

|>Tim Shearer wrote:
|>>
|>> Tom Sharples <sharples@hooked.net> wrote:
|>> >A Yaesu FT-2500 will easily do this. The mod is in the Artsci books-
you
|>> >just cut a green wire. I've used this rig on the marine bands with no
|>> >problem. Also have done the same with a Yaesu FT10 HT.
|>>
|>> I hope everyone understands this is against FCC regulations. Amateur
|>> tranceivers are not TYPE ACCEPTED for this service. There are reasons
for
|>> this. I take it no out of amateur band transmissions will be made until
a
|>> bonfide life and death situation occurs.
|>>
|>> You should not publically admit to federal offenses. You admissions are
|>> being permanently recorded in archives like DejaNews.
|>>
|>THe FCC, with all their people and funds is now searching the DejaNews
|>archives to find out who has admitted to federal offenses. They will
|>then go before an OJ Simpson kind of Grand Jury and get a warrrant for
|>arrest. The FCC will get a plane ticket and show up to your door and
|>confront you with your e-mail admission. They will search your house and
|>confiscate your radios and computers. So make sure not to admit to
|>violating out of band rules!

|>Jim, N0JD

ROTFLVVL!

1839. Re: Need copy of Service manual for TR-8400 and TR-7400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5e5b2v$7f2@news1.mnsinc.com>
Source record: 97284

gerwitz@inficad.com (James A. Gerwitz) whistled a happy tune like:

|>Can anyone help me locate a copy of a service manula for a TR-7400 and another
|>manual for a TR-8400? I need to align both of my radios and need the
|>alignment procedure.

Sure Jim - you can find a massive list of sources & suppliers at:
http://www.mnsinc.com/bry/

The information you are needing can be found on my Web Site in the
HAM RADIO RESOURCES section at the address listed below.
ENJOY!

I have a number of unique resources available for radio etc.

MEGALIST + HAM RADIO + HOCKEY = Bry's Page!

http://www.mnsinc.com/bry/

All the very best - Brian, AF4K / G3XLQ
73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

1840. Sound Blaster = easy WEFAX FAX SSTV RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: "Brian E. Cauchi" <gcauchi@keyworld.net>
Message-ID: <01bc1b89$25fdf0c0$0101a8c0@gcauchi.keyworld.net>
Source record: 97285
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Hello... Brian here!

If you have a RADIO and a SOUND BLASTER (or compatible card) you already have all the hardware necessary to receive WEFAX, FAX, SSTV and RTTY.

You can also transmit monochrome FAX and SSTV, with the current version of my FTV software.

*** Put the power of your 80386, 80486 or Pentium processor to real use ***

The external "decoder" units that are used by conventional users are modelled inside this software. This makes it easy to get started, inexpensive and rids you of the inevitable tangle of wires and boxes of decoders.

Absolutely no external hardware, other than a simple audio lead, is required by FTV. The current version decodes:

WEFAX (from weather satellites, e.g. 137-138 MHz)
HF-FAX (from terrestrial stations)
SSTV (from radio amateurs, e.g. 14.230 MHz)
Baudot (press, naval, weather etc)

Here is a run down of the more interesting features:

(1) It keeps the demodulated signal in memory, so that the signal can be analysed again at a different keying rate or polarity! Garbage can be resampled on the fly, which means that minutes of received signals decoded at the wrong baud rate or keying polarity are recovered, on the fly, while still receiving.

(2) The incoming signal is analysed automatically - standard modes, line rates, baud rates and keying polarity are automatically determined following analysis.

(3) Tuning oscilloscope available at all times, without loss of copy.

(4) Program works in real time.

*** What are you waiting for? Try it now! ***

Take a look at my web site for futher details, from where you can download an evaluation copy, at: http://www.geocities.com/SiliconValley/2504

Registration promotes the further development of this software and entitles the user to future upgrades paying only for delivery expenses, if any.

Finally, just in case some of you have trouble accessing my web site, here is my postal address (if you want a reply, send a self-addressed label and IRC's to cover expenses):
Brian E. Cauchi,
Gawhra, Domenico Cachia Street, Birkirkara BKR06, MALTA.

What can I say? Try it, and may you have as much fun as I am having...
73's from Brian.

1841. Re: 10 Ghz cavity inquiry

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: ESPI35E@prodigy.com
Message-ID: <5e5dlm$2a68@usenetz1.news.prodigy.com>
Source record: 97286

Most of these Gunn cavities seem to run about 10-20 mw.
The foam rubber seems to be a decoupling element, but I think it might be mostly to keep dust and foreign material out of the cavity. Just retune the cavity after cleaning out the junk. DON'T use conductive foam to replace it. It WILL act like a dummy load.
Do a search in Infoseek for +amateur +microwave and you'll find a few sites. Links at most of these sites will get you the rest of the way.

73
de N1FNE

1842. Cold Solder Joints - Why?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Vincent Biancomano <103520.355@CompuServe.COM>
Message-ID: <5e5d7aboo2@mhafc.production.compuserve.com>
Source record: 97287

re: Cold Solder Joints - Why?

>Any ideas out there why cold solder joints often manifest
>themselves four or five years after the soldering took place?
>I used to think a cold solder joint wouldn't work or would be
>intermittent from day one. Experience with some Kenwood
>transceivers and this week with a Sony TV is showing me
>otherwise. Is it related to wave soldering with solders that
>melt at lower temperatures? Or ?????

One way they can fail even months (not sure about years) after application is if the flux rosin that's applied during wave soldering isn't applied at the proper instant or doesn't completely envelop the joint. Then oxidation can set in, weakening the joint with time. Also, if the flux isn't properly cleaned off after soldering, moisture will collect on the flux and, again, cause failure of the joint in time. Neither one of these things should happen very often with today's modern processes tho, let alone with Sony or Kenwood equipment, so there may well be other reasons connected with the solder itself (actually, also a bit unlikely). Solder that melts at lower temperatures shouldn't by itself affect things, but if the solder isn't "eutectic" or "near eutectic" (harden almost instantly, with not much of a temperature range between initial melting and the total liquid state), that could cause several problems in the process. In addition, there will be a build up of "dross" on the soldering equipment, which definitely will lower the efficiency of the soldering process, and is said even to wreck the soldering equipment. However, manufacturers generally like to stay away from "non eutectic" types for just that reason.

All in all, none of this should ever happen. It might well be that the solder joints that failed were simply re-soldered somewhere along the line, and unless that's done very carefully, you know the results. Also, of course, if too little solder was applied initially, that can make a difference even 10 years down the line.

Regards,
Vince, WB2EZG

1843. Re: 10 Ghz device inquiry

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: ESPI35E@prodigy.com
Message-ID: <5e5du2$2a68@usenetz1.news.prodigy.com>
Source record: 97288

I forgot to mention,

SHF Microwave has a website that'll show you some of the stuff they have for 10 and 24 GHz toys. Heaters, Modulators, Sources and Antennas.

Look for them in links and in search engines.

1844. Re: Request for Heathkit rotator controller info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: TW Morey <capngoat@planet.net>
Message-ID: <3305E886.296A@planet.net>
Source record: 97289

Here's a link to some healthkit stuff:

http://www.cyberventure.com:80/heathkit/default.html

W. D. Milner wrote:
>
> Joe Scalet <jscalet@sound.net> wrote:
>
> >Does any one have a source code listing for the Heatkit computerised
> >rotator controller HD/1750. I need to take out the delay/time out
> >feature because my rotator (an ORION 2800) doesn't require a duty
> >cycle limitation. I don't want to disassemble my controller untill I
> >have a new prom/cpu programmed. With Heatkit gone some parts are made of
> >unobtainium and I don't want to risk the cpu/eprom unnecessarily. Any
> >info would be appreciated to email jscalet@sound.net tnx joe WK0G
>
> Is that similar to the HD/HDW-1780? I assume you are looking for the
> EPROM contents? If so you can do a DUMP from the MISC menu. This
> performs an Intel hex dump of the memory content that can be used to
> make a new EPROM.
>
> NOt sure if that helps with your model or not :) Hope so.
>
> 73,
>
> ---------------------------------------
> Dean, VE1CBF VE1CBF@VE1CBF.ns.ca
> wdmilner@atcon.com FN96VC
>
> - - ... ... - -

--
TW Morey | If you can't love your enemies,
Flanders, NJ | at least be kind to your friends.
|
capngoat@planet.net |

1845. Tubes and Test Equipment for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: Kevin Harlan <harlan@deltanet.com>
Message-ID: <01bc1b95$481f0200$48cab2cc@Psrklein>
Source record: 97290

USED TUBES,UNTESTED BY US, SOLD "AS IS,WITHOUT WARRANTY",
These tubes were part of the estate of a long time radio
repairman,who was in business in the San Francisco area
from the 1930's to the 1970's.The tubes were bulk packaged
in large boxes marked "tested ok", however we have not
checked any of these tubes. We have been advised by one
of our customers that some of the tubes we shipped were
duds. These tubes have been priced accordingly.

****
* Shipping for the below tubes to anyplace in the USA: *
* 1 to 6 tubes, $3.00 // 7 or more tubes, shipping free.*
****

****
Used Tubes for $1.00 each:

OA2, 0C3, 1A7GT, 1H5GT, 1H5GT/G, 1LH4, 1R5, 1S5, 1T5GT,
1X2B, 1T4, 1U4, 1B3GT, 1N5G, 1N5GT, 3BC5, 3Q5GT, 3Q5GT/G,
3S4, 5AT8, 5AW4, 5T8, 5654, 5814A,6AG5, 6AK5, 6AL5, 6AU6,
6AU6A, 6BC5, 6BC6A, 6BH6, 6BJ6, 6CB6, 6CB6A, 6DA4, 6H6,
6H6GT/G, 6J4, 6J6, 6SJ7, 6T8, 6W4GT, 6X4, 6X4WA, 6AB4,
6AC7, 6AT8, 6AX4GT, 6AX4GTB, 6BQ6GA/6CU6, 6BQ6GT,
6BQ6GTB/6CU6, 6CL6, 6KT8, 6S4A6SA7, 6U10, 6W6GT, 7A8,
7Z4, 9003, 9006, 12AX4GTA, 12AX4GTB, 12D4, 12J5GT, 12Q7GT,
14B6, 25W4GT, UY85, 0Z4, 12AT7, 12AU7, 12AV6, 12AV7, 12AX7,
12SC7, 12SK7, 12SK7GT, 12SK7GT/G, 14Q7, 35C5, 50B5,
****
Used Tubes for 1.50 each:

1LN5, 1N6G, 3Q4, 5V4, 5W4G, 5Y4G, 6AQ5, 6AS8, 6AV5GT, 6AW8A,
6BG7, 6BN4, 6BQ7A, 6BS8, 6BU8, 6BZ7, 6C5, 6C6, 6CM7, 6CN7
6CS6, 6DT3, 6J7GT, 6K7, 6K7G , 6K7GT, 6K8G, 6L7G, 6SQ7,
6SQ7GT6SQ7GT/G, 6SR7, 6U7G, 6U8, 6V6GT, 6V6GTA, 6V6GT/G,
6V6GTY,6X5GT, 7A6, 7A7, 7C7, 7W7, 12BA6, 12BE6, 12K7GT,
14A7/12B7, 14B6, 14H7, 35W4, 35Y4, 35Z3, 39/44, 50A5, 50C5,
56, 57, 77, 78, 85, 117Z3, 117Z6, 117Z6GT, 5751, UF89
****
Used Tubes for $2.00 each:

2E26, 6AN8A, 6AS7G, 6AU5GT, 6BL7GT, 6CG8A, 6K6GT,
6K6GT/G,6Q7, 6Q7GT, 6SK7, 6V6G, 12SA7, 14F8, 35Z5GT,
35Z5GT/G, 1LB4, 5T4, 6A8, 6D6, 6DA5/EM81, 6DE7, 6EW7, 6F5,
6J5, 6J5GT, 7C6, 12A6GT, 12AT7WA, 12DQ6A, 12DT8, 12SQ7,
12SQ7GT, 12SQ7GT/G, 25CU6, 25EC6, 25L6G, 25L6GT, 25L6GT/G,
25Z6GT, 35L6GT, 35L6GT/G, 76, 117L7/M7GT, ECC81/12AT7

****
Used Tubes for $3.00 each:

6SN7GT, 6SN7GTA, 6SN7GTB, 6SN7WGTA, 3V4, 6CD6G, 6DQ6B,
6GW6/6DQ6B, 7C5, 27, 35, 37, 43, 50L6GT, 80
****
Used Tubes for $4.00 each:

6A7, 6BG6G, 6CG7, 6E05, 6F6GT, 6JA5, 6LX6, 7F8, 7N7,
24, 24A, 41, 47, 6AF6G, 6FQ7/6CG7, 75
****
Used Tubes for $5.00 each:

5V4G, 224, 226, 227, 239, 327
****
Used Tubes for $6.00 each:

5AS4A, 5U4GB, 6F6G, 124 ARCTURUS, 127 ARCTURUS, 301A
****
Used Tubes for $7.50 each:

5U4G, 26, 42
****
Misc used tubes cost per tube listed:

6U5 = $9.00, 171A = $11.25,180 = $15.00, 280 = $15.00,
247 = $18.75
****
****
Coaxial Connectors, TNC male for RG-59 and RG-62 size
cable, NEW, in original bags.

Amphenol 31-5061, clamp attachment, 99 available, $.75 each

Amphenol 31-5157, crimp attachment, 76 available, $.75 each

Shipping for above connectors to anyplace in the USA :
1 - 19 connectors $3.00, 20 or more connectors shipping free.

****
!NEW! 8,000 available. $0.10 each

JAN 6186W, Equal to 6AG5WA, Sharp cut-off, pentodes, 7 pin
miniature, made by Philips in the USA in 1986.

Shipping in USA 1-199 tubes $3.00, 200 or more shipping free.
****

Used Test Equipment Shipping free in continental USA:

(1) Power Mate BPA-40G, regulated power supply, 0 to 40 volts,
12 amps.Checked, working, but may need calibration and minor
repairs. $150.00

(1) Power mate BPG-40G, same as above,but not checked,
line cord cut,fuse and fuse holder cap missing,otherwise
looks clean. Offered "as is" for $50.00

(1) HP 628A, Signal generator, 15 to 21 Ghz, checked, working,
but may need calibration and minor repairs, $75.00

(1)BIRD 72-2 COAXIAL SWITCH,MANUAL,2 circuit,2 position,
850 W @ 100 MHz, N (f) $50.00

(2)HP G281A,WAVEGUIDE TO COAX ADAPTER,3.95 to 5.85 GHz,
UG-149A to N (f), $7.50 each

(4)HP J281A,WAVEGUIDE TO COAX ADAPTER,5.85 to 8.2 Ghz,
UG-344 to N (f), $7.50 each

(1)HP J370C,WAVEGUIDE FIXED ATTENUATOR,10 DB,5.85 to 8.2 GHz,
WR-137,UG-344, $10.00

(1)HP X375A,WAVEGUIDE ATTENUATOR,VARIABLE,8.2 to 12.4 Ghz,
0 to 25 DB,UG-39, $40.00

(1)HP G382A,WAVEGUIDE ATTENUATOR,VARIABLE,3.95 to 5.85 GHz,
0 to 50 DB,UG-149A, $50.00

(2)HP H382A,WAVEGUIDE ATTENUATOR,VARIABLE,7.5 to 10 GHz,
0 to 50 DB,UG-51, $40.00 each

(2)HP J382A,WAVEGUIDE ATTENUATOR,VARIABLE,5.85 to 8.2 GHz,
0 to 50 DB,UG-344, $40.00 each

(2)HP J424A, CRYSTAL DETECTOR MOUNT,UG344/BNC f,
$15.00 each

(1)HP J487B, THERMISTOR MOUNT, 5.85 to 8.2 GHz,
UG-344 / BNC (f), $15.00

(1)HP R752A,WAVEGUICE DIRECTIONAL COUPLER,10 DB,
26.5 to 40 GHz, missing termination, $25.00

(5)HP X752A,WAVEGUIDE DIRECTIONAL COUPLER,3 DB,
8.2 to 12.4 GHz, WR-90,UG-39, $10.00 each

(1)HP G914A,WAVEGUIDE TUNABLE LOAD,3.95 to 5.85 GHz,
WR-187,UG-149A, $10.00

(1)HP J920A,WAVEGUIDE MOVING SHORT,7.5 to 10 GHz,
knob tuned,UG-51, $10.00

(1)HP 8436A, BANDPASS FILTER, 8 TO 12.4 GHz,
N(m)to N(f),$50.00

(3)HP 11523A,LOAD RESISTOR, feedthrough termination for
HP 420 series detectors, $5.00 each

(3)JFW 50F-006, COAXIAL ATTENUATOR, 6 dB, DC to 2 GHz,
TNC connect, new never used, $10.00 each

(2)NARDA 47G2,WAVEGUIDE ATTENUATOR,
VARIABLE 0 to 40 dB, $25.00 each

(2)NARDA 4773-20 SMA COAXIAL ATTENUATOR, 20 dB,
DC to 6 GHz, $20.00 each

(4)NORSAL 12104 MIXER, SMA CONNECTORS,
NEW NEVER USED, $15.00 each

(1)WAVELINE 60562,WAVEGUIDE ATTENUATOR,VARIABLE, $25.00

Ordering:
If you request any product, I will hold that equipment
for 1 week. Currently we are only accepting money orders,
personal checks, business checks, bank checks,
or cash by registered mail.

Thank you!!

Kevin
harlan@deltanet.com

1846. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970215232100.SAA08359@ladder01.news.aol.com>
Source record: 97291

In article <measures-ya02408000R1302970927220001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>Has anyone ever pondered why Eimac does not specify a maximum grid current
>rating for the 8877 or any of the other tubes that are designed for Class
>AB2 g-g service?

The reason is because the heating is due to electron bombardment, and so it depends on the grid cathode voltage and current. It is NOT I squared R loss, so they can give no current limit without knowing the voltage.

>The 8877 has an anode to grid C of 10pF. The 4kV/1A maximum ratings for
>the 8877 apply up to 250MHz. At 250MHz, 10 pF has 63.66 ohms of
>capacitive reactance. According to Eimac *CURVE 4250*, the 8877 begins to
>saturate at an anode to grid potential of about 250v. Therefore, with an
>anode supply voltage of 4000V, the peak AC anode voltage is about 4000v
>-250v = 3750v during the conduction half-cycle when the cathode is driven
>negative. The AC rms anode voltage = 1/2^0.5 *3750v = 0.7071*3750v =
>2651V-rms. When 2651V-rms is applied to capacitor whose reactance is 63.66
>ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.

What a bunch of mixed up rubbish that is.

You not only incorrectly assumed ALL the output capacitance
is to the grid wires, you also gave a completely mixed up analysis.

Rich, better look at the table again.

The grid to anode capacitance is 0.1 pF, NOT ten pF in grounded grid.

Cout is given as ten pF, not Cgp!!!

Rich, you are *very* careless with everything you say.

You are misusing the capacitance from the massive anode to the entire
area around the anode (including the chassis) as the capacitance between
the anode and grid wires.

> ...Sure, 41A is an eyebrow-raising amount of grid current, but this is the
>case according to standard AC Circuit-Analysis, which applies in all parts
>of the universe, with the exception of one rather unique place in the State
>of Georgia.

Before you are critical of me, be sure you can read a simple Eimac
tube data sheet. Reading is an important skill.

Rich, when you constantly throw out incorrect data and false statements,
how can anyone trust anything you say? We have to check out

everything you say, or we can't believe it. Are you doing this on purpose?

73 Tom

1847. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-15 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1502971608350001@news.vcnet.com>
Source record: 97292

In article <330601C4.6E02@crpl.cedar-rapids.lib.ia.us>, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:

> R. L. Measures wrote:
> >
> > In article <5e3124$1rcu$1@news-s01.ny.us.ibm.net>, subich@ibm.net (Joe
> > Subich) wrote:
> >
> > > :>If an 8877 is being operated at Eimac's maximum rating of 4kV and
> > > :>250MHz, the RF grid current is 2650v-rms/ 63.66 ohms = 41.63 amperes
> > > :>rms.
>
> I have a question about plate to grid capacitance.
>
> Since there is also a fairly large grid to cathode capacitance, doesn't a
> large part of the plate to grid capacitance current pass on to the
> cathode, rather than out through the grid terminal, especially if the
> cathode is grounded and the grid is not grounded, but instead is at some
> impedance, say 50 ohms, above ground?
>
> If this is true, then doesn't the question of grid current disspation due
> to plate-grid capacitance become a lot more complicated?
>
> Bill W0IYH

When the grid is grounded, the anode to cathode C in an 8877 is 0.1pF. The
reactance of 0.1pF at 250MHz is 6366 ohms. Thus, 2600v/6366 ohms = 0.4A
apparently flows to the cathode.

--
--Rich-- ag6k, 805-386-3734

1848. re homebrew 12v antenna rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: jeffg@istar.ca
Message-ID: <5e5opf$i6v@news.istar.ca>
Source record: 97201

Over the past few months I've been asking for tips on building a 12v antenna rotator controller. The roator itself is fitted with a pot that turns as the rotator turns thus changing the ohmage. I can of course read the ohmage on a VOM an extrapolate the readings to N/S/E/W. but does anyone have a better way of converting the readings without using an ohmmeter?
Jeff

1849. Test equipment service manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: cripps@netcom.com
Message-ID: <cripps-1502971842120001@10.0.2.1>
Source record: 97202

A while back details were posted of a company that sells test equipment service manuals. Unfortunately, I've lost the information.

Be grateful if someone could repeat....specifically I'm looking for an HP334A manual.

Thanks,

Peter

--
Peter Cripps Associates
Technology Strategy and Product Development
20 Carrera Court
Redwood City, CA 94062
415 364 4413 voice
415 364 1353 fax

1850. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <33066adf.73258055@news.santafe.edu>
Source record: 97203

I don't want to rain on anybody's parade, but there's a good deal of "strange science" going both directions.

I asume it's a slip of the keyboard, but careful editing would be helpful, considering the nature of the debate. The interelectrode capacitance of a tube is a function of geometry, not of the circuit in which it's used. Measurements get a little tricky because all of the elements also have some capacitance to the rest of the world. That's why the discalimer that the measurements were made "in a specially design fixture" appears in the data sheets.

But, for purposes of discussion, the 8877 has a grid-cathode capacitance of 38.5 pf, a grid-plate capacitance of 10.2 pf, and a plate-cathode capacitance of 0.1 pf. These are a function of geometry. Which is input, output and feedthrough capacitance does depend on the circuit, but is trivial to figure out which is which.

All sides in this discussion would do well to heed the words of Mark Twain, "Never argue with a fool. It's hard for bystanders to tell who's who."

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

1851. Re: Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: Litco@webtrak.com
Message-ID: <5e6565$elq@mtinsc05.worldnet.att.net>
Source record: 97204

>> It's been a while, but I recall once having trouble with a DDS
>> based LO. The DAC in the DDS was generating alot of quantization
>> spurs. Rather than try to get a high speed umpteen bit DAC I just
>> used, effectively, a 1 bit DAC, which can run comfortably at a
>> very high speed. And nothing is more linear than a 1 bit DAC
>> (nothing digital anyway). Feeding this to the LO port of the
>> mixer, the end result was alot cleaner.

>I don't beleive that this works in general. Generating a digital
>signal with 'a high speed umpteen bit DAC', de-aliasing it
>properly, and squaring it is _not_ the same as generating
>the signal with a 1 bit DAC.

>If you think about it, the anti-alias filter is needed to
>interpolate between the two digital samples near the zero
>crossing - without it the 1 bit DAC changes synchronously
>with the clock frequency. The result contains significant
>phase noise. I can probably steer you to an ap-note that
>expounds if you are interested...

>> Art.

>Bob
>WA3TGF
The the use of MSB of DDS is OK at the lower end of DDS range
where the noise sidebands might be tolerable. As you approach the
upper limit (1/2 clock frequency) the phase noise sidebands amplitude
will be very close to the amplitude of the carrier and you will not be
able to filter the sidebands out with low pass "brick wall" filter.
There will be frequencies where there is no fractional division and
the carrier will be clean at those frequencies.

1852. Wanted: Dual Band HT or Mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: Aaron Jarvis <kb9moj@si-net.com>
Message-ID: <01bc1bc9$3d139040$2920c4d0@kb9moj>
Source record: 97205

I would like a dual band ht or mobile. It must be in fair condition (
everything working properly) . The radio must have crossband repeat and
simultanious recieve. I will probably trade other Amatuer Equitment I have
but will maybe provide some cash.
Thanks if intrested please e-mail me
kb9moj@si-net.com

KB9MOJ

1853. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5e65t0$1mj8$1@news-s01.ny.us.ibm.net>
Source record: 97206

In message <33047bc8.256410791@news.santafe.edu> - jpotter@jpaw.com (Jim Potter) writes:
:>
:>
:>Two things could cause a distribution of heat damage as you describe
:>it. One is that there was more dissipation in the damage area. The
:>other is that the cooling was better in the undamaged area. The
:>available cooling mechanisms are conduction and radiation. The bottom
:>end is the only part with conduction cooling, through the grid support
:>struccture. Radiation cooling would be to the anode. The distribution
:>would depend on the distribution of temperature on the anode, and
:>other factors, such as the emissivity of the anode and grid as a
:>function of position. The end might be different from the sides, for
:>example.
:>
:>However, I don't see an obvious big difference in the grid cooling
:>from one end to the other, except for conduction through the support
:>structure which would add cooling to the bottom end (unless, through
:>some perverse circumstances it was the source of heat.)
:>

Jim,

There is one thing that will cause the heat damage pattern that Rich describes ... Eimac have addressed the issue but amateurs being very notorious scroungers may well still be seeing the problem ... a bad heat dam design in some production lots of the 8877.

Eimac have redesigned the heat dam several years ago to prevent a failure which literally fried the bottom end of the grid structure. On opening the tubes the observations were identical to those Measures claims could only be caused by VHF parasitics, severe plating damage (melting, evaporation, and redepositon of the gold) to the bottow end of the grid structure with relatively normal (undamaged) upper grid structure.

I have regularly seen "surplus" 8877s advertised or floating around hamfests and understand that at least one tube house will rebuild the 8877. It is entirely possible, in spite of Eimac efforts to rid the market of them, that some of the old design 8877 tubes are still in ciruclation.

==========
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>

<subich@ibm.net>
<subich@compuserve.com>
==========

1854. My DTMF Home Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: pdrunen@aol.com
Message-ID: <19970216063100.BAA29995@ladder01.news.aol.com>
Source record: 97207

Greeting Group!

I have updated my Home Page with my windows DTMF decoding software, a picture of the decoder and a real-time schematic interface.

The location is:

http://home.aol.com/pdrunen

There is also a link to a software search engine and other related DTMF links.

Thanks...
KJ4UO

1855. aor8000 audio discriminator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: de jong <vicjong@pi.net>
Message-ID: <3306EE0E.4D47@pi.net>
Source record: 97208

where can i find the audio discriminator on a aor8000
what pins do i use?

vic.

1856. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1602970319470001@news.vcnet.com>
Source record: 97209

In article <33066adf.73258055@news.santafe.edu>, jpotter@jpaw.com wrote:

> I don't want to rain on anybody's parade, but there's a good deal of
> "strange science" going both directions.
...snip...

I'm listening, Jim. Please be specific.

> All sides in this discussion would do well to heed the words of Mark
> Twain, "Never argue with a fool. It's hard for bystanders to tell
> who's who."
>
Amen, Jim.
OTOH, this admonition only applies to bystanders who don't understand the
subject.

It seems to me that the more a fool talks, the less doubt he leaves in the
minds of others. The recent court case in Santa Monica is a prime example.

--
--Rich-- ag6k, 805-386-3734

1857. Re: Silver Plated Strap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: philk5pc@connect.net
Message-ID: <5e6ta8$9s8@dallas1.connect.net>
Source record: 97210

In article <5e4h3j$pg2@mtinsc04.worldnet.att.net>, woody white <"eMail "@
my.www.page.Mailto> says:
>
>Russ,
>I sheared strips from roofing (copper) flashing. The Ag plating can
>then be done using a kit called (I think ?) "Cool-Amp". The kit isn't
>cheap, but should be more economical than a plating shop for just a few
>feet of strap. 73, Woody
>
Anyone know where the "Cool Amp" kit can be purchased? Thanks..

(((73)))
Phil, K5PC

1858. Re: Silver Plated Strap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5e722f$4u9@mtinsc04.worldnet.att.net>
Source record: 97211

Phil, I located this in the Thomas Register. Looks like the right outfit. Perhaps they can point you to a local distributer. I have forgotten where the source was I located.... MAybe a large electrical supply house? Good Luck! Woody

Cool-Amp Conducto-Lube Co.
Lake Oswego, OR 97035 USA
503-624-6426
FAX: 503-624-6436

Cool-Amp Silver Plating & Conducto-Lube Electrically Conductive Lubricant.
> >
> Anyone know where the "Cool Amp" kit can be purchased? Thanks..
>
> (((73)))
> Phil, K5PC

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

1859. celphone yagi

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: fistermix@aol.com
Message-ID: <19970216134401.IAA11742@ladder01.news.aol.com>
Source record: 97212

can anyone help with building a yagi for motorola celphone. so i can boost my signal in a low signal area?

1860. Re: Test equipment service manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <330720BB.56DB@ix.netcom.com>
Source record: 97213

Peter Cripps wrote:
>
> A while back details were posted of a company that sells test equipment
> service manuals. Unfortunately, I've lost the information.
>
> Be grateful if someone could repeat....specifically I'm looking for an
> HP334A manual.
>
> Thanks,
>
> Peter
>
> --
> Peter Cripps Associates
> Technology Strategy and Product Development
> 20 Carrera Court
> Redwood City, CA 94062
> 415 364 4413 voice
> 415 364 1353 fax

Hello Peter -- goto the following URL for some Manual Vendors:
http://pw2.netcom.com/~ac6v/pagef.html#M

Good Luck
Rod in San Diego
--
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V (WAZ 10M SSB #118)

1861. Amateur Radio Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <330732C9.57C7@primenet.com>
Source record: 97214
Cross-posted to: rec.ham-radio.packet,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Please browse, bookmark, and send comments regarding my web page:
http://www.primenet.com/~ke7gh

73, Brian

1862. Re: good source for amplifier tips/ Marv W6FR's Article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: bsbuchanan@aol.com
Message-ID: <19970216162000.LAA18317@ladder01.news.aol.com>
Source record: 97215

OM's
Looking for information on Passive input circuits for Tetrode Amplifiers
as mentioned in QST April 1996
Deals with shunting with approx. 50 OHM loads to limit complexity of input
circuits for low band 80-10 or even 80-6 meters. This was noted by George
Badger of Sevtlana Electron Devices.......and published in Communications
Quarterly Summer 1993 and later by Marv Gonsior W6FR in the same mag
Winter 1995.....

1863. Re: good source for amplifier tips/ Marv W6FR's Article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <33073f5e.2887781@netnews.worldnet.att.net>
Source record: 97216

On 16 Feb 1997 16:20:06 GMT, bsbuchanan@aol.com (BSbuchanan) wrote:

> Passive input circuits for Tetrode Amplifiers
>as mentioned in QST April 1996
>Deals with shunting with approx. 50 OHM loads to limit complexity of input
>circuits for low band 80-10 or even 80-6 meters.

Passive grid circuits are also applicable to lower-gain triodes and
big tetrodes. An old 833A I built (back when we got them used for
free) used a 200 Ohm grid-swamping resistor. I used a 4:1 input
transformer and fed the output side up through the center of the
non-inductive resistor used for swamping. The grid impedance
obviously lowers the termination impedance dymanically. It doesn't
lower it much, however, so the impedance swing on the driver wasn't
much of a problem. (This could be a good IPM generator if everything
went wrong--wideband sideband.)

Fred

jfriley@worldnet.att.net jfriley@airmail.net fredwa8ajn@aol.com

1864. Driving Mixer Circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: w1aaz@juno.COM
Message-ID: <19970216.123627.9439.0.w1aaz@juno.com>
Source record: 97217

>Richard Karlquist (rkarlqu@scd.hp.com) wrote:
>: You see this written from time to time. I happen to disagree with
>: this opinion, as a general matter. It sounds reasonable to drive
>: mixers with a square wave since one is trying to switch the diodes
>: on and off. The reality is that square waves do not go through
>: transformers very well, so you should really stick with a sine
>: wave in most cases. What really makes mixers happy (at least
>: below 100 MHz.) is to be driving from a current source of sine
>: wave.

I have previously made several post regarding the advantages of using a square LO. This is what Mini Circuits has to say about the subject (From their "most asked questions about mixers" section of their RF/IF Designer's Handbook, page 1-29).

Q: I am a digital designer, dealing with pulses rather than sine waves. Is it necessary to furnish only sine waves to a DBM?

A: No. A DBM operates as a switching device...pulses are fine (and may even lower distortion).

Ed
W!AAZ

1865. Re: celphone yagi

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: "David A. Cooley" <N5XMT@amsat.org>
Message-ID: <33074DEF.3C18@amsat.org>
Source record: 97218

Fistermix wrote:
>
> can anyone help with building a yagi for motorola celphone. so i can boost
> my signal in a low signal area?

There is a program available for download from
http://www.ipass.net/~teara
called Yagicad 4.1... It is very good for designing antennas. The
problem you'll run into with the cellphone is that if your moving,
you'll have to know exactly where the closest cell tower is and point it
directly at it at all times... if your a fixed station, that won't be a
problem... however, being fixed it would be cheaper to have a standard
phone line.

Later,
DAve

--
==========
David Cooley N5XMT Packet: N5XMT@W4RAL.#RTP.NC.USA.NOAM
Internet: N5XMT@amsat.org Web: http://www.ipass.net/~cooldave/
Sponges grow in the ocean... Wonder how deep it would be if they didn't!
==========

1866. 624 Kits List of PC Boards and Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5e7kms$gtd@news.teleplex.net>
Source record: 97219

I have another small list of parts, Kits and PC boards. Email me for a copy.

Pat Bunn

1867. INMARSAT Satellites

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: patricio@deltanet.com
Message-ID: <5e7pro$t8l$2@news05.deltanet.com>
Source record: 97220
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Where are the INMARDAT Satellites located? What are the frequencies in use?
Is the signal strong?

1868. Re: good source for amplifier tips/ Marv W6FR's Article

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1602971238200001@news.vcnet.com>
Source record: 97221

In article <19970216162000.LAA18317@ladder01.news.aol.com>,
bsbuchanan@aol.com (BSbuchanan) wrote:

> OM's
> Looking for information on Passive input circuits for Tetrode Amplifiers
> as mentioned in QST April 1996
> Deals with shunting with approx. 50 OHM loads to limit complexity of input
> circuits for low band 80-10 or even 80-6 meters. This was noted by George
> Badger of Sevtlana Electron Devices.....and published in Communications
> Quarterly Summer 1993 and later by Marv Gonsior W6FR in the same mag
> Winter 1995.....

To minimize the chance of regeneration, the (50 ohm) termination should be wired directly to the grid pin on the tube socket. The other end of the termination should be bypassed directly to ground with at least two different values of C--such as 1000pF and 0.01mF. A convenient place to feed the DC grid bias voltage is at the bypassed end of the termination. IF you want the amplifier to oscillate, place an inductor in series with the grid termination.

Neutralizing a grid-driven Class AB1 amplifier greatly improves the input swr on the higher bands. For a neutralized general-coverage, grid-input circuit, see Figure 5 at:
http://www.vcnet.com/measures/

--
--Rich-- ag6k, 805-386-3734

1869. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc1c50$921f0880$a6102399@peter-s>
Source record: 97222
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Holstein <holstein@erols.com> wrote in article
<5e0v8s$ehq@boursy.news.erols.com>...
> >The marine band is in the 160+ MHz range, while 2m is in the 146MHz
> >range. Unfortunately most transmitters can't over this wide of range
> >unless they are specially built.

I don't know about you, but I sick and tired of people telling me that
things are "impossible"
when it obviously ain't so. It amazes me that things work as well as they
do in the world
with so much negativity and giving up.

> Look people. I asked for help! I would like to modify a ham rig for
> use on the marine band for emergency use so I don't have to waste a
> bunch of money on a MARINE rig I'll never use. I am sick and tired of
> all the unsolicited e-mails from cranky old men who have nothing
> better to do than to tell me this is illegal (which it is not).

It doesn't matter whether or not it is "illegal." If it saves someone's
life then that is much
more important than whether or not some stupid regulation is followed.

Good luck, I hope you get the mod.

1870. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970216213500.QAA05245@ladder01.news.aol.com>
Source record: 97223

In article <33035d8f.183127261@news.santafe.edu>, jpotter@jpaw.com (Jim Potter) writes:

>The factor of 2 is not a rule of thumb, since it varies, depending on
>the operating conditions. However, I believe that the dc method always
>overestimates the actual grid dissipation.

Not with a 360 degree grid current conduction angle, hi.

Measures has had all the heating problems pointed out to him
early in the thread, but he's back at it again.

Earlier he said the 8877 grids were 500 watt rated, now they are in the
multi-kilowatt range.

My puzzlement is how mystical magical parasitics cook
the gold off the 41 ampere grids that exist in the world of pathological
science.

Earlier Richard said his suppressors worked because they
had higher resistance at VHF, now he claims they work because
they have lower Rp.

I think I'll take Twain's advice, and bow out.

73 Tom

1871. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc1c52$1c41c6a0$a6102399@peter-s>
Source record: 97224
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Tim Shearer <xTimothy_Shearer@MK.com> wrote in article
<5e4ikt$4oh@esgadm.esg.mk.com>...
> I take it no out of amateur band transmissions will be made until a
> bonfide life and death situation occurs.
>
> You should not publically admit to federal offenses. You admissions are
> being permanently recorded in archives like DejaNews.
>

Doesn't one part of the amateur regs permit communication by "any means
available"
during an emergency situation?

I was contemplating loading the local PD freqs into my portables in case
something
really bad happens. If I end up saving someone's life, even if I lose my
license, it
would be worth it anyway.

1872. Need Info for PT6067/68 transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: yu1ol@eunet.YU
Message-ID: <3307728A.2A6C@eunet.yu>
Source record: 97225

HI,

Any body have data for PT6067&PT6068 transistors or equivalents?

TKU to all es vy 73's de YU1OL, Batko

1873. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: Bob Nielsen <nielsen@primenet.com>
Message-ID: <330764B1.4510C6FD@primenet.com>
Source record: 97226
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bart Wessel wrote:
>
> William Vynck <RACO@ping.be> wrote:
>
> >The official Kenwood TH-79E/A modifications can be found on my homepage.
> >Those are JPG files that you can download and vieuw with a picture
> >viewer.
>
> >Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz
>
> Be aware that these file contain obvious errors. Look at table 2: the E and E3
> units seem to be electronically identical, yet their frequency coverages
> differ.
> Mmmm.... Wonder what else is wrong!

Look carefully at Table 2: E receives 144-146 and 430-440, while E3
receives 67-180 and 400-512 MHz.

It appears there is no way to get the 800 MHz band on "K" (U.S./Canada)
models, which should make Newt Gingrich happy.

Page 16 appears to be missing from the JPG images.

Bob

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
AX.25: w6swe@wb7tls.az.usa.noam
http://www.primenet.com/~nielsen

1874. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: William Vynck <RACO@ping.be>
Message-ID: <33079110.3BAB@ping.be>
Source record: 97227
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bob Nielsen wrote:
> Look carefully at Table 2: E receives 144-146 and 430-440, while E3
> receives 67-180 and 400-512 MHz.
>
> It appears there is no way to get the 800 MHz band on "K" (U.S./Canada)
> models, which should make Newt Gingrich happy.
>
> Page 16 appears to be missing from the JPG images.
>
> Bob
>
> --
> Bob Nielsen Internet: nielsen@primenet.com
> Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
> AX.25: w6swe@wb7tls.az.usa.noam
> http://www.primenet.com/~nielsen

I checked my pages and indeed we don't have page 16
What i don't understand is that all pages i have are just like i
received from Kenwood and they are one part.
No way they could "forget" page 16, i think it's a mistake in numbering
the pages sins page 15 and 17 are one.

I ask them for it and let you know.

William

--
Visit my Homepage http://www.ping.be/RACO
E-mail RACO@ping.be and/or William.Vynck@ping.be
Fidonet 2:291/1800.15
Radio Amateur ONL4021
QSL via bureau UBA Belgium

1875. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970216170753.28730A-100000@oso.slonet.org>
Source record: 97228
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Marine radios and especially handhelds have become so cheap that the hams are trying to convert them from marine to two meters! Cliff K7RR

1876. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: Tom Sharples <sharples@hooked.net>
Message-ID: <3307AE7E.7504@hooked.net>
Source record: 97229
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Well, aren't we self-righteous today! In any event, as it happens I do own a marine radio. It is not portable, and is attached to my large boat. Therefore, it is not suitable for use in a small boat of the sort I rented on my last vacation. The FT-11 was much more appropriate, and, when the engine conked out in my rental boat in the middle of Puget Sound, I was able to call for help! So sorry I didn't use a "type approved" radio- I suppose it would have been much better for my family and I to row the ten nautical miles or so to the coast. In addition, Jeffrey, you really don't have the slightest idea what you are talking about with respect to performance- I have a fully equipped radio communications shop including a Service Monitor and both a HP and Advantest spectrun analyzer and shielded room. I've looked at both of the radios with respect to deviation, spurs, and frequency stability- they are fully the equal of my Midland marine radio. In fact many of the ham rigs are based on commercial designs or vice versa- for example the IC02 and the essentially identical Aircraft HT's.
So go mind your own business Jeffrey.

1877. CHECK THIS OUT!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <3307D11C.DC5@mailhost.cyberramp.net>
Source record: 97230

http://www.cyberramp.net/~johnf

1878. Kenwood TH-79A Remote Function ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: "Mark S. Conway" <mconway@mail.nantucket.net>
Message-ID: <3307C19A.4273@mail.nantucket.net>
Source record: 97231
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

I would like to use my 79A as the remote to my 733A.

I followed all the directions in the Appnotes. I power on while holding PTT and MR and nothing happens.

Any suggestions would be great.

Thanks, Mark, N1XYY

1879. Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3307C9B9.35C8@geocities.com>
Source record: 97232
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Anyone wishing to register opposition for the ARRL/AMSAT submission should send a brief e-mail message to wrc97@fcc.gov. The Subject line should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible allocation proposal," will be included in the public record and will help to drive home the point that there is broad-based approval to well conceived 2 metere sharing proposals. It ought to be clear to the FCC the public good is poorly served by allowing hams exclusive use of these valuable
frequencies.

Please note! The proposals the League opposes are not FCC proposals, nor are
they endorsed by any other branch of the government. They are industry proposals. The League's objective is to falsely demonstrate there is broad citizen opposition to the industry proposals.

Additional arguments or evidence also is welcome. Important! Comments should
reach the FCC no later than March 4, 1997!

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

1880. Equivalent to heathkit part

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: ianls@patrol.i-way.co.uk
Message-ID: <33074ec0.974066@news.i-way.co.uk>
Source record: 97233

Does anyone know an equivalent to Heathkit's 10.7 MHz IF transformer
used as T 301 and T302 in the HW9? Heathkit part number 52-193.
Presumably it has a Toko equivalent? Thanks.

G4JQT

--
Ian
ianls@patrol.i-way.co.uk

1881. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-16 00:00:00 UTC
From: jeffreyh@hawaii.edu.edu
Message-ID: <5e7if4$38b@news.Hawaii.Edu>
Source record: 97234
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Tom Sharples <sharples@hooked.net> wrote:
>(this is a copy of my response on this subject to jeffreyH, Busybody)
>Well, aren't we self-righteous today! In any event, as it happens I do
>own a marine radio. It is not portable, and is attached to my large
>boat. Therefore, it is not suitable for use in a small boat of the sort
>I rented on my last vacation. The FT-11 was much more appropriate, and,
>when the engine conked out in my rental boat in the middle of Puget
>Sound, I was able to call for help! So sorry I didn't use a "type
>approved" radio- I suppose it would have been much better for my family
>and I to row the ten nautical miles or so to the coast.

Uniden HH-979 VHF marine handheld: $159.95. Your family's life is
worth at least that much, and you won't be violating federal law.

>In addition,
>Jeffrey, you really don't have the slightest idea what you are talking
>about with respect to performance- I have a fully equipped radio
>communications shop including a Service Monitor and both a HP and
>Advantest spectrun analyzer and shielded room. I've looked at both of
>the radios with respect to deviation, spurs, and frequency stability-
>they are fully the equal of my Midland marine radio. In fact many of the
>ham rigs are based on commercial designs or vice versa- for example the
>IC02 and the essentially identical Aircraft HT's.

So do you cut legal corners in all aspects in your radio shop
business, or just with your own personel communications?

My comments were directed to everyone who has asked (or will ask
in the future) "How can I modify my radio to xmit out-of-band?"
None of those posting such queries have a fully-equipped radio
shop such as yourself to analyze the results of their modifications
(they wouldn't be asking for such info in the first place, yes?) -
that you're encouraging people to screw around with their
radios without them having the means to check their actions is
morally wrong. If their radios cause problems to other services
(as a result of your suggestions) and they encounter trouble with
the authorities, in their own defense they'll certainly mention
your name ("He told me how to do it!").

I have to wonder about the validity of your radio shop claims -
you said "... cut some <colored> wire..." - that was rather
vague for someone with their own radio shop business.

>So go mind your own business Jeffrey.

That will never happen.

Do you also cheat on your taxes?

73,
Jeff KH2PZ

1882. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: N5RWC <Tim_Raffety@Oxy.com>
Message-ID: <33086886.4DBC@Oxy.com>
Source record: 97093
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Peter Gottlieb wrote:
>
> David Holstein <holstein@erols.com> wrote in article
> <5e0v8s$ehq@boursy.news.erols.com>...
> > >The marine band is in the 160+ MHz range, while 2m is in the 146MHz
> > >range. Unfortunately most transmitters can't over this wide of range
> > >unless they are specially built.
>
> I don't know about you, but I sick and tired of people telling me that
> things are "impossible"
> when it obviously ain't so. It amazes me that things work as well as they
> do in the world
> with so much negativity and giving up.
>
> > Look people. I asked for help! I would like to modify a ham rig for
> > use on the marine band for emergency use so I don't have to waste a
> > bunch of money on a MARINE rig I'll never use. I am sick and tired of all the
unsolicited e-mails from cranky old men who have nothing
> > better to do than to tell me this is illegal (which it is not).

****

Don't worry about them. I have done it and I'd do it again. It's not so
much the radio being "type accepted" but rather a matter of money.
People that produce marine radios want you to spend your money on their
junk rather than have some smartassed ham radio operator mod their
own radio to work in that portion of the band they make radios for.

:)

1883. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970217154300.KAA17550@ladder01.news.aol.com>
Source record: 97094

In article <measures-ya02408000R1402970441000001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>
> Is it likely that 100 watts of drive could evaporate gold from an 8877
>grid? Each of the 96 gold-plated rectangular grid wires is 0.85 inches in
>length. Even if half of the drive power could be directed into the grid,
>that works out to 0.52 watts per grid wire. Does this seem likely to be
>enough energy to melt gold?

Flaws in the argument above:

1.) assuming the power distribution is equal throughout
the entire grid structure.

2.) ignoring the fact the grid is already heated by the cathode temperature

3.) the wire is suspended in a vacuum so there is no convection cooling.

4.) more than 1/2 the exciter power can be coupled to the grid

5.) the heating is due to electron bombardment and is concentrated
ONLY at the outer surface of the gold plating.

6.) Eimac states the maxmum grid dissipation rating is 25 watts.

73 Tom

1884. How do i downtune my radio??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Schembri Joseph Saviour <schemb2@uwindsor.ca>
Message-ID: <33087D1A.3876@uwindsor.ca>
Source record: 97095

I havbe an old Weather Band/FM/TV audio receiver that i bought at a garage sale for $2 that i would like to downtune to listen to either the 2m or 6m band. I'm pretty sure this is possible sine the Weather Band is 166.55 MHZ, and Channel 2 audio is only slightly above the 6m band. I was playing around with the tuning capacitors and did manage to get the radio to receive the aircraft band. Please Email, me if you can help, since I'm living on a students budget and *REALLY* would like to get into amateur radio. Thanks.

1885. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc1cec$689b5080$b8a1dece@dale>
Source record: 97096
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt,

I followed your instructions, but I replaced "oppose" with "support".

73,
--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Burt Fisher <burtfisher@geocities.com> wrote in article
<3307C9B9.35C8@geocities.com>...
> Anyone wishing to register opposition for the ARRL/AMSAT submission
> should send a brief e-mail message to wrc97@fcc.gov. The Subject line
> should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
> effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
> allocation proposal," will be included in the public record and will

1886. Re: Cold Solder Joints - Why?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb17.161959.23053@ke4zv.atl.ga.us>
Source record: 97097

In article <01bc1b5c$387898e0$27c99dcc@default> "John Lockhart" <jlockj@minn.net> writes:
>Any ideas out there why cold solder joints often manifest
>themselves four or five years after the soldering took place?
>I used to think a cold solder joint wouldn't work or would be
>intermittent from day one. Experience with some Kenwood
>transceivers and this week with a Sony TV is showing me
>otherwise. Is it related to wave soldering with solders that
>melt at lower temperatures? Or ?????

This is very common behavior. Usually, bad joints make a sufficient
mechanical connection to pass test, and often to work for some time
in the field. Then the joint corrodes, and the problems appear. A
good joint is protected from the effects of the atmosphere, a cold
joint typically isn't. So after a time it corrodes and becomes
either high resistance or behaves intermittantly.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1887. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: tgold@microvst.demon.co.uk
Message-ID: <856196780snz@microvst.demon.co.uk>
Source record: 97098
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <01bc1c52$1c41c6a0$a6102399@peter-s>
peter_gottlieb@msn.com "Peter Gottlieb" writes:

> Doesn't one part of the amateur regs permit communication by "any means
> available"
> during an emergency situation?

No, there's no such permission, it's actually worded as a negative.
S97.403 says that nothing elsewhere in Part 97 prevents a license
holder from any activity to save life or property which are under
immediate threat.

You may see that as an unimportant difference, but I think it is very
significant. What it means is that you have no permission or
imunity to rely on if and when the FCC or some other branch of the
Federal, State or Local government charge you with a violation of
some other statute, only from penalties for violating CFR 47 Part 97
itself.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com
tgold@microvst.demon.co.uk
packet: g3skr@n0ary.#nocal.ca.usa.na

1888. WTB: Eddystone 898 dial

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: dewonder@aol.com
Message-ID: <19970217170300.MAA21700@ladder01.news.aol.com>
Source record: 97099

hello...

i am looking to purchase (for a reasonable proce) an EDDYSTONE 898 or
similar model slow motion drive slide rule dial. this is for personal use
on a homebrew receiver project.

thank you & 73,

Bob, KC5LHR

email=Dewonder@aol.com <or> Robert.Harding@abq.com

1889. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1702970903250001@news.vcnet.com>
Source record: 97100

In article <19970210194001.OAA13582@ladder01.news.aol.com>, w6tg@aol.com (W6TG) wrote:

> This thread has turned into a real pissing contest.
> Too bad, it was real interesting for sometime.
> W6TG

True enough, Terry, but the buttheads in the world are not terribly difficult to ignore.

If anyone is interested in further reading on the subject of VHF/UHF parasitic-oscillation, see: Dittrich, H. F.; *Tubes for R. F. Heating*; N.V. Phillips Gloeilaampenfabrieeken--Eindhoven, the Netherlands. Section 5.8, 'Parasitic Suppression Circuits' begins on page 96.

However, loyal members of the Rauchian camp might do well to avoid Dittrich's book.

--
--Rich-- ag6k, 805-386-3734

1890. unsubscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: ermira@pl.jaring.MY
Message-ID: <3.0.16.19970218014108.2c4f9862@pop2.jaring.my>
Source record: 97101

someone out there pls help me how to unsubscribe to this reflector.
advance thanks.

1891. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb17.164541.23241@ke4zv.atl.ga.us>
Source record: 97102

In article <measures-ya02408000R1502971551480001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>In article <1997Feb15.203248.13312@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us >(Gary Coffman) wrote:
>
>> In article <measures-ya02408000R1302970927220001@news.vcnet.com> >measures@mail.vcnet.com (R. L. Measures) writes:
>> >The 8877 has an anode to grid C of 10pF. The 4kV/1A maximum ratings for
>> >the 8877 apply up to 250MHz. At 250MHz, 10 pF has 63.66 ohms of
>> >capacitive reactance. According to Eimac *CURVE 4250*, the 8877 begins to
>> >saturate at an anode to grid potential of about 250v. Therefore, with an
>> >anode supply voltage of 4000V, the peak AC anode voltage is about 4000v
>> >-250v = 3750v during the conduction half-cycle when the cathode is driven
>> >negative. The AC rms anode voltage = 1/2^0.5 *3750v = 0.7071*3750v =
>> >2651V-rms. When 2651V-rms is applied to capacitor whose reactance is 63.66
>> >ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.
>> >
>> > ...Sure, 41A is an eyebrow-raising amount of grid current, but this is the
>> >case according to standard AC Circuit-Analysis, which applies in all parts
>> >of the universe, with the exception of one rather unique place in the State
>> >of Georgia.
>>
>>
>> Well, that sort of "AC Circuit-Analysis" may work in your universe
>> (far, far, away), but not in the Real World(TM). Kirchhoff's law
>> requires a closed path for current flow, and the topology of a GG
>> vacuum tube amplifier doesn't provide a closed path including grid
>> and plate which *only* includes the grid-plate capacitance, so your
>> simple Ohm's law "AC Circuit-Analysis" fails.
>...snip...
>
> While it is true that no net displacement of electrons flows through a
>capacitor, nevertheless, an equal and opposite displacement of electrons
>flows back and forth that produces an I^2*ESR loss in real watts. Some
>people call AC an apparent current.
>
> The next time you receive your monthly electric bill, Gary, try arguing
>that, since no real current---i.e., no net displacement of
>electrons---flowed through your residence, you could not possibly have
>consumed any electric power whatsoever.

Nice try at changing the subject, Rich, but I'm not taking the bait.
Your creative editing can easily be undone to put the point you're
trying to duck back in. (And besides, my power meter doesn't spin

until I provide a *closed path* for the AC current through it.)

[reinstate original]

The full mesh also includes the plate tank circuit, and that's
about 5000 ohms, and the chassis return to the grid contact,
hopefully a very low impedance, but perhaps as much as a few
hundred ohms at VHF. So the peak current in that mesh would be
at most 2651/5063.66 = 0.52 ampere, not 41 amperes as you erroneously
calculated.

In other words, the AC current mesh looks like this:

```
x--grid----grid-plate capacitance---plate---plate tank impedance--x
| |
| |
x---------------------chassis impedance--------------------------x
```

The DC supply isn't part of the AC current mesh because the plate
choke effectively blocks it from participating in AC current flow.
Applying Kirchhoff's law, grid-plate capacitance is in *series*
with the other circuit impedances, and a current calculation must
use the *sum* of those impedances.

[end insert]

>>The full mesh also includes the plate tank circuit, and that's
>>about 5000 ohms, ...snip...
>
>The output Z of an amplifier tube in linear service is approximately equal
>to the anode supply voltage divided by two times the avg. anode current.
>For an 8877 at full-tilt, that would be 4000v/(2*1a)=2000 ohms. 5000 ohms
>does not win the teddy bear, Gary---however, you may choose between a
>6-ounce bottle of "Babe" shampoo or a 5lb. bag of Bandini.

Very cute. Now try to dodge the fact that the AC current loop *includes*
the tank impedance and the chassis return impedance. *Whatever they are*,
they are much larger than the grid-plate impedance with which they are
in series, so your calculation is *wrong*.

>I stand by my answer of 41.63A-rms.

I'm not surprised that you don't understand Kirchhoff's laws,
no doubt you think you can wire a light switch with only one
wire too, but then I've ceased being surprised that you are an
idiot. When this thread began (long long ago), I was willing
to give you the benefit of the doubt, and even offered some
supporting comments. But now it is very clear that you don't
have a clue. Your theory is voodoo, and any product based on
it is too.

Gary
--

Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1892. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: barney@google.com
Message-ID: <5ea6e0$ljg@news1.mnsinc.com>
Source record: 97103
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

WHY do you ONLY want to give away 2 meters, Burtie?

Why not get all the hams to write the FCC and recommend that they give away ALL of our spectrum?

I am sure the readers of this newsgroup are already dashing off letters by the DOZEN to the FCC in response to your great message, since we all follow you like the pied piper!

Burt Fisher <burtfisher@geocities.com> whistled a happy tune like:

|>Anyone wishing to register opposition for the ARRL/AMSAT submission
|>should send a brief e-mail message to wrc97@fcc.gov. The Subject line
|>should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
|>effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
|>allocation proposal," will be included in the public record and will
|>help to drive home the point that there is broad-based approval to well
|>conceived 2 metere sharing proposals. It ought to be clear to the FCC
|>the public good is poorly served by allowing hams exclusive use of these
|>valuable
|>frequencies.

|>Please note! The proposals the League opposes are not FCC proposals, nor
|>are
|>they endorsed by any other branch of the government. They are industry
|>proposals. The League's objective is to falsely demonstrate there is
|>broad citizen opposition to the industry proposals.

|>Additional arguments or evidence also is welcome. Important! Comments
|>should
|>reach the FCC no later than March 4, 1997!
|>#================#===#
>	Burt Fisher	Teacher of idiocy, broadcasting and electronics
>	Amateur call	South Dennis, Ma. (Cape Cod)
>	K1OIK	http://www.geocities.com/WallStreet/5169
>#================#===#
>	Visit my WWW site, it stinks like no other k1oik@bozonet.com
>#===#

1893. Re: celphone yagi

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Ken Finney <kenneth.c.finney@boeing.com>
Message-ID: <33089416.764A@boeing.com>
Source record: 97104

David A. Cooley wrote:
>
> Fistermix wrote:
> >
> > can anyone help with building a yagi for motorola celphone. so i can boost
> > my signal in a low signal area?
>
> There is a program available for download from
> http://www.ipass.net/~teara
> called Yagicad 4.1... It is very good for designing antennas. The
> problem you'll run into with the cellphone is that if your moving,
> you'll have to know exactly where the closest cell tower is and point it
> directly at it at all times... if your a fixed station, that won't be a
> problem... however, being fixed it would be cheaper to have a standard
> phone line.
>
> Later,
> DAve

That assumes you are in a fixed location where phone lines are available.
I know of counties where 1/3 of the homes don't have electricity available,
I can imagine most of those homes don't have phone lines either.

1894. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: "John M. Yellenic" <yellenic@epix.net>
Message-ID: <3308B0DE.5B96@epix.net>
Source record: 97105
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Anyone wishing to register opposition for the ARRL/AMSAT submission
> should send a brief e-mail message to wrc97@fcc.gov. The Subject line
> should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
> effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
> allocation proposal," will be included in the public record and will
> help to drive home the point that there is broad-based approval to well
> conceived 2 metere sharing proposals. It ought to be clear to the FCC
> the public good is poorly served by allowing hams exclusive use of these
> valuable
> frequencies.
>
---SNIP---

> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

I'm a professional educator of electronics and computer service technology. I've only had my ham ticket for about a month now, but I'm learning a lot about this fascinating field. In fact, it was a few of my students that got my interest up in ham radio, and I've done what I can to promote it to my other students. I view it as a national resource... and also realize that it is fast becoming an endangered resource!

Reading these newsgroups has helped me have a better understanding of not only the technical aspects of the field, but the kind of people that are involved in it. The vast majority of the participants in these groups are extremely helpful, and willing to do anything they can to promote amateur radio... proud followers of The Amateur Code by W9EEA!

I've also learned that there are a small number of participants that prefer to use the newsgroups for their own pleasure... attempting to degrade the service and those participating in it. No doubt these types have other interesting diversions when their computers and rigs are down, such poking sticks into hornet nests to observe the reaction. I've been around long enough to know that this type of person will continue to provoke a response until they are ignored long enough. Even

the hornets learn this lesson!

Perhaps the formation of a new newsgroup, such as rec.radio.amateur.whiners-cryers is in order, so that these types can have their own little playground and stop spamming the groups that are helpful!

Also... please don't think anyone identifying himself as a "teacher" speaks for everyone in that profession. Hopefully you too have been around long enough to realize that there will always be a few dog-eared cards in the deck. Fortunately, they are easy enough to identify.

Obviously, I'm opening a path for flames by posting my opinion here... and from the childish battles I've read on these newsgroups, I certainly expect a few. I'll just ignore them. Then the flamethrowers will find another nest to poke.

My two cents...

John - N3YPR

1895. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Tom Sharples <sharples@hooked.net>
Message-ID: <3308B4C6.2059@hooked.net>
Source record: 97106
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

This is my final comment on this subject, so JeffreyH, Busybody,the fellow who openly admits the he "will never mind his own business" will probably end up having the last work.

Many local hams have seen my radio shop and can verify all of my claims to its existence. As for the modifications, I didn't "suggest" that anyone do them, nor did I tell anyone how to (I'll leave that up to the many, many users of the popular Artsci publications I was referring to); In response to a previous post, I merely stated that the modification could be done with success.

As to your other gratuitous comments, get a life Jeffrey! No-one wants to listen to you pontificate out here. Maybe you should get a job for the federal government- there, you can spend as much time as you want in pious oversight of the moral fiber of the rest of us (or perhaps you've thought of that already...)

1896. FS: HP302A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <3308B8C8.3C05@calweb.com>
Source record: 97107
Cross-posted to: sci.electronics.equipment,rec.radio.amateur.homebrew,rec.audio.marketplace

For Sale:

Hewlett Packard HP 302A, solid state,Low Frequency selective voltmeter, 20 Hz to 50 Khz calibrated in 10 hz divisions on linear dial system. Bandwidth specs: +/- 3.5 hz at 3db down points, +/- 25 hz at 50 db down points, +/- 70 hz at 80 db down points. Sensitivity: 30 microvolts F/S to 300 volts FS (-90dbm/600 ohms f.s.). Tracking oscillator output 1V rms/600 ohms (20 hz to 50,khz). Has DC output of 1 ma for FS meter reading into 1500 ohms or less (scale for a digital VM readout if desired or use with strip recorder). AFC allows for signal capture and hold of up to +/- 100 hz. Also provides a frequency restorer output of input signal of 1 volt RMS for full scale readings. This is an older intrument and weighs around 35 lbs. it is cabinet mounted but can be rack mounted. Excellent electrical and mechanical condition.Shipping weight around 50 lbs.

$150 plus ups on 50 lbs (double boxed) from zip 95827

Thanks for the read

Bob, KE6F

1897. ASKING FIRST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: suprkids@rt66.com
Message-ID: <5ea81g$h78$2@mack.rt66.com>
Source record: 97108

May I post an offer here for my Karate Video? If I get a flame, I'll post, otherwise the yea's have it. It's a good show. Mort Packer

1898. TUBE HOMEBREWERS READ!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5eagoi$q9u@news1.mnsinc.com>
Source record: 97109

Reminder: There is an email list devoted to building and operating
tube gear; to subscribe send an email to listproc@theporch.com
and only write:
subscribe glowbugs your-name-here
and you'll be hooked up. To send a message to the gang use the
address glowbugs@theporch.com.

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

1899. ?? Valve MACHLETT ML 6696

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: R.P.Schorn@kfa-juelich.de
Message-ID: <5eag2e$2qv@zam201.zam.kfa-juelich.de>
Source record: 97110

I'm looking for technical data concerning
the MACHLETT valve ML 6696. Thanks.

Ralph, DC5JQ

R.P.Schorn@kfa-juelich.de

1900. Re: re homebrew 12v antenna rotator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: fsimonds@icanect.net
Message-ID: <5eak4q$jh6@news.icanect.net>
Source record: 97111

jeffg@istar.ca (Jeff Groberman) wrote:

->Over the past few months I've been asking for tips on building a 12v
->antenna rotator controller. The roator itself is fitted with a pot
->that turns as the rotator turns thus changing the ohmage. I can of
->course read the ohmage on a VOM an extrapolate the readings to
->N/S/E/W. but does anyone have a better way of converting the
readings
->without using an ohmmeter?
->Jeff

Absolutely! At the next hamfest, buy a big dc voltmeter. Make sure you can take it apart; if you can't, don't buy it.

Calibrate your pot/VOM system at the four cardinal and intercardinal points (N, NE,E,S,SE, etc...), noting at what voltage readings these 8 points occur. Once done, don't change a thing in the cabling to and from the rotor pot.

You'll probably have to change the attenuation circuit inside the meter (unless its scale matches your VOM). Repaint the meter face as appropriate (N,NE,E, etc...), put it in a nice box, and you're in business.

Good luck...

73--Terry/WB4FXD in Ft. Lauderdale, FL
fsimonds@icanect.net

1901. robocopy

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Robert McMillan <rmcmilla@cadvision.com>
Message-ID: <01bc1d1e$d3457460$3d46e4cf@cadvision.com>
Source record: 97112

I came across this file the other day while searching for a similarly named program. This robocopy refers to an article in the September 1990 edition of 73 magazine for a device to connect your receiver to your computer to interpret CW.

I don't have access to this copy of the magazine, and I guess by now there have been a few more articles written, and circuits designed around this subject. Can anyone e-mail to me the circuit diagram for this device or one similar?

Thanks..... Rob...

1902. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3308E04E.63AB@geocities.com>
Source record: 97113
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Ken Durham wrote:
`

> > Burt, would you explain why Hams shouldn't continue exclusive
> use of these "valuable" frequencies and how Hams will benefit from
> giving them up. It is not "clear" to me. Are you familiar with
> the freq plan for P3D?

Hams use 2 meters for exactly what that serves the public in a
MEANINGFUL
way?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

1903. Who know's the 66LI0100-3 From NEC ??????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Marco <mbokma@caiw.nl>
Message-ID: <01bc1d23$2eb4e840$8f0bb2c2@ingrid>
Source record: 97114

Hello I am looking for any information on the NE673 MESFET from NEC.
It seems that nobody know this MESFET or did ever use it.
If you can help me with an appplication circuit diagram, please do so!

Thanks, Marco

1904. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3308DF7C.3F5E@geocities.com>
Source record: 97115
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Barney wrote:
>
> WHY do you ONLY want to give away 2 meters, Burtie?

Actually you are correct. Hams need nothing except to SERVE THEMSELVES.

> Why not get all the hams to write the FCC and recommend that they give
> away ALL of our spectrum?

Great!

> I am sure the readers of this newsgroup are already dashing off letters
> by the DOZEN to the FCC in response to your great message, since we all
> follow you like the pied piper!

Actually you all follow each other like the Pied Piper. Listen to a
contest.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

1905. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970217225200.RAA11122@ladder01.news.aol.com>
Source record: 97116

In article <1997Feb17.164541.23241@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) writes:

>The full mesh also includes the plate tank circuit, and that's
>about 5000 ohms, and the chassis return to the grid contact,
>hopefully a very low impedance, but perhaps as much as a few
>hundred ohms at VHF. So the peak current in that mesh would be
>at most 2651/5063.66 = 0.52 ampere, not 41 amperes as you erroneously
>calculated.

Gary,

The tube is a time varying resistance in parallel with a capacitance in a complex circuit. While we can ignore most of the complexities at HF, we can not do so at VHF. We don't even know where the ten pF is really "at" in the system, but it's a safe bet it isn't all between the very middle of each grid wire and the anode. The solution is more complex than either of you are presenting.

Rich's math is correct if the tube indeed discharges the ten pF he imagines exists in one spot, and if it charges back up to the voltage he claims.

But the bottom line is this.....

Even if we allow Rich freedom to swing the amount of voltage he likes at 250 MHz, he has no idea where or how the 41 amperes would be distributed.

He is just pulling numbers from his "storeroom" of abstract data, and mis-applying them to a circuit he doesn't fully understand. The whole argument is foolish.

A more important question might be if the grid CAN carry 41 amperes, as Mr. Measures claims, how does a VHF parasitic we can't measure or even see on the meters melt the gold in a fraction of a nanosecond??

You see Gary, he argues against himself at every turn. He whines about heeding ratings (like filament inrush and voltage) when it serves his purpose of making others look bad, and in the next breath tells us the grid will dissipate more power than the anode!

He won't even answer about the suppressor Rp issue. He claims lower suppressor Rp results in more stability. Taking that to the extreme a dead short is the lowest possible Rp and the best suppressor.

He's probably just having fun yanking our chains.

73 Tom

1906. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970217225200.RAA11111@ladder01.news.aol.com>
Source record: 97117

In article <measures-ya02408000R1502970550520001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

> I can not recall seeing one in QST or in any publication. Typically, such
>authors only say something like: wind 5 turns of #18 on a 47 ohm
>resistor--period ..... To me, this treatment, or lack thereof, has the
>earmarks of 'cut-and-try' as well as a lack of understanding of what is
>going on in the VHF-resonant anode circuit of HF amplifiers. This sort of
>thing bears a certain similarity to the so-called "cures" for bubonic
>plague that were being sold in the streets of Europe in centuries past.

Why Rich,

I'm shocked that you would say that.

Within the last few weeks you changed your his tune about how
suppressors work, plus you have a "one size fits all" nichrome
cure!

Plus you said the following a week or so ago:

In article <measures-ya02408000R0202971344300001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:
>Quite true, Peter---unless the tune capacitor is resonant or near
>resonance. Before this discussion began, I hadn't given much thought to
>how VHF voltage might be able to arc a tuning capacitor. Thanks to Mr.
>Rauch's measurements of a tune capacitor from an AL-80, I think I have an
>inking.

After years of making your claims about plate capacitor arcing,
you now admit never "giving it much thought" and say you are
just now having a "inking"!

Why pick on everyone else when you are doing the same thing?

73 Tom

1907. Re: TUBE HOMEBREWERS READ!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: wa5dxp@worldnet.att.net
Message-ID: <5eamee$mrf@mtinsc05.worldnet.att.net>
Source record: 97118

bry@mnsinc.com.NO_SPAM (Brian Carling AF4K/G3XLQ) wrote:

>http://www.mnsinc.com/bry/

Tried the site, won't go back, too many cookies to enjoy the site....

1908. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3308E218.57CD@geocities.com>
Source record: 97119
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

John M. Yellenic wrote:

> I'm a professional educator of electronics and computer service
> technology.

So am I.
Look at my WWW page and see my students and their work. The boy that is pictured there got his ham license for ONE reason only, to get extra credit points I give if you get a ham license. He refused free equipment and wants to give his call back.

I've only had my ham ticket for about a month now, but I'm
> learning a lot about this fascinating field.

What is so interesting?

I view it as a national
> resource... and also realize that it is fast becoming an endangered
> resource!

It is a vast wasteland.

> The vast majority of the participants in these
> groups are extremely helpful, and willing to do anything they can to
> promote amateur radio... proud followers of The Amateur Code by W9EEA!

Most of them are clones, will help rarely and most sit on their butts.

> I've been around long enough to know that this type of person will
> continue to provoke a response until they are ignored long enough. Even
> the hornets learn this lesson!

Hams can not ignore.

> Also... please don't think anyone identifying himself as a "teacher"
> speaks for everyone in that profession.

No you do not. If you find ham radio interesting you will love watching water freeze.

, I certainly
> expect a few. I'll just ignore them. Then the flamethrowers will find
> another nest to poke.

If you ignore them, why is there a post about what you will ignore?

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

1909. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <3308ead7.710311641@news.erinet.com>
Source record: 97120
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Mon, 17 Feb 1997 14:26:23 -0500, "John M. Yellenic"
<yellenic@epix.net> wrote:

>Burt Fisher wrote:
>>
>> Anyone wishing to register opposition for the ARRL/AMSAT submission
>> should send a brief e-mail message to wrc97@fcc.gov. The Subject line
>> should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
>> effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
>> allocation proposal," will be included in the public record and will
>> help to drive home the point that there is broad-based approval to well
>> conceived 2 metere sharing proposals. It ought to be clear to the FCC
>> the public good is poorly served by allowing hams exclusive use of these
>> valuable
>> frequencies.
>>
>---SNIP---
>
>> #===============#===#
>> | Burt Fisher | Teacher of video, broadcasting and electronics |
>> | Amateur call | South Dennis, Ma. (Cape Cod) |
>> | K1OIK | http://www.geocities.com/WallStreet/5169 |
>> #===============#===#
>> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
>> #===#
>
>I'm a professional educator of electronics and computer service
>technology. I've only had my ham ticket for about a month now, but I'm
>learning a lot about this fascinating field. In fact, it was a few of
>my students that got my interest up in ham radio, and I've done what I
>can to promote it to my other students. I view it as a national
>resource... and also realize that it is fast becoming an endangered
>resource!

THUS we see the difference between a teacher and a Burt!

1910. Re: ASKING FIRST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <3308ea81.89277620@news.flash.net>
Source record: 97121

On 17 Feb 1997 18:29:04 GMT, suprkids@rt66.com (Mort Packer) wrote:

Please don't
Kerry

1911. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Doug Woodruff <km4hy@mindspring.com>
Message-ID: <3308F03D.7E92@mindspring.com>
Source record: 97122
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:

> Hams use 2 meters for exactly what that serves the public in a
> MEANINGFUL
> way?

Come on, Burt....
Let me see ---- public service events (bike races, marathons, sporting events, Special Olympics, APRS at the real Olympics in Atlanta, etc), search and rescue communications (whether on foot, in vehicles, or in the air), coordination of communications for emergency management agencies (from city/municipal to FEMA), and what about hurricanes, tornadoes, wildfires.....

Is that enough or do you need me to waste more bandwidth trying to convince you of something the rest of us acknowledge.

Doug, KM4HY
--
****
* *
* The Law is the common man's best protection. *
* "http://www.mindspring.com/~km4hy/km4hy.htm" *
* *
****

1912. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Doug Woodruff <km4hy@mindspring.com>
Message-ID: <3308F0EC.57A0@mindspring.com>
Source record: 97123
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt,

I'll be checking the callsign database with bated breath waiting for your call to come open after you resign it......can't imagine why you would want to continue to be identified with such a bunch of losers like us!!

Doug, KM4HY

1913. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Doug Woodruff <km4hy@mindspring.com>
Message-ID: <3308F206.5667@mindspring.com>
Source record: 97124
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> John M. Yellenic wrote:
>
> > I'm a professional educator of electronics and computer service
> > technology.
>
> So am I.
> Look at my WWW page and see my students and their work. The boy that is
> pictured there got his ham license for ONE reason only, to get extra
> credit points I give if you get a ham license. He refused free equipment
> and wants to give his call back.
>
> I've only had my ham ticket for about a month now, but I'm
> > learning a lot about this fascinating field.
>
> What is so interesting?
>
> I view it as a national
> > resource... and also realize that it is fast becoming an endangered
> > resource!
>
> It is a vast wasteland.
>
> > The vast majority of the participants in these
> > groups are extremely helpful, and willing to do anything they can to
> > promote amateur radio... proud followers of The Amateur Code by W9EEA!
>
> Most of them are clones, will help rarely and most sit on their butts.
>
>
> > I've been around long enough to know that this type of person will
> > continue to provoke a response until they are ignored long enough. Even
> > the hornets learn this lesson!
>
> Hams can not ignore.
>
>
> > Also... please don't think anyone identifying himself as a "teacher"
> > speaks for everyone in that profession.
>
> No you do not. If you find ham radio interesting you will love watching

> water freeze.
>
> , I certainly
> > expect a few. I'll just ignore them. Then the flamethrowers will find
> > another nest to poke.
>
> If you ignore them, why is there a post about what you will ignore?
>
> #================#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

STILL WAITING FOR YOUR CALL TO COME OPEN, BURT!!

Doug, KM4HY
--
****
* *
* The Law is the common man's best protection. *
* "http://www.mindspring.com/~km4hy/km4hy.htm" *
* *
****

1914. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <3308eb1d.710381544@news.erinet.com>
Source record: 97125
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Mon, 17 Feb 1997 17:56:24 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>John M. Yellenic wrote:
>
>> I'm a professional educator of electronics and computer service
>> technology.
>
>So am I.
>Look at my WWW page and see my students and their work. The boy that is
>pictured there got his ham license for ONE reason only, to get extra
>credit points I give if you get a ham license. He refused free equipment
>and wants to give his call back.

Doesn't say very much about your example, does it Burt? Are you
telling us that you are such a poor teacher and such a poor example,
that you can not guide your students to the more interesting,
productive areas of ham? Please don't say there are none, you and the
rest of us know that that is an outright lie. Of course, if you truly
believe there are NO redeeming features in amature radio, then that
would prove that you are not a good teacher, or at the very least,
lack the knowledge and drive to be a "good" teacher. All that said,
I'm not stating that you are not a good teacher, like I said, it could
simply be that you are spouting bilge and nonsense for some strange
reason known only to yourself.

>It is a vast wasteland.

If your above example shows your ability to motivate our youth, could
it be possible that the same could be said of your classroom?

>Hams can not ignore.

Why should hams ignore? I, personally feel, that is one of the
problems in ham radio. We ignore TOO much. You yourself have
mentioned this. Please make up your mind on how you feel it should
be.

>No you do not. If you find ham radio interesting you will love watching
>water freeze.

You have NO room to talk, Burt. YOU are guilty of being exactly what
you accuse others of being. You are still the UTH (remember that
one), you just use internet instead of ham. I find this interaction
interesting, but it is definitely more boring than talking to someone

live, on air. If this is you idea of interesting, then maybe you'd find watching water thaw fascinating. A "typical ham" (your definition) is still a "typical ham" whether it be via radio or internet>

1915. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <3308ed9a.711018639@news.erinet.com>
Source record: 97126
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Mon, 17 Feb 1997 17:45:16 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>Actually you all follow each other like the Pied Piper. Listen to a
>contest.

Interesting point Burt. So what percentage of hams do you think
contest? And try to give an accurate estimate, NOT a made up figure.
I ask because I see the word "all" up there again, as I do in many of
your posts.

1916. Haw do I calculate a coil for 100 Mhz ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc1d2d$9f503960$79b630ce@pass>
Source record: 97127

Hello

Can somone calculate for me an coil at 50 Ohm at 100 Mhz.

What diameter, and haw many turns, and thikness of the wire ?

I like to use it like this.

```
IN ---------------------------------------- OUT
c
c
c
GND --------------------------------------- GND
```

ALL INFORMATION IS WELKOM

THANKS IN ADVANCE

GEERT

1917. Rauchian conspiracy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: hurstjsj@gte.net
Message-ID: <856229909.10422@dejanews.com>
Source record: 97128

Wouldn't you know? I just went to my local library to do some research.
Tried to check out the well known text: *Toobs for R.F. Heating* by
H.F. Dittrich; N.V. Phillips Gloeilaamenfabrieeken--Eindoven, Neth.
The librarian said that ALL the copies had been checked out and then
supposedly LOST! He mumbled something about some parasitic Rauchian
group being responsible.
Has anyone else had a similar experience?
John, KU6X

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

1918. Re: TUBE HOMEBREWERS READ!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5eb1al$c3a@news1.mnsinc.com>
Source record: 97129

wa5dxp@worldnet.att.net (Jim Overstreet) whistled a happy tune like:

|>bry@mnsinc.com.NO_SPAM (Brian Carling AF4K/G3XLQ) wrote:

|>>http://www.mnsinc.com/bry/

I will ask my ISP about this. You are the second person (out of almost 7,000 callers!) who has grumbled about this so maybe there is something to it.

I have never found a cookie on ANY web site and don't care about them myself.
Cookies, schmookies!

I think Cookie-detecting is for the paranoid anyway, right guys?

|>Tried the site, won't go back, too many cookies to enjoy the site....

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

1919. Oppose OR Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <33088A69.600E@erols.com>
Source record: 97130
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Re what was previously posted regarding the ARRL/AMSAT position
on this issue. I would recommend that individuals do their own
research
prior to sending the suggested response. The poster points out that:

"Please note! The proposals the League opposes are not FCC proposals,
nor are they endorsed by any other branch of the government. They are
industry proposals. The League's objective is to falsely demonstrate
there is broad citizen opposition to the industry proposals."

I would ask myself - when did industry ever propose to GIVE any new
frequencies to the Amateur community? As far as "broad citizen
opposition to the industry proposal", the Amateur Community will
generally have to be its own best advocate. We know the value of
the 2 Meter band during times of stress and emergency, the general
public is sometimes quick to forget the acts of service.

The poster also states that your "simple statement" will:

".....be included in the public record and will help to drive
home the point that there is broad-based approval to well conceived
2 Meter sharing proposals."

He appears to be asking you the amateur community to use the same
"simple statement" to support the view favored by industry. Somehow
the logic escapes me - when has the Amateur not lost out in the end
to every "well conceived sharing proposal"?

The poster then wraps up with the following:

"It ought to be clear to the FCC the public good is poorly served
by allowing hams exclusive use of these valuable frequencies."

Pay close attention to that phrase "valuable frequencies"! Obviously
they are of financial value to someone or industry would never have
come up with this proposal. This is $$$$$ speaking - NOT service to
the community, not public relations, and certainly not the voice of
a broad based citizenry.

Anyone wishing to register SUPPORT for the ARRL/AMSAT submission
should send a brief e-mail message to wrc97@fcc.gov. The Subject line
should say "Reference No. ISP-96-005 IWG-2A." A simple statement to
this
effect:

"I fully support the ARRL/AMSAT opposition to the NVNG MSS flexible allocation proposal." This might be followed by a BRIEF example of a situation wherein the Amateur Service and the Two Meter band was of value to the community in times of stress/emergency.

As noted by the posting, your view -- supporting OR dissenting -- will be included in the public record and will help to demonstrate that there is support for your side of the question. Please do your own research, and don't get caught up in the rush towards "broad-based approval" of either side!

You know the value of the Two Meter Band and you know there are other groups who would like to market a few more Garage Door Openers or some other commercial (read $$$$$ making) devices. Once the frequencies
are gone, there may not be any others to share.

Comments must arrive at the FCC prior to 04 MAR 97

Please note, I apologize for the length of this posting. I was concerned
that the language in the original note ("oppose" the "opposition") might
be construed in the wrong way and do a dis-service to the Amateur Service.

73 Dave K7HMP
==========
SKYWARN Observer

(One small example of Two Meter service to the community! The trained observer on the ground, in radio contact with the NWS, is the primary source of ACTUAL tornado spottings/warnings! The fancy radar will only
tell you the right places to look.)
==========

1920. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Madd DOG! <bmoceri@flash.net>
Message-ID: <3308FCB3.565D@flash.net>
Source record: 97131
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

jeffreyh@hawaii.edu.edu wrote:
>
> Tom Sharples <sharples@hooked.net> wrote:
> >(this is a copy of my response on this subject to jeffreyH, Busybody)
> >Well, aren't we self-righteous today! In any event, as it happens I do
> >own a marine radio. It is not portable, and is attached to my large
> >boat. Therefore, it is not suitable for use in a small boat of the sort
> >I rented on my last vacation. The FT-11 was much more appropriate, and,
> >when the engine conked out in my rental boat in the middle of Puget
> >Sound, I was able to call for help! So sorry I didn't use a "type
> >approved" radio- I suppose it would have been much better for my family
> >and I to row the ten nautical miles or so to the coast.
>
> Uniden HH-979 VHF marine handheld: $159.95. Your family's life is
> worth at least that much, and you won't be violating federal law.
>
> >In addition,
> >Jeffrey, you really don't have the slightest idea what you are talking
> >about with respect to performance- I have a fully equipped radio
> >communications shop including a Service Monitor and both a HP and
> >Advantest spectrun analyzer and shielded room. I've looked at both of
> >the radios with respect to deviation, spurs, and frequency stability-
> >they are fully the equal of my Midland marine radio. In fact many of the
> >ham rigs are based on commercial designs or vice versa- for example the
> >IC02 and the essentially identical Aircraft HT's.
>
> So do you cut legal corners in all aspects in your radio shop
> business, or just with your own personel communications?
>
> My comments were directed to everyone who has asked (or will ask
> in the future) "How can I modify my radio to xmit out-of-band?"
> None of those posting such queries have a fully-equipped radio
> shop such as yourself to analyze the results of their modifications
> (they wouldn't be asking for such info in the first place, yes?) -
> that you're encouraging people to screw around with their
> radios without them having the means to check their actions is
> morally wrong. If their radios cause problems to other services
> (as a result of your suggestions) and they encounter trouble with
> the authorities, in their own defense they'll certainly mention
> your name ("He told me how to do it!").
>
> I have to wonder about the validity of your radio shop claims -
> you said "... cut some <colored> wire..." - that was rather

> vague for someone with their own radio shop business.
>
> >So go mind your own business Jeffrey.
>
> That will never happen.
>
> Do you also cheat on your taxes?
>
> 73,
> Jeff KH2PZ

What a goody-2-shoes....Why your just daddy,s{goverment}little simpletin...Throw ya a doggy bone if your a good boy.....Do what they tell ya now....

1921. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <3309c583.501806@news.monad.net>
Source record: 97132
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Sun, 16 Feb 1997 22:00:09 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>snip<

> The League's objective is to falsely demonstrate there is
>broad citizen opposition to the industry proposals.
>

Wrong here. If the League alerts its members to a threat to the amateur band allocations, and the membership (and Amateur community at large) agrees, it is by no means a "false" demonstration. It demonstrates that there is, in fact, STRONG, BROAD opposition to the sharing of these band segments with other sevices, as NO method of sharing has been proposed that would not severely interefere with existing services here, especially to the amateur satellite service. I encourage all those amateurs (who have not already done so) to file their comments OPPOSING the sharing of these band segments with other services.

Thanks.
-Bruce Beford, KA1ORB

1922. Ham Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <33081848.385C@mailhost.cyberramp.net>
Source record: 97133

http://www.cyberramp.net/~eddie

1923. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Woody <rafman@kerrlake.com>
Message-ID: <3308FC8A.787B@kerrlake.com>
Source record: 97134
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bruce Beford wrote:
>
> On Sun, 16 Feb 1997 22:00:09 -0500, Burt Fisher
> <burtfisher@geocities.com> wrote:
>
> >snip<
>
> > The League's objective is to falsely demonstrate there is
> >broad citizen opposition to the industry proposals.
> >
>
> Wrong here. If the League alerts its members to a threat to the
> amateur band allocations, and the membership (and Amateur community at
> large) agrees, it is by no means a "false" demonstration. It
> demonstrates that there is, in fact, STRONG, BROAD opposition to the
> sharing of these band segments with other sevices, as NO method of
> sharing has been proposed that would not severely interefere with
> existing services here, especially to the amateur satellite service. I
> encourage all those amateurs (who have not already done so) to file
> their comments OPPOSING the sharing of these band segments with other
> services.
>
> Thanks.
> -Bruce Beford, KA1ORB

The "false" comes into the picture when the league acts "concerned".
Fact is we have lost, and will loose spectrum, since the idiots in
Newington have promoted this as a "hobby" and dropped the "service". Add
incentive licensing, contests and NTS and you have a good case to get
rid of the whole lot of 500,000! ARRL did not get concerned about
220-222, now the whole band plus 2m and 440? The ARRL stacks the deck,
no doubt, but it (ham radio) is over. I am 34 and have been in radio 24
years. I said 15 years ago, hams were becoming "bookmarks" for
commercial interest. I was right. I work in the communications business
and read industry periodicals. Just wait till you find out we will also
be loosing space on 40/75 meters! This is coming real soon.
Burt, I do not know how you could put "which president do you trust
more?"
on your page. This piece of crap, in lieu of a leader, sells everything
to highest bidder. That is why you support the idea of "sharing" and
"getting along" since Clinton has made it so. For those who read this:
RCR a commercial trade newspaper has reported the Clinton regime plans
to make $50 BILLION off of additional spectrum auctions the next 2

years. They also admit that wireless company officials went to "coffees" at the white house. Now you ask why does Burt support all this? Because by Clinton selling our spectrum, he will get more federal money to use at work along with a raise for nothing! Computers, the internet in every classroom, more education spending..get it? More utopian spending at Burt's place of work.

I do agree 90% of hams are boring and unskilled, but to get to the point, sharing the 2m band will lead to exclusive allocation and then what do you do? I will become an outlaw: guns, scanners, ham radios, cigarettes, etc.

I will see you on 144.410 no matter who "owns" it!
Chris

--
=-=
CJ Crosby KA2RAF/4 rafman@kerrlake.com | Buggs Island Lake:
The BuckHorn WoodWorx of Buggs Island, Virginia | Virginia's best fishing
=-=
"A mind is a terrible thing to waste, provided you had one to start with"
=-=
There are 5 boxes to Freedom: ballot, witness, jury, soap, and cartridge
=-=

1924. HAM RADIO STUFF

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: TURK <johnf@mailhost.cyberramp.net>
Message-ID: <33088B83.62DF@mailhost.cyberramp.net>
Source record: 97135

Visit this site for ham related files, projects, ham graphics, web graphics, computer info, scanner info, and more!
http://www.cyberramp.net/~johnf

1925. Re: Haw do I calculate a coil for 100 Mhz ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Dave Hockaday <wb4iuy@ipass.net>
Message-ID: <3308BB7F.55C7@ipass.net>
Source record: 97136

Douglas "Lonely Planet Boy" Shawhan wrote:
> Can you suggest a good, inexspensive reference for winding coils? I have
> seen many neat schema that require "twisting yer own" but have never
> found easy-to understand instructions.... Please don't direct me to the
> ARRL handbook! I have gotten them from the library and they seem more
> geared toward someone who:
> A. Has a ton of time
> B. A ton of money
> C. Wants to buy _their_ kits!
> Thank you kindly.

I have a program available for download from http://www.ipass.net/~teara/ in menu #2. It's a shareware program by Max Froding, and runs under windows. Pretty easy to operate. The registration .txt file suggests that the program can be registered to obtain an upgraded version, but the author doesn't seem to get my emails and the recommended URL is now broken. The program works pretty good, though. Hope that helps...

--
Dave Hockaday WB4IUY
wb4iuy@ipass.net
WB4IUY@W4RAL.#RTP.NC.USA.NOAM

http://www.ipass.net/~hockaday/
http://www.ipass.net/~wb4iuy/
http://www.ipass.net/~teara/
http://www.geocities.com/TheTropics/3349/
http://www.RTPnet.org/~fcarc/
http://www.RTPnet.org/~rdrc/

1926. Re: IRF 510'S ON SPECIAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Fran Flynn <fflynn@together.net>
Message-ID: <3307E712.49D5@together.net>
Source record: 97235

If you get an error 404, retype the url in lower case,
looks like some pretty good deals on parts here.

Jerry Parker wrote:
>
> DAN'S SMALL PARTS HAS PUT IRF 510'S ON SPECIAL AT 5 FOR $4.50
>
> CHECK OUT HIS SPECIALS AND REGULAR INTERNET CATALOG AT:
>
> HTTP://WWW.FIX.NET/DANS.HTML
>
> ENJOY,,,JERRY...K

1927. Re: Cold Solder Joints - Why?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <5e8ist$3mma@news.doit.wisc.edu>
Source record: 97236

"John Lockhart" <jlockj@minn.net> wrote:

>Hello to the Group!

>Any ideas out there why cold solder joints often manifest
>themselves four or five years after the soldering took place?
>I used to think a cold solder joint wouldn't work or would be
>intermittent from day one. Experience with some Kenwood
>transceivers and this week with a Sony TV is showing me
>otherwise. Is it related to wave soldering with solders that
>melt at lower temperatures? Or ?????

I don't think it's anything particularly mystical. It's just that the fresh cold joint is usually a good mechanical joint, so the parts are in mechanical and electrical contact. Later, after time and temp cycling have occured, the mechanical joint is still there, but it is looser and there is an oxide layer that may eventually keep the mechanical contact from also making electrical contact.

Jim

Melissa Kepner Jim Adney
mgkepner@facstaff.wisc.edu jim.adney@mpcug.com
Laura Kepner-Adney
Madison, Wisconsin

1928. fs: 20mW 10.295Ghz TX and RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: peter smit <peter_smit@hoogovens.e-mail.com>
Message-ID: <3307A37B.4E78@hoogovens.e-mail.com>
Source record: 97237

```
For sale:
Baseband input, build in LNB
20mW Transmitter 10.295 Ghz for ATV FL 795,--
LNB for 10.000 to 10.500 Ghz FL 225,--
OMT for TX/RX on 1 feed FL 125,--

Peter Smit PE1CQS
```

1929. Need info for MI204, RN1202 and RN1204

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: Hannu Jauhiainen <hannu.jauhiainen@tietosavo.fi>
Message-ID: <01bc1cb1$b8577620$7b8556c2@hja>
Source record: 97238

Hello!

Has anybody data or a hint for equivalents?
All of them are from ICOM IC765 transceiver. MI204 is a diode and RN1202 &
RN1204 are digital
transistors?

Hannu, OH7WD

-
Hannu Jauhiainen / Internet: hannu.jauhiainen@tietosavo.fi
Tietosavo Oy / AX.25: OH7WD@OH7RBA.#KUO.FIN.EU
P.O.Box 1582 / X.400: C=fi;ADMD=elisa;PRMD=tsnet;O=tietosavo;
FIN-70461 KUOPIO / S=jauhiainen; G=hannu
FINLAND / Tel: +358-17-193 374, Fax: +358-17-193 355
(017) 193 374, (017) 193 355
-

1930. ham help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: arisk@spidernet.COM.cy
Message-ID: <199702171035.MAA21019@mail0.spidernet.net>
Source record: 97239

Hello everyone on the list.
I have asked three times on this list if someone could help me in getting a
transistor 3SK113 which i need for a VHF preamp.I had no success until now.
Can please someone send me one and i will cover ALL costs,which are very small.
Postal address:P.O.Box 1723 ,Limassol 3058,CYPRUS.
Hope this time i find a good christian:-)

1931. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <3307daae.4955035@news.cyberhighway.net>
Source record: 97240
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:

<Burt supports the theft of the 144, 222, and 440 bands by industry>

>Additional arguments or evidence also is welcome. Important! Comments
>should
>reach the FCC no later than March 4, 1997!

>#===============#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

Yeah, there's a picture of you and Slick Willie on there. So how much are you getting paid to lobby against the best interests of the hobby, Burt? You're being a bit transparent, wouldn't you say?
--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

1932. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5e9pvonbn1@tilde.csc.ti.com>
Source record: 97241
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <3307C9B9.35C8@geocities.com>, burtfisher@geocities.com says...

>......It ought to be clear to the FCC
>the public good is poorly served by allowing hams exclusive use of
these
>valuable
>frequencies......
>
>
.....The League's objective is to falsely demonstrate there is
>broad citizen opposition to the industry proposals......
>~~~~~~`
> Burt, would you explain why Hams shouldn't continue exclusive
use of these "valuable" frequencies and how Hams will benefit from
giving them up. It is not "clear" to me. Are you familiar with
the freq plan for P3D?

> I am not a fan of the ARRL, but I don't see any reason why they
would "falsely" demonstrate our opposition to losing "valuable"
frequencies. Please explain your reasons for thinking we should
write the FCC and complain about the ARRL opinion.

Ken Durham K5MBV AMSAT member mbv@ti.com and mbv@flash.net

1933. Re: What is a MCL SBL-1 -10??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-17 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb17.143216.22362@ke4zv.atl.ga.us>
Source record: 97242
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <3304D317.21AF@superman.cig.mot.com> Tom Sedlack <toms@superman.cig.mot.com>
writes:
>I have an old Mini-Circuits mixer stamped MCL SBL-1 and right
>below that is printed -10. I believe the device is a level 7
>mixer but I'm thrown by the -10 that is printed on top.
>Could this be a special mixer for a -10 dBm LO?? Any help
>would be appreciated.
>
> ___________
>| MCL SBL-1 | <-- Stamped in the metal can itself
>| -10 | <-- Printed with ink
>|___________|

The SBL-1 is a level 7 mixer. The dash numbers typically indicate
that the mixer was specially qualified over a certain frequency
range for a particular customer. According to the Mini-Circuits
Designer's Handbook, -10 is not a stock item, but there are other
dash numbers, and they all denote special qualification over portions
of the SBL-1 frequency range, so I think it is safe to assume that
is the case here too.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

1934. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Bob <pmw5@cornell.edu>
Message-ID: <330A6976.6632@cornell.edu>
Source record: 97043
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

sean hall wrote:
>

> >#================#===#
> >| Burt Fisher | Teacher of video, broadcasting and electronics |
> >| Amateur call | South Dennis, Ma. (Cape Cod) |
> >| K1OIK | http://www.geocities.com/WallStreet/5169 |
> >#================#===#
> >|Visit my WWW site, it is like no other k1oik@ccsnet.com

> >#===#
> I still can't figure out how one can teach broadcasting.
>
> sean hall/W1SWH

Simple: He just refers them to the following newsgroup:
news://alt.radio.pirate
Just because this guy has NEVER been involved in SkyWarn, RACES, ARES, or built his own repeater network from the ground up, he thinks these things should be left to the broadcasters, and commercial guys only! He's obviously got the knowledge, and spent some time doing some technical things (he's an extra), but he must now be bored.

--
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.2

mQBtAzK9lTgAAAEDALNAegQHu6xJ7isCW1c57zKpN2N97N14FO6OcHQ1JLQNpbsB
bXmt2KaZMu4+4qLKiaM3S94CANtQlMc/VrQ6fZJNmu2Abg68PrP5RM9PkrKasLiU
8OJ86NbesAZWzN0PFQAFEbQ+Um9iZXJ0IFdleWJyZWNodCwgSlIgLSBOMlFFVyAt
IHBtdzVAY29ybmVsbC5lZHUgLSA2MDctNzU3LTk0MzQ=
=Df2X
-----END PGP PUBLIC KEY BLOCK-----

1935. WTB- low voltage high current transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: OSTERTAGK@SNYCORVA.CORTLAND.EDU
Message-ID: <01IFJB78VNFC000PQD@SNYCORVA.CORTLAND.EDU>
Source record: 97137

I would like to buy a 16-18volt 20amp transformer for my 13.8v power supply project. Do any of you have such a thing for sale? Do any of you know where I might find one? It could be a close equivalent, maybe a 32-36volt CT?

I know that Fair Radio sometimes has transformers, but they are the only supplier I know of. I've been to two hamfests recently with no luck. I have done a few web searches and checked out a bunch of suppliers in Nut&Volts. Someone recommended the Peter Dahl company for a custom made transformer, but that might be too pricey.

Thanks,

Keith, N3KXZ

1936. Re: 16/1700 KCS IF xfmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Peter Shintani <shintani@tv.sony.co.jp>
Message-ID: <01bc1d39$9ca917c0$6103022b@dell-for-peter>
Source record: 97138

This may not be of much use but...
There is a company called FCZ(Fancy Crappy Zippy) in Japan that sells
a series of coils, IF cans and kits for radio experimenters. I have been
using their
10mm square IF cans 455 kHz, 9 MHz and 10.7 MHz units. They retail for 180
yen
a piece in single lots. They are available on the following center
frequencies,
0.455, 1.6, 3.5, 7,9, 10., ...50, 144 MHz
Basically all the ham bands are covered. Also the IF cans are available in
a smaller
7mm square size. Especially interesting is the 10mm can, with slug, but no
windings
or caps are great for wind your own experiments.
I am sure that someone must be importing this brand into the USA. If not
ask
a big importer to get some samples.
PEter

PS or find someone who will be visiting Japan to pick up the pieces for you.

1937. Re: Rauchian conspiracy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ebhmu$1q2$3@nadine.teleport.com>
Source record: 97139

In article <856229909.10422@dejanews.com>, hurstjsj@gte.net wrote:
>Wouldn't you know? I just went to my local library to do some research.
>Tried to check out the well known text: *Toobs for R.F. Heating* by
>H.F. Dittrich; N.V. Phillips Gloeilaamenfabrieeken--Eindoven, Neth.
>The librarian said that ALL the copies had been checked out and then
>supposedly LOST! He mumbled something about some parasitic Rauchian
>group being responsible.
>Has anyone else had a similar experience?
>John, KU6X

Yeah. The local copies here got snarfed up by some Nichromian Aral
Measurement society. What gives?

Roy Lewallen, W7EL

1938. Re: Rauchian conspiracy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970218073800.CAA08457@ladder01.news.aol.com>
Source record: 97140

In article <856229909.10422@dejanews.com>, hurstjsj@gte.net writes:
>
>Wouldn't you know? I just went to my local library to do some research.
>Tried to check out the well known text: *Toobs for R.F. Heating* by
>H.F. Dittrich; N.V. Phillips Gloeilaamenfabrieeken--Eindoven, Neth.
>The librarian said that ALL the copies had been checked out and then
>supposedly LOST! He mumbled something about some parasitic Rauchian
>group being responsible.
>Has anyone else had a similar experience?
>John, KU6X

When we are through editing, the books will be returned.
;-)

1939. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: "William A. Wetzel" <n6rky@pacbell.net>
Message-ID: <3309831B.6F2A@pacbell.net>
Source record: 97141
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

N5RWC wrote:
>
> ************
>
> Don't worry about them. I have done it and I'd do it again. It's not so
> much the radio being "type accepted" but rather a matter of money.
> People that produce marine radios want you to spend your money on their
> junk rather than have some smartassed ham radio operator mod their
> own radio to work in that portion of the band they make radios for.
>
> :)

It is not impossible to do it... But it is not good engineering practice. Amateur Radio equipment is not type accepted for marine use for a reason; they are not as clean on the output as the type accepted ones are. But if the amateur equipment is used soley as backup to regular marine equipment that is no problem. The real problem is that alot of hams THINK they know electronics and RF theory, and in reality do not. that does not mean that one should not experiment - because it is experience that teaches best of all! So go ahead and experiment, but follow the rules, for they are there for a reason, your service monitors (if you have any) will verify it.
--
William A. Wetzel
N6RKY@PACBELL.NET
N6RKY@JUNO.COM

1940. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: NOSPAM.wessel@via.nl
Message-ID: <5ebtbi$e2i$1@news.via.nl>
Source record: 97142
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bob Nielsen <nielsen@primenet.com> wrote:

>Look carefully at Table 2: E receives 144-146 and 430-440, while E3
>receives 67-180 and 400-512 MHz.
Which is *exactly* my point: the receive ranges differ, yet the diode-matrix
(D302-D308, labeled 'Destination diode' in table 2) is exactly the same.
These diodes tell the unit how to behave. Now if the E and E3 units have the
same diodes, how can they behave differently?

Note that I feel the documents contain a wealth of information,
I was just hoping to keep anybody from opening up his/her handheld and moving
diodes, only to find out there is an error in this table 2. The TH79 is to
precious for that.

> It appears there is no way to get the 800 MHz band on "K" (U.S./Canada)
> models, which should make Newt Gingrich happy.
Still, I see TH79A's advertised WITH 800 MHz in various newsgroups. As I
understand it the older units can receive 800, but the newer ones can not. I
somewhere read in an article that you can see this from the serial number:
===If your serial number is 603XXX or higher, that is all you will get. The
===TH-79A that I have posted is 602XXX
I cannot find the original article though- you'll have to search the net for
it.
There may be a NOSPAM. in front of my E-mail address.
It is there to fool machines, not people.

1941. 3-400Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Dave Aldridge <Dave@Athena.europe.dg.com>
Message-ID: <01bc1d88$40d80d30$96e73e98@cheetah>
Source record: 97143

I want to use a 3-400Z in a grounded-grid amplifier. Can anyone tell me the input impedance of this tube, so I can design the input pi-network without too much cut n' try
Dave - G3VGR

1942. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970218102700.FAA12495@ladder01.news.aol.com>
Source record: 97144

In article <measures-ya02408000R1502971551480001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>
>The output Z of an amplifier tube in linear service is approximately equal
>to the anode supply voltage divided by two times the avg. anode current.
>For an 8877 at full-tilt, that would be 4000v/(2*1a)=2000 ohms. 5000 ohms
>does not win the teddy bear, Gary---however, you may choose between a
>6-ounce bottle of "Babe" shampoo or a 5lb. bag of Bandini.
>
>

Rich,

You've exceeded the ratings of the tube.

The output impedance is more complex than Ep over 2Ip.
It requires a Chaffe analysis.

Surely you know that much about PA's!

1943. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: tgold@microvst.demon.co.uk
Message-ID: <856263826snz@microvst.demon.co.uk>
Source record: 97145
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <3309831B.6F2A@pacbell.net>
n6rky@pacbell.net "William A. Wetzel" writes:

> Amateur Radio equipment is not type accepted for marine use for a reason;
> they are not as clean on the output as the type accepted ones are.

I believe that this is incorrect. The reason why ham kit will not
pass muster for acceptance into Marine other services is the ability
of the operator to set the frequency arbitrarily instead of only to
the pre-set channels allocated. A 2m HT (<25W) is permitted a
maximum power in any spurious signal of the lower of 25uW and -40dB
versus the mean power at the fundamental, except that it need not be
reduced below 10uW.

Is the spec for the Marine Service acceptance any tighter than that?

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com
tgold@microvst.demon.co.uk
packet: g3skr@n0ary.#nocal.ca.usa.na

1944. FS: HP 608C Signal Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <5ec6ci$h1j@news1.hlc.net>
Source record: 97146
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

This is the VHF signal generator that covers 10-480 Mhz with output
level of 0.1uv to 1.0v, crystal calibrator and low residual FM.
Internal and external AM are provided. Weighing over 60lbs., you will
probably want to pick this up . I live in Herndon VA, a few miles from
Dulles airport. This is a working unit and looks to be in mint
condition both inside and out. Manual avilable at extra cost.
I am asking $125 for this generator.
Thank you,
Dale

1945. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Bob Sull <wa8imo@kellnet.com>
Message-ID: <3309CED6.416D@kellnet.com>
Source record: 97147
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bart Wessel wrote:
>
> William Vynck <RACO@ping.be> wrote:
>
> >The official Kenwood TH-79E/A modifications can be found on my homepage.
> >Those are JPG files that you can download and vieuw with a picture
> >viewer.
>
> >Gives you a answer why some TH-79's aint receiving 800 - 999 Mhz
>
> Be aware that these file contain obvious errors. Look at table 2: the E and E3
> units seem to be electronically identical, yet their frequency coverages
> differ.
> Mmmm.... Wonder what else is wrong!

This has nothing to do with DX, thats what!

73,
Bob
--
<> Bob Sull WA8IMO <>
"73, CUL, es keep the FUN in Ham radio."
>Life Member-ARRL QCWA< >Member-NODXA NCDXF<
>DXCC WAS RCC < >8P9BC<
>QSL Mgr for 8P6JG<
>WA8IMO@W8IZ.#NEOH.OH.USA<
>WA8IMO@KELLNET.COM<

1946. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AC09.7B7C@geocities.com>
Source record: 97148
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Howard Watson wrote:
>
> Interesting point Burt. So what percentage of hams do you think
> contest? And try to give an accurate estimate, NOT a made up figure.
> I ask because I see the word "all" up there again, as I do in many of
> your posts.

I would say 30% of all hams are active and 10% of those are involved in contests. Those 10% walk all over the rest in their piggish ways of hogging the band.

You are right, I should not use the word "all" as you suggested.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

1947. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AC5B.6EF4@geocities.com>
Source record: 97149
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Doug Woodruff wrote:
>
> Burt,
>
> I'll be checking the callsign database with bated breath waiting for
> your call to come open after you resign it......can't imagine why you
> would want to continue to be identified with such a bunch of losers like
> us!!

I rarely admit I am a ham to anyone in the normal world (as in REAL
world).

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

1948. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AD20.3605@geocities.com>
Source record: 97150
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Doug Woodruff wrote:
>
> Come on, Burt....
> Let me see ---- public service events (bike races, marathons, sporting
> events, Special Olympics, APRS at the real Olympics in Atlanta, etc),
> search and rescue communications (whether on foot, in vehicles, or in
> the air), coordination of communications for emergency management
> agencies (from city/municipal to FEMA), and what about hurricanes,
> tornadoes, wildfires.....

And what percentage of hams take part in the above?
And of those that do, ham communication uses 400000 words when 10 will
do. Hams are horribly inefficent voice communicators.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

1949. Tube needed - 7868

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: jwg6@cornell.edu
Message-ID: <jwg6-1802970836130001@cu-dialup-2221.cit.cornell.edu>
Source record: 97151
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I'm looking for a 7868 pentode which is the modulator for a Lafayette 6m am rig.
I have found a local shop where they have some, but they want something
like $38 for one.

Can anyone spare one for a price that is not so steep, or suggest where
else I might find one?
The supplier I mentioned above also checked his vendors' catalogs, and
couldn't find an
equivalent in the import tubes.

Thanks and 73

Joel Govostes N1AEP Freeville, NY (FN12)

1950. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: AL7OQ <mfeldmn@ibm.net>
Message-ID: <3309AEBF.7E6B@ibm.net>
Source record: 97152
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Hams use 2 meters for exactly what that serves the public in a MEANINGFUL way?
>
>
Ask FEMA (Federal Emergency Management Agency), who has opposed the
Little LEOS proposal on the ground that hams provide invaluable
emergency communications services on 2 meters.

Burt: be honest! Why are you supporting this industry band grab?

Martin
AL7OQ

1951. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AFA4.470D@geocities.com>
Source record: 97153
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Howard Watson wrote:

> Doesn't say very much about your example, does it Burt? Are you
> telling us that you are such a poor teacher and such a poor example,
> that you can not guide your students to the more interesting,
> productive areas of ham?

Is that what it thinks it tells you. When I demonstrate ham radio I make no editorial comment. I offer extre credit for it. If I leave the radio on the comment I get is, "you do not talk to those losers do you." Ham radio speaks for itself. Not even Jesus Christ could convince our youth to get on the air with the current crop of old white fat farts.

If you want to talk direct to the student that has no use for ham radio his address is on my WWW site. See him, he is the #1 student in the school with a perfect SAT verbal score. And he knows the score on ham radio.

> Of course, if you truly
> believe there are NO redeeming features in amature radio, then that
> would prove that you are not a good teacher, or at the very least,
> lack the knowledge and drive to be a "good" teacher.

What is "amature radio?"

> >It is a vast wasteland.
>
> If your above example shows your ability to motivate our youth, could
> it be possible that the same could be said of your classroom?

I welcome the public to my classroom, see for your self.

> You have NO room to talk, Burt. YOU are guilty of being exactly what
> you accuse others of being. You are still the UTH (remember that
> one), you just use internet instead of ham.

UTH?

I find this interaction
> interesting, but it is definitely more boring than talking to someone
> live, on air.

Nothing is more boring than that. But I will be glad to meet you OR ANYONE on the air, if you have the guts.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

1952. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3309AFE0.495D@geocities.com>
Source record: 97154
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Doug Woodruff wrote:

> STILL WAITING FOR YOUR CALL TO COME OPEN, BURT!!
>
> Doug, KM4HY

If I can get W1AW you can have it.

```
#===============#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#===============#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=====================================================================#
```

1953. Re: Support Little *KILLFILES*!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5ecgcd$el6$1@tilde.csc.ti.com>
Source record: 97155
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

This thread is what killfiles are for! The Agent newsreader supports them. My screen was getting full of this. I don't intend to look at the website being promoted either. This argument is not productive. My newsgroup has been edited out of the header in this response.

Ken K5MBV

1954. Re: 3-400Z

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970218152800.KAA22188@ladder01.news.aol.com>
Source record: 97156

In article <01bc1d88$40d80d30$96e73e98@cheetah>, "Dave Aldridge"
<Dave@Athena.europe.dg.com> writes:

>I want to use a 3-400Z in a grounded-grid amplifier. Can anyone tell me the
>input impedance of this tube, so I can design the input pi-network without
>too much cut n' try
>Dave - G3VGR

It's normally about 100 ohms.

Put the tube in the socket, tie a 100 ohm non-inductive resistor
from the filament pin to grid pin (short leads) across the socket
and you can adjust your input circuir with the tube cold.

It'll be close except perhaps on 15 and ten, where regeneration affects
the impedance. By the way, ground the grid leads with short direct grounds,
that's important for many reasons.

73 Tom

1955. Heathkit, EICO, PACO items for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: jgrow@vir.com
Message-ID: <jgrow.5.006F45E8@vir.com>
Source record: 97157
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello to all,
I have the following items for sale.
HEATHKIT
SB600 Speaker, good condition $ 15.00
SB630 Station Console, good condition, manual (clock does not work) $ 35.00
HD-1416A Code Oscillator, manual, works fine $ 12.00
Heathkit Oscilloscope, model 10-10, compact, clean, well built, works $ 35.00

Lafyette HA-230 Receiver, good condition, very clean inside and out, covers
500 khz to 30 Mhz. This unit was made by Trio for Lafyette. No manual $ 85.00

EICO Test Equipment
Oscilloscopes Model 470 & 460, both work, no manuals $ 20.00 & $ 30.00
Signal Tracer, Model 174, works, clean, manual $ 25.00
Electronic VTVM, Model 249, works, clean. $ 15.00
Dynamic Conductance, Tube, and Transistor Tester, Model 666 $ 25.00
RLC Bridge Comparator, Model 950B, works $ 15.00

PACO Test Equipment
Model G-32, TV-FM Sweep Generator, works, manual, clean $ 25.00
RF-Signal and Audio Generator, clean, works $ 35.00

Western Electric USA, model 61C Signal Generator, works, clean,
10 hz to 10 Mhz. In metal shipable case, 22 Lbs. $ 25.00

Mercury Tube Tester, compact unit, with manual, Model 1100A, clean and tested
with known tubes and known tube Tester. $ 35.00

Starkit RF Signal Generator, old Canadian kit , copy of EICO 324 generator,
$ 15.00

Regards,
John Grow

1956. Re: WTB- low voltage high current transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Jim <jstrohm@texas.net>
Message-ID: <5ecmb8$11ai@newsgate.sps.mot.com>
Source record: 97158

Ever hear of a device called a "battery charger"?

You will frequently find surplus automotive battery chargers
that have exactly the transformer you need. In addition, the cheap
"cracker box" arc welders may have a suitable transformer, or one
that can be easily rewound.

Finally, old computer surplus usually has big-iron transformers.
Drag some stuff home and take it apart -- you might be surprised what
you find. A Teletype line printer gave up my most recent find.

As a last resort, old tube-type TVs with the big iron transformer
will donate a suitable rewindable transformer. These are typically good
for 200 watts or more, which may not be enough, but will be close.

N6OTQ

1957. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Siegfried Rambaum <siram@light.lightlink.com>
Message-ID: <Pine.SUN.3.95.970218114007.24734B-100000@light.lightlink.com>
Source record: 97159
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

> I rarely admit I am a ham to anyone in the normal world (as in REAL
> world).

The R-series of callsigns was assigned to Russia. What business do you have in Russia, Burt?

1958. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5ecnbv$hja@abyss.West.Sun.COM>
Source record: 97160
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <3309831B.6F2A@pacbell.net>,
William A. Wetzel <n6rky@pacbell.net> wrote:
>N5RWC wrote:
>>
>> ************
>>
>> Don't worry about them. I have done it and I'd do it again. It's not so
>> much the radio being "type accepted" but rather a matter of money.
>> People that produce marine radios want you to spend your money on their
>> junk rather than have some smartassed ham radio operator mod their
>> own radio to work in that portion of the band they make radios for.
>>
>> :)
>
>It is not impossible to do it... But it is not good engineering practice.
>Amateur Radio equipment is not type accepted for marine use for a reason;
>they are not as clean on the output as the type accepted ones are.

Really? A 25W VHF high-band transmitter is restricted to spurious/harmonic
output of -60dB/c; I haven't looked at the type acceptance regs for
marine gear lately but I don't recall them being more stringent. The
type acceptance regulations for land mobile and marine gear are intended
to prevent an operator from accidently operating on an unlicensed
frequency, hence type acceptance calls for fixed frequencies and
PL tones.

> But if
>the amateur equipment is used soley as backup to regular marine equipment
>that is no problem. The real problem is that alot of hams THINK they know
>electronics and RF theory, and in reality do not.

Oh, I know what you mean!! I once had a ham lecture me on network
standards, you know, CCITT, IEEE, IAB, stuff like that. When I
wouldn't agree with his wrong assertions, he told me I didn't
know what I was talking about! Oh well, at least I don't have
that problem with the _professionals_ I work with. ;-) ;-)

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

1959. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5ecs30$sch@lehi.kuentos.guam.net>
Source record: 97161
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

kr4wm@sccoast.net (Web Williams) wrote:

>> Does anyone know of a mod to make the Realistic HTX-212 transmit out
>> of band??? I want to be able to use this radio on my boat on the
>> marine band instead of buying another radio.

>Have you looked on the QRZ Website? I've found quite a few mods there.

>Now, as an answer to some of the complaints you're receiving about the
>pros and cons of amateur radios having the capability to transmit out of
>band-

>I am a career firefighter. I work in a <paid> department, and do it for a
>living. I'm not some yahoo volunteer out to make a name for myself by
>doing stupid things. (Yeah right, like going into a burning building
>while others are coming out isn't stupid, but hey, somebody has to do
>it!) When I got my amateur license, it was then that I found out that
>certain ham radios could be modified to work out-of-band. At the time,
>our department was stiffed for funds, and occasionally, some of us would
>be inside a burning building with no way to communicate with the outside
>(lack of radios). It was a godsend that I obtained permission from our
>department's chief to use my amateur HT and mobile to transmit on the
>fire department frequencies! He understood the EMERGENCY nature of my
>use, and consented without me even having to use my cattle prod! I've
>also used my mobile rig when I was off-duty to call the F.D. Dispatcher
>and inform them of auto accidents that may have gone unreported for long
>periods of time. Or to let them know that no emergency response was
>necessary, saving the wear and tear on our engines. At $700 per run, it
>adds up. Yes, all things considered, it costs about $700 to put a fire
>truck in the street for EACH CALL! And since we run first-responder
>medical as well as fire calls, and ran over 5000 calls last year- well,
>you get the picture. I've only used my mobile to call in accidents four
>times in 5 years. It's not like I abuse it. I don't call the dispatcher
>to ask what time it is- it's ONLY FOR EMERGENCIES! If this fellow wants
>to use his radio in a like manner, WHO CARES!?!?

The FCC does, I guess. Maybe that's why they made rules against using
non type accepted equipment on commercial bands.

>Our department now has
>more radios, and I no longer must carry my HT into fires. It is my
>opinion that my use of my amateur HT/mobile on frequencies AUTHORIZED by
>my department probably saved time, money, and lives. How can you argue
>with success? 73, Web Williams, KR4WM, City of Myrtle Beach Fire
>Department, Myrtle Beach, SC

Can't argue about saving lives, Web. But somebody will probably argue
that the Myrtle Beach Fired Department does not have the authority
to overide the FCC.

I don't think anyone who is a ham has a problem with you saving lives with
your HT. I would imagine the problem comes in because the overwhelming
majority of the Mod Squad are ambulance chasing wannabe Jr. G. Men, or
broke Cocktails On The Fantail sailors who don't wanna spring for real radios
for the boat. Maybe there is a difference between a professional fireman
who happens to be a ham, and an amatuer sailor who became a ham because
the radios are cheap, I don't know......

73, Jim KH2D

1960. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5ecs7r$sch@lehi.kuentos.guam.net>
Source record: 97162
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Jim Daneke <daneke@ix.netcom.com> wrote:

>Tim Shearer wrote:
>>
>> Tom Sharples <sharples@hooked.net> wrote:
>> >A Yaesu FT-2500 will easily do this. The mod is in the Artsci books- you
>> >just cut a green wire. I've used this rig on the marine bands with no
>> >problem. Also have done the same with a Yaesu FT10 HT.
>>
>> I hope everyone understands this is against FCC regulations. Amateur
>> tranceivers are not TYPE ACCEPTED for this service. There are reasons for
>> this. I take it no out of amateur band transmissions will be made until a
>> bonfide life and death situation occurs.
>>
>> You should not publically admit to federal offenses. You admissions are
>> being permanently recorded in archives like DejaNews.
>>
>THe FCC, with all their people and funds is now searching the DejaNews
>archives to find out who has admitted to federal offenses. They will
>then go before an OJ Simpson kind of Grand Jury and get a warrrant for
>arrest. The FCC will get a plane ticket and show up to your door and
>confront you with your e-mail admission. They will search your house and
>confiscate your radios and computers. So make sure not to admit to
>violating out of band rules!

>Jim, N0JD

That's a good attitude, Jim. Sarcastic, I hope. So what you are saying is
since we know nobody is looking, it's OK to break all the rules, right ??

73, Jim KH2D

1961. Any boomer or geezer HBers have unfinished tube RX in junkbox?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <3309ABE1.3202@atl.org>
Source record: 97163

Hi-

Is there anybody out there (?????) with an
unfinished/abandoned/never could get the darn thing to work
homebrew (handbook/published plans design counts too)
tube RX in the junkbox?

Email and maybe we can do some junk box 'stuff' trading.

Have some whole working stuff to trade too.

-bob
bob@atl.org

1962. Re: Twisted pair in place of coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: frussle@erols.com
Message-ID: <3312f55c.21219861@news.erols.com>
Source record: 97164

On 12 Feb 1997 05:00:55 GMT, rohrwerk@pcOnline.com (John Seboldt)
wrote:

>In a few references accompanying Rick Campbell's R2/T2 projects, he
>referred to the possibility of using twisted-pair wiring for some of the
>RF connections within a project. Based on this cue, I have used it quite
>frequently now at HF -- tightly twisted small enameled wire is sure a lot
>easier to solder and move into place in tight quarters. From empirical
>evidence, things seem to work fine even with some runs of 6-8 inches.
>
>Obviously a twisted pair is a transmission line, but I'm surprised it
>seems to work tolerably even with unbalanced signals.
>
>Anybody know the limits of this approach? Surely in some situations the
>shielding would not be sufficient.

I'd imagine that the capacitance per foot might get to you eventually.

Using twisted pair as a transmission line is not as strange as you
might think. After all, LANs are routinely built with signalling
rates of 25 MHz and higher through Category 5 cable (a variety of
twisted pair cable which is characterized up to 100 MHz). It doesn't
even radiate very much. It does get pretty lossy above 30 MHz,
though. But for the short distances you're dealing with, I doubt
you'll notice any difference.

One question: are you attempting to control the twists per inch (and
thus the characteristic impedance of the cable) or are you just
twisting it for mechanical reasons?

>In addition, one reference said, "For the ultimate in engineering
>elegance, place a ferrite bead in the middle of the twisted pair." How
>does that little bit of ferrite help the situation?

I don't think that bit of ferrite would change things any more than it
would if you were using RG-174. It merely forces the twisted pair to
stay balanced by breaking the common mode circuit (thus keeping the
line from radiating).

Keep in mind that at least one end of the balanced pair has a
transformer (the mixer) and is therefore balanced. The other end
could also be balanced if you used those wide band phase shifter and
Wilkinson power divider circuits described in the SPRAT technical
cartoons. Given that, the ferrite is really unneccesary.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

1963. Re: TUBE HOMEBREWERS READ!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5ecah4$b7o@news1.mnsinc.com>
Source record: 97165

wa5dxp@worldnet.att.net (Jim Overstreet) whistled a happy tune like:

|>bry@mnsinc.com.NO_SPAM (Brian Carling AF4K/G3XLQ) wrote:

|>>http://www.mnsinc.com/bry/

Nonsense. I tried it and got ONE COOKIE! Not "cookies"
I will ask my ISP if THEY are setting the cookie or if it is coming from
www.digits.com whioch is the counter service I use.

Again thanks for your report although it seems exaggerated!
I have not set ANY cookies on my web page.

Regards - Bry

|>Tried the site, won't go back, too many cookies to enjoy the site....

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

1964. 5 GHz NII Band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Steve Baer <75207.1646@CompuServe.COM>
Message-ID: <5ecu1urus5@mhafc.production.compuserve.com>
Source record: 97166
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

I recently read some of the mail from N3HAU, N3GHE,and N1MYT
regarding a desire to get/find/build NII band digital equipment.
Please add my name to the list. I'm aware of some Part 15 'high
power' gear like Cylink's, but that's too pricey for ham use, and
really designed for pt-pt T1 like links. Is anyone else aware of
5 GHz gear that might be used in a multiple access scheme?

I'd be interested in joining a thread on this topic.

Thanks,

Steve K2PBO

--

1965. Re: FS: HP 608C Signal Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: dallen@melpar.esys.com
Message-ID: <5eccse$asj@fcserv1.fcd.esys.com>
Source record: 97167
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

In article <5ec6ci$h1j@news1.hlc.net>,
radiodale@dclink.com (Dale B. Allen) wrote:
>This is the VHF signal generator that covers 10-480 Mhz with
output
>level of 0.1uv to 1.0v, crystal calibrator and low residual FM.
>Internal and external AM are provided. Weighing over 60lbs.,
you will
>probably want to pick this up . I live in Herndon VA, a few
miles from
>Dulles airport. This is a working unit and looks to be in mint
>condition both inside and out. Manual avilable at extra cost.
>I am asking $125 for this generator.
> Thank you,
> Dale
>
Correction - This is a 608E (later model). Sorry, Dale

1966. Re-Crystal a walkie talkie.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Schembri Joseph Saviour <schemb2@uwindsor.ca>
Message-ID: <3309FAC1.477A@uwindsor.ca>
Source record: 97168

This might sound stupid but.... Is it not possible to re-crystal a childs walkie talkie to a frequency in the 6m band and even add a slight tuning capability. If this is possible could you please Email on how to do this....Thanks.

1967. Q: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: jdc3538@osfmail.isc.rit.edu
Message-ID: <5ecocf$9ha@news.isc.rit.edu>
Source record: 97169
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

I'm tinkering with a radio for packet use that has a relay for T/R switching. The relay has a diode across it to keep the transistor that runs it from getting fried. So far so good. Every now and then there is mention of how this increases relay switching time, obviously a bad thing for packet. This leads to a few questions:

- How much of a difference in switching time is there?

- What's a faster way of snubbing the induced voltage?

73..Jim N2VNO

1968. Free Mac/Ham Software on WWW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-1802971346330001@wd1v.mv.com>
Source record: 97170
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

A trip to my home page reveals there are many good files and programs for amateur radio operators that want to use Mac computers.

<http://www.mv.com/ipusers/wd1v/>

* Ham Radio Test Simulators - where you can go from Novice to Extra Class practicing the actual tests right on your Mac! Check out the info on the new NO CODE license or scramble your neurons and learn Morse on the Mac too!

* Macnet Roster - a virtual "Who's Who" HyperCard stack with more than 780 entries giving the names, addresses, phone numbers, of radio operators all over the world that are using Macs. Check out their projects and their passions and put a design on your Mac Radio future when you see what neat things are being done!

* Mac Ham Radio Software Listing - as the name implies, its "The List" of the latest - much of it with FTP links so what you see is what you can get with just a click. Many of the programs listed on right there for FTPing.

* Ham Radio.FAQ - compiled on a Mac with a lot of links to great Mac FTP sites for radio, electronic engineering, and similar data.

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1969. Info wanted of rectifierbridges

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <330d07dd.3319667@news5.inter.NL.net>
Source record: 97171

Hello OM,
I am searching for info about the rectifierbridges (do I say this good
?) of Semikron.
They have the next numbers:
SKB 30/04 A1
SKB B 80/70-4
BSK B 80/70-4
The first one is new, the others are used and old.
Thanks in advance.
73 de Bart PA3GGM.

1970. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Bob Nielsen <nielsen@primenet.com>
Message-ID: <330A030A.7C7F0355@primenet.com>
Source record: 97172
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Bart Wessel wrote:
>
> Bob Nielsen <nielsen@primenet.com> wrote:
>
> >Look carefully at Table 2: E receives 144-146 and 430-440, while E3
> >receives 67-180 and 400-512 MHz.
> Which is *exactly* my point: the receive ranges differ, yet the diode-matrix
> (D302-D308, labeled 'Destination diode' in table 2) is exactly the same.
> These diodes tell the unit how to behave. Now if the E and E3 units have the
> same diodes, how can they behave differently?
>
> Note that I feel the documents contain a wealth of information,
> I was just hoping to keep anybody from opening up his/her handheld and moving
> diodes, only to find out there is an error in this table 2. The TH79 is to
> precious for that.
>

Ah, yes, and if you look at the figure on page 6, the "E" has a jumper
at W301, while the "E3" does not, And in Table 4, the TX-RX Unit number
for the "E" is X57-4402-71, while the "E3" us X57-4402-73. Do the X57
indicators imply the configuration of jumpers and/or diodes, or
different firmware? Things may be more comples than just moving diodes
and cutting wires. It's confusing (probably on purpose).

Bob

--
Bob Nielsen Internet: nielsen@primenet.com
Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
AX.25: w6swe@wb7tls.az.usa.noam
http://www.primenet.com/~nielsen

1971. Looking for ZN449 IC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: paulegan@interlog.com
Message-ID: <5echgs$cv3@news.interlog.com>
Source record: 97173

I've been looking all over for this older GEC chip. Any help locating one or a advice on a reliable sub. would be greatly appreciated. The project is a SSTV mod/demodulator called ATFAX.
Thanks.
Paul. VE3GFY

1972. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: KB9KHM <kb9khm@sprynet.com>
Message-ID: <3309AEE0.72B2@sprynet.com>
Source record: 97174
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> It is my
> opinion that my use of my amateur HT/mobile on frequencies AUTHORIZED by
> my department probably saved time, money, and lives. How can you argue
> with success? 73, Web Williams, KR4WM, City of Myrtle Beach Fire
> Department, Myrtle Beach, SC

Thanks for saving lives! We all appreciate your efforts. However, the
AUTHORIZATION from the FIRE DEPT. doesn't mean squat. They don't have
the autority to authorize this - it must be done by the FCC. And while
use of ANY frequency is allowed in an emergency (when you can't
obtain help on a ham frequency, you no doubt could have
found another ham to call the accidents in to, instead of using
the Fire Dept. frequencies.
--
Mark <KB9KHM>

Home Page:
http://expert.cc.purdue.edu/~kb9khm

1973. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: prografx@teleport.com
Message-ID: <5ecrg4due1@nadine.teleport.com>
Source record: 97175
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

holstein@erols.com (David Holstein) wrote:

<Attitude & Inappropriate Language Snipped>

>Whatever...I give up on getting help from ham operators...you are all
>a bunch of turn-of-the-century jack-asses who cannot handle progress
>and new technology.

>From on generation X-er, I can't wait 'till you all die.

>David Holstein, Jr.
>holstein@erols.com
>N3NGB@KE3GP.MD.USA.NOAM

.... so much for the future of Amateur Radio....

Steve
WB7PSD

1974. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: akent@bga.com
Message-ID: <5ed9gl$1838@news3.realtime.net>
Source record: 97176
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,rec.radio.amateur.dx,rec.radio.scanner

Thank you William for the post-

These are indeed correct.
The newer US versions of the radio have a different processor that
will not allow the extended coverage. No doubt a request-demand from
our wonderful government.

Kent

William Vynck <RACO@ping.be> wrote:

>Bob Nielsen wrote:
>> Look carefully at Table 2: E receives 144-146 and 430-440, while E3
>> receives 67-180 and 400-512 MHz.
>>
>> It appears there is no way to get the 800 MHz band on "K" (U.S./Canada)
>> models, which should make Newt Gingrich happy.
>>
>> Page 16 appears to be missing from the JPG images.
>>
>> Bob
>>
>> --
>> Bob Nielsen Internet: nielsen@primenet.com
>> Tucson, AZ AMPRnet: w6swe@w6swe.ampr.org
>> AX.25: w6swe@wb7tls.az.usa.noam
>> http://www.primenet.com/~nielsen

>I checked my pages and indeed we don't have page 16
>What i don't understand is that all pages i have are just like i
>received from Kenwood and they are one part.
>No way they could "forget" page 16, i think it's a mistake in numbering
>the pages sins page 15 and 17 are one.

>I ask them for it and let you know.

>William

>--
>Visit my Homepage http://www.ping.be/RACO
>E-mail RACO@ping.be and/or William.Vynck@ping.be
>Fidonet 2:291/1800.15
>Radio Amateur ONL4021
>QSL via bureau UBA Belgium

1975. Looking for HW-8 mods and info.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: edbu@sepia.wv.tek.com
Message-ID: <5edbjnINNbje@sepia.wv.tek.com>
Source record: 97177

I just picked up a Heathkit HW-8 at a swap meet.
I would like to know if there is a list of fixes
and mods that people have collected. I did a
web search, but didn't find much. I did get the
original manual with it, but I'm looking for the
after market hints and kinks.
Thanks,
Ed Burress
KC7GFX

1976. Re: Rauchian conspiracy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ed78dhcn2@nadine.teleport.com>
Source record: 97178

In article <19970218073800.CAA08457@ladder01.news.aol.com>,
w8jitom@aol.com wrote:

>When we are through editing, the books will be returned.
>;-)

And then it's off to the Ministry of Love for re-education. . .

Roy Lewallen, W7EL

1977. New Ham Radio FAQ on WWW, Email, or Disk

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-1802971340230001@wd1v.mv.com>
Source record: 97179
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

1978. Re: unsubscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Dana Yeomans <dana@keystone.intergate.net>
Message-ID: <Pine.LNX.3.91.970218190431.3314A-100000@keystone.intergate.net>
Source record: 97180

hi there, if you are using tin, or btin, just type "u" and that will doit.
.73's from n4pge in griffin, georgia.

1979. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Phil Heaton <ke4krt@radio.org>
Message-ID: <330A47DF.2C42@radio.org>
Source record: 97181
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
>
> Is that what it thinks it tells you. When I demonstrate ham radio I make
> no editorial comment. I offer extre credit for it. If I leave the radio
> on the comment I get is, "you do not talk to those losers do you."
> Ham radio speaks for itself. Not even Jesus Christ could convince our
> youth to get on the air with the current crop of old white fat farts.
>

Didn't I tell you to throw that 2m rig away!

Phil
--

Phil Heaton, KE4KRT, ke4krt@radio.org

1980. Re: TUBE HOMEBREWERS READ!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Cruzn <cruzn@waveinter.com>
Message-ID: <330A4D54.534C@waveinter.com>
Source record: 97182

Brian Carling AF4K/G3XLQ wrote:
>
> wa5dxp@worldnet.att.net (Jim Overstreet) whistled a happy tune like:
>
> |>bry@mnsinc.com.NO_SPAM (Brian Carling AF4K/G3XLQ) wrote:
>
> |>>http://www.mnsinc.com/bry/
>
> I will ask my ISP about this. You are the second person (out of almost 7,000
> callers!) who has grumbled about this so maybe there is something to it.
>
> I have never found a cookie on ANY web site and don't care about them
> myself.
> Cookies, schmookies!
>
> I think Cookie-detecting is for the paranoid anyway, right guys?
>
> |>Tried the site, won't go back, too many cookies to enjoy the site....
>
> 73 from Bry (((Amateur Radio G3XLQ / AF4K)))
> http://www.mnsinc.com/bry/
> E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
> Home of MEGALIST ham radio files, SWL info. etc. etc.
> You MAY NOT use my email address for unsolicited Email!
What's a cookie?
tnx,
wb1eim

1981. Repairing RF ammeter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <fKtgwEAkygCzEwmG@falstaf.demon.co.uk>
Source record: 97183

Dear All,
I've got a nice RF ammeter that I've melted the thermo couple in. Can anybody suggest a repair. I've though about a current transformer supplying a diode and a resistor to limit the current to suit but don't know how to calc the transformer. It reads 1 - 4 amps and is intended to work on about 200 - 500 kHz

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

1982. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330A69BB.4931@geocities.com>
Source record: 97184
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Siegfried Rambaum wrote:
>
> > I rarely admit I am a ham to anyone in the normal world (as in REAL
> > world).
>
> The R-series of callsigns was assigned to Russia. What business do you
> have in Russia, Burt?

Your point?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

1983. subscribe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Gerald Lynas <lynasp2@airmail.net>
Message-ID: <3309EA97.4FA9@airmail.net>
Source record: 97185

```
subscribe
```

1984. HAM SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Jerry Newland <rnewland@cyberramp.net>
Message-ID: <330A914F.1BB9@cyberramp.net>
Source record: 97186

Http://www.geocities.com/colosseum/7859

1985. HAM SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <330A8D61.4986@cyberramp.net>
Source record: 97187

http://www.cyberramp.net/~rnewland

1986. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: spkatzmann@ccgate.dp.beckman.com
Message-ID: <spkatzmann.14.000CEA30@ccgate.dp.beckman.com>
Source record: 97188
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Like someone said "It does not matter if it is legal or not, if a life is on the line..."

This is true, if anyone's life were on the line they would probably even use illegal drugs (such as marajuana) to save themselves. I think that what most people are trying to say here, is that for casual or replacement use, it is illegal to use a ham radio for out of band transmission (with the exception of MARS/CAP of course). These radios were not FCC TYPE ACCEPTED for that use, and consequently they were never tested for such use. For one to simply assume that if he clips a wire he can transmit anywhere that he is authorized to do so, is ignoring this regulation.

These radios have very "wide" receive front-ends, and fairly narrow (read: ham band only) transmitt bandpass filters. Attempting to transmitt out of the ham bands on these radios could generate spurs which will possibly interfere with other vital communications in the area. In theory, one might jepardize some other legitimate "life-threatening" situation by interfering with their legitimate communications efforts!

Think about this before you use your Kenwood or Yaesu handheld on the marine bands, or especially on police and fire frequencies. If you insist on taking the chance and saving a few bucks on equipment, at least take the radio to a qualified tech so that they can put it on a spectrum analyzer to make sure that it is transmitting a "clean" signal.

Just a thought. 73's, Steve.

1987. Re: Silver Plated Strap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Russ Ellsworth <russcwv@cyberhighway.net>
Message-ID: <330A2D09.5769@cyberhighway.net>
Source record: 97189

I want to thank all who sent e-mail and/or commented on the group. It appears that there are solutions to silver plating and kind offers of help by digging into treasure(junkboxes for the unwashed) for a stranger. Thank you all. I will report the outcome when the Amp is finished.
73, Russ Ellsworth WA6CWV, Boise, Idaho

1988. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5eb47p$6i9@news.Hawaii.Edu>
Source record: 97190
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <3308FCB3.565D@flash.net>, Madd DOG! <bmoceri@flash.net> wrote:
>What a goody-2-shoes....Why your just daddy,s{goverment}little
>simpletin...Throw ya a doggy bone if your a good boy.....Do what they
>tell ya now....

I do. I've seen the result of anarchy in both small- and large-scale settings - devastation is the only word that can describe the final outcome.

If you believe certain regulations are disadvantageous, then try your hardest to get them changed. But to go breaking laws out of laziness or thriftiness is shameful.

Jeff KH2PZ

1989. Re: Tube needed - 7868

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5edpcr$dss@news1.mnsinc.com>
Source record: 97191
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

jwg6@cornell.edu whistled a happy tune like:

|>I'm looking for a 7868 pentode which is the modulator for a Lafayette 6m
am rig.
|>I have found a local shop where they have some, but they want something
|>like $38 for one.

|>Can anyone spare one for a price that is not so steep, or suggest where
|>else I might find one?

Yes Joel, surf to:

http://www.mnsinc.com/bry/hamfiles.htm

and click on TUBES!

You will get a long list of suppliers and I am sure you can do a lot better
than that price!!

Bry, AF4K

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

1990. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-18 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330A6B3E.6279@geocities.com>
Source record: 97192
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

AL7OQ wrote:

> Ask FEMA (Federal Emergency Management Agency), who has opposed the
> Little LEOS proposal on the ground that hams provide invaluable
> emergency communications services on 2 meters.
>
> Burt: be honest! Why are you supporting this industry band grab?

Because I am public service minded person.
--
#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

1991. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <330a48d9.2616961@news.ma.ultranet.com>
Source record: 97044
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Mon, 17 Feb 1997 18:59:41 -0500, Doug Woodruff
<km4hy@mindspring.com> wrote:

>Burt,
>
>I'll be checking the callsign database with bated breath waiting for
>your call to come open after you resign it......can't imagine why you
>would want to continue to be identified with such a bunch of losers like
>us!!
>
>Doug, KM4HY

Perhaps it has to do with the same reasons there's hams over on the CB
newsgroups.

****
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
****
.

1992. For Sale: IC-T21A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: Aaron Jarvis <kb9moj@si-net.com>
Message-ID: <01bc1e11$5d2c6880$2e20c4d0@kb9moj>
Source record: 97045

I have an IC-T21A for sale I want 150-175$$ for it. It will also come with an extra bp-152
1100mah battery. The radio is only 6 months old. It has never been dropped or abused. Both batteries are in excelent condition. The radio will come with regular ni-cd, long life
ni-cd, regular antenna, manual, schematics, box. Please e-mail me asap!!

KB9MOJ
kb9moj@si-net.com

1993. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <330b51fb.3089942@news.airmail.net>
Source record: 97046

I don't have enough pain in my life; I'm gonna jump in here.

>>measures@mail.vcnet.com (R. L. Measures) writes:
>>> >When 2651V-rms is applied to capacitor whose reactance is 63.66
>>> >ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.

There's nothing wrong with the math here.

gary@ke4zv.atl.ga.us (Gary Coffman) wrote:
>The full mesh also includes the plate tank circuit, and that's
>about 5000 ohms

I just can't agree with this statement. The tube impedance is dependant on the anode current. With the conditions stated (driving the grid until the anode voltage drops to 250V) the resonant anode impedance is about 2KOhms unless the tube is under-coupled. We can assume, arguendo, that we're loaded correctly. And assuming a modest tank Q, the impedance between anode and ground (the effective tuning reactance) is 200 Ohms. That gives a current through the grid of about 10 Amps. But I think that's high; more about that below.

>and the chassis return to the grid contact,
>hopefully a very low impedance, but perhaps as much as a few
>hundred ohms at VHF.

Here's why I don't agree with that statement. If the grid contact impedance were at all significant, a voltage would be impressed on the grid opposite to the grid-to-cathode voltage. The net effect would be to lower the gain of the tube. Looking at tube gain at HF and VHF, I find the gain drops from 15 db to 14 db. I conclude that the reactance of the grid connection is very low.

(Unlike Tom, I suspect the majority is between the grid wires and the anode even though the grid cap-to-anode capacity looks--looks--fairly high. If the majority component of the grid-to-plate capacity is at the grid cap, the wires must still carry the RF current.)

Rich goes on:

>>I stand by my answer of 41.63A-rms.

Even if you're right, Rich--and I don't think you are--you're wrong about the relevance of this value to the argument raging around it. Here's why. The only heat that would be developed by this current is the loss caused by the wire resistance which, being gold plated, is pretty darn low. If you take my calculated value, 10 Amps, the losses are lower by an order of magnitude. And, Tom has stated, quite

correctly, that we don't know exactly where this capacitance is so my value is probably high which lowers the RF current even further and lowers the heating even more.

The thing that bothered me for days is that the anode voltage appears between the anode and grid. And the capacity between the grid and anode has to be charged and discharged. The problem is that you can't find a return for that much current. But, if you take Gary's approach to the circuit analysis, looking at it as a series circuit, then everything makes sense.

You have to think about grid heating differently when you're thinking about RF drive power. When the grid is positive it's attracting electrons (heat). The amount of heating of the grid is determined by the peak grid-to-cathode voltage and the grid current (~80 Volts @ 1 Amp) and the amount of time over the RF cycle that the grid is positive--less than 10%. The grid dissipation, then, is about 7 or 8 Watts. That takes into account the reduced gain at 250 MHz; at 25 MHz the grid dissipation, because of the higher gain, drops to 6-7 Watts, all the above assumption remaining true.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

1994. Good Source For Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bc1e19$cee28a60$32229bcf@kn6dv.qnet.com>
Source record: 97047

For those who are interested in the on going dicusion, I have up loaded
Part 13(from 02-08-97 to 02-18-97).
You can find it at my WebPages:

http://www.av.qnet.com/~kn6dv

Thanks 73 Will, KN6DV

kn6dv@contesting.com

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for atractive vices, he will fail.
(Walter Lippmann)

1995. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: Glenn Schultz <glenn@spacestar.net>
Message-ID: <01bc1e12$9d864bc0$f1e691ce@larry.spacestar.net>
Source record: 97048
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote in article
<3308E218.57CD@geocities.com>...
> #================#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>
Before this thread get's any further out of hand, I have a couple of
questions:

First of all, this clown is just looking for attention and enjoy's pushing
everyones buttons. He is looking for a response from a large group of
people, and he got it! He's no better than a jammer on your local repeater;
the more you respond to his drivel, the more he enjoy's it. If he is just
ignored, he will eventually go away. Don't give him the satisfaction of a
response, he has shown that he doesn't really care about the issues, he
just like to push your buttons!
Second, he obviously was interested in Amateur Radio at one time, since he
is an Extra Class, and continues to use his call sign in his sig at the end
of every message. I really wonder what his daughter, KA1VBQ thinks about
Amateur Radio? Does he really hate Amateur Radio that much? I don't think
so...His web page has several references, links, etc to Amateur Radio. He
even has some quotes paying homage to CW. Let's see, photo's of him and his
daughter with their call signs prominently displayed, callsign search,
links to Ham Radio info, and obviously very proud to be an Amateur Radio
Operator! At least that's what it looks like from this end!
So Burt, what's the real story? Are you AND your daughter going to give up
your calls? Are you going to continue this rediculous thread? If you feel
such hatred towards the hobby, why don't you show it on your web page? I
look forward to your response and hope you can quit playing this silly game
of yours.
--
Glenn
N0VYK

interNET ==>> glenn@spacestar.net
packetNET ==>> n0vyk@n0vyk.ampr.org

Web Page ==>> http://www.spacestar.net/users/glenn/index.html

1996. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <330a7014.4294075@news.erinet.com>
Source record: 97049
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Tue, 18 Feb 1997 08:33:24 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>Howard Watson wrote:
>

>What is "amature radio?"

OK, got me on that one. :> I have NO idea why I spelled it that way.
If you kept any of my previous posts (YES, I realize you get way too
many messages to do so), then you'd see that I usually (if not nearly
always) spell it correctly.
>
>

>UTH?

I thought you would remember that one, Ultimate Typical Ham.

>Nothing is more boring than that. But I will be glad to meet you OR
>ANYONE on the air, if you have the guts.

I have seen you post that comment before. It makes absolutely NO
sense! "If I have the guts"??? I am confused as to your meaning.
All kidding aside, my first impression is that you actually do have
some serious problems. Do you so delusional as to believe that you
could harm me by merely talking to me? I have the "guts" to talk to
any human being in this world. Would your conversation be so inane
that I would die of boredom? I had always imagined it would be an
interesting conversation. Please explain this "guts" idea. I am
willing to bet I am not the only one with this question.

1997. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: "ir003432@worldnet.att.net" <ir003432@worldnet.att.net>
Message-ID: <330AC9F1.4796@worldnet.att.net>
Source record: 97050
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

While the tpic of this thread makes intersting reading, there is
something serious here.

We are well into the age of everything electronic -- cash registers,
walkman, watchman, cell phones, cell phones with faxes attached, wirelss
computer printers, wireless internet connections, wireless LANs,
wireless WANs, more cell phones, garage door openers, electronic dog
collars, electronic cat collars, electronic ignition on everything,
wireless tracking devices for UPS packages, remote controls for VCRs,
TVs, stereos, and gas fireplace logs, etc., etc., etc. And it is
getting worse.

How long before someone innocently keys up an HT and crashes the entire
northeastern U.S. power grid?

Peter Gottlieb wrote:
>
> Rob Neff <n7ory*@*primenet.com> wrote in article
> <32ffac19.28077629@news.primenet.com>...
> > Story: I had a gal at work that cranked her headphones up SO loud, I
> > could hear Stevey Wonder's harmonica down the hall and into the
> > bathroom! She worked in the office just behind the wall, and behind
> > me. She was using the cassette player on her walkman. First I brought
> > a CB walkie talkie in, a 5W'er.. Did no good. Then one day I was
> > trying to key up a local 440 repeater when I noticed the audio on her
> > headphones quiet a bit on transmit. I placed the ht as close to the
> > wall as I could, keyed it up, and it wiped the audio out completely.
> > For some reason I could not hit the repeater that day, but sure was
> > fun trying.
>
> Once I was waiting in line at a Pizza Hut and talking simplex to a friend
> at
> the other end of the mall. I noticed that whenever I keyed up the cash
> register
> beeped. When I got right near it I keyed up to ask my friend what she
> wanted
> and the register display went BLANK. Actually I crashed the entire system.
> Did you know all the register were interconnected? I didn't. When they
> restarted the system it insisted on printing the day end receipts which
> took
> quite some time. Despite them seeing me key up they had absolutely no
> idea I caused the problem. I have since refrained from using the ht near
> electronic equipment that has the possibility of delaying lunch.

1998. For Sale: IC-T21A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: Aaron Jarvis <kb9moj@si-net.com>
Message-ID: <01bc1e0f$8d5f3160$2e20c4d0@kb9moj>
Source record: 97051
Cross-posted to: 2ec.radio.amateu2.equipment,alt.radio.scanner,alt.radio.scanner.uk,rec.antiques.radio+phono,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec

I have an IC-T21A for sale I want 150-175$$ for it. It will also come with
an extra bp-152
1100mah battery. The radio is only 6 months old. It has never been dropped
or abused. Both batteries are in excelent condition. The radio will come
with regular ni-cd, long life
ni-cd, regular antenna, manual, schematics, box. Please e-mail me asap!!

KB9MOJ
kb9moj@si-net.com

1999. Re: Q: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: djch@rivers.dra.hmg.gb
Message-ID: <DJCH.97Feb19112518@tamar.dra.hmg.gb>
Source record: 97052
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

>- How much of a difference in switching time is there?

On a relay which pulls in in say 10ms, you might see drop out of 35 ms with a diode.

>- What's a faster way of snubbing the induced voltage?

There is a fixed amount of stored energy in the relay coil (1/2*L*I^2). This has to be dissipated. If you limit the voltage to .7V (with the diode), then the current is also small (set by the relay coil resistance), so the energy takes a long time to go.

The fix is to add a zener or similar in series with the diode. I've used a 15v zener, which improved the drop out time to ~12 ms. The drive transistor must be able to take the higher voltage (in this case 15+Vcc, but allow a good margin...). As you go to higher voltages, the time improvement gets less.

(An alternative, which I've not tested, is to energise the relay with its full voltage, and then drop the voltage across the relay to just above hold in point. This would reduce the stored energy, and hence the drop out time. It may also save power)

Given that some of the small relays now quote times < 5ms, relay switching is not to be ignored for packet. I get TXD=50ms to work fine for 1200 baud on a relay switched rig on 2m, and the relay isn't the limiting factor. The ARRL handbook has sequencers for T/R switching, you need to be certain that the various events happen in the right order :-).

--David G8SQH

2000. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1902970343340001@news.vcnet.com>
Source record: 97053

In article <330b51fb.3089942@news.airmail.net>, jfriley@airmail.net (J. Fred Riley) wrote:

> I don't have enough pain in my life; I'm gonna jump in here.
>
> >>measures@mail.vcnet.com (R. L. Measures) writes:
> >>> >When 2651V-rms is applied to capacitor whose reactance is 63.66
> >>> >ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.
>
> There's nothing wrong with the math here.
>
> gary@ke4zv.atl.ga.us (Gary Coffman) wrote:
> >The full mesh also includes the plate tank circuit, and that's
> >about 5000 ohms
>
> I just can't agree with this statement. The tube impedance is
> dependant on the anode current. With the conditions stated (driving
> the grid until the anode voltage drops to 250V) the resonant anode
> impedance is about 2KOhms unless the tube is under-coupled. We can
> assume, arguendo, that we're loaded correctly. And assuming a modest
> tank Q, the impedance between anode and ground (the effective tuning
> reactance) is 200 Ohms. That gives a current through the grid of
> about 10 Amps. But I think that's high; more about that below.

Agreed--5000 ohms is porcine shampoo. The peak anode current in, Class AB2 linear operation of an 8877is around 3a. ....BTW, beginning a sentence with a conjunction was uncool in my jr. high school.
... ...
> Here's why I don't agree with that statement. If the grid contact
> impedance were at all significant, a voltage would be impressed on the
> grid opposite to the grid-to-cathode voltage. The net effect would be
> to lower the gain of the tube. Looking at tube gain at HF and VHF, I
> find the gain drops from 15 db to 14 db. I conclude that the
> reactance of the grid connection is very low.

> (Unlike Tom, I suspect the majority is between the grid wires and the
> anode even though the grid cap-to-anode capacity looks--looks--fairly
> high. If the majority component of the grid-to-plate capacity is at
> the grid cap, the wires must still carry the RF current.)
>
> Rich goes on:
>
> >>I stand by my answer of 41.63A-rms.
>
> Even if you're right, Rich--and I don't think you are--you're wrong

> about the relevance of this value to the argument raging around it.
> Here's why. The only heat that would be developed by this current is
> the loss caused by the wire resistance which, being gold plated, is
> pretty darn low. If you take my calculated value, 10 Amps, the losses
> are lower by an order of magnitude. And, Tom has stated, quite
> correctly, that we don't know exactly where this capacitance is so my
> value is probably high which lowers the RF current even further and
> lowers the heating even more.

I measured the grid-to-anode C on two 8877s. Each was slightly more than 10pF. 2600V-rms at 250MHz impressed across 10+ pF of C equals more than 40A in most of the universe. .
You did NOT show us how you arrived at the figure of 10 amperes, Fred..

The idea that electrons originating from the cathode cause gold to evaporate from the grid, but that electrons originating from the anode don't cause gold to evaporate, is not plausible---unless there are bad-guys electrons and good-guys electrons.

> The thing that bothered me for days is that the anode voltage appears
> between the anode and grid. And the capacity between the grid and
> anode has to be charged and discharged. The problem is that you can't
> find a return for that much current.

The main engine that pumps the apparent current through the 10+ pF is the tank circuit. The return to the tank is through the grid-grounding collet and the chassis, which are in series with the grid. The contact fingers on the Eimac p/n 135305 8877 grid-grounding collet are similar to the fingers on 47.3A-per-inch rated Eimac CF-100 finger-stock. Since the circumferential length of the 135305-collet is about 6 inches, I have zero doubt that 40A is within the collet's contact-current capability.

> But, if you take Gary's approach
> to the circuit analysis, looking at it as a series circuit, then
> everything makes sense.

Not everything Gary says makes sense to me, Fred. Gary does not seem to understand that apparent (AC) current is virtually identical to DC current even though no NET displacement of electrons takes place.
>
> You have to think about grid heating differently when you're thinking
> about RF drive power. When the grid is positive it's attracting
> electrons (heat).

The grid is pretty-much grounded, so its potential is virtually 0V. . The grid attracts electons when the cathode is driven negative---i.e., since like charges repel, electrons on a negative-potential cathode are repelled toward the 0V grid.

>The amount of amount of heating of the grid is determined by
> the peak grid-to-cathode voltage and the grid current (~80 Volts @ 1
> Amp) and the amount of time over the RF cycle that the grid is
> positive--less than 10%.

The grid draws current when the cathode is negative. The cathode is driven negative for somewhat more than 10% of the cycle. Why wouldn't grid-heating be determined by RMS values instead of peak values?

>The grid dissipation, then, is about 7 or 8
> Watts. That takes into account the reduced gain at 250 MHz; at 25 MHz
> the grid dissipation, because of the higher gain, drops to 6-7 Watts,
> all the above assumption remaining true.
>
This seems reasonable.
However, the point of this discourse is: Are we to believe that less than 0.5 amperes of DC grid current boils gold off a grid that was designed to carry over 40 amperes at 250MHz?
Boiling and evaporating gold in a vacuum requires well over 2000 deg. F. The engineers who designed the 8877 reportedly concluded that gold evaporation was most probably due to an 'oscillation condition'.
The total length of the 8877's rectangular grid wires in 0.85 inches x 96 = 81.6 inches, or 6.8 feet. The circumference of the grid wires is around 40 thousandths. IMO, in a vacuum, it would take at least 500w to raise such to 2000 deg. F.
I have opened a number of kaput 8877s. I looked at the damaged grids with a 50x microscope. IMO, the damage I saw was unlikely to have been caused by HF currents. The argument of 0.5A of grid current causing gold-evaporation smacks of undiluted technoblather.

I believe that the most likely explanation for the 0.5A/gold-evaporation argument is DENIAL of the incontrovertible fact that the 8877 is a high-Mu device that is quite capable of oscillating at VHF---unless its VHF voltage amplification can be made sufficiently low by reducing the VHF parallel-equivalent R load (VHF-Rp) on the 8877's anode.
The designer of the MFJ-Ameritron AL-1500 amplifier made no attempt to reduce the VHF-Rp load on the 8877's anode
The next time you run into an AL-1500 owner on the air, Fred, ask him/her: How many 8877s failed in the amplifier during the first 12 months of use.
--
BTW, Fred, on page 54 of the September 1984 issue of *Ham Radio* magazine, you essentially stated that the cathode-input Z of a Class AB2 g-g amplifier can be matched with a broadband toroid transformer. Do you stand by your statement?

--
--Rich-- ag6k, 805-386-3734

2001. WTB: 10mtr CW Tx strip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: doug469@knox.mindspring.com
Message-ID: <5ef1nv$d41@camel4.mindspring.com>
Source record: 97054

I need a 10mtr low power (~5w or less) transmit strip for a beacon project. simple design, crystal controlled.

Anybody got a schematic, kit, pre-assembled one etc?

I have had a few replies about converting CB's to 10 etc, but don't have time for that kind of hassle. Need something that will work without a lot of trial and error stuff.

What have you got ??????

Reply to;
doug469@mindspring.com

Thanks

2002. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <330AC9F5.5CB2@atl.org>
Source record: 97055
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"Blasting Ahead"

"TURN OFF TWO-WAY RADIO!"

2003. Transistor Parts.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: pdrunen@aol.com
Message-ID: <19970219153400.KAA15173@ladder01.news.aol.com>
Source record: 97056

Hi, this is my list of T0-3 and T0-66 transistors, I use to work for a power supply company that built on demand, at the end of the year the inventory was dumped for tax purposes. All parts are new, unused, surplus.

Would like to get:

$1 each + shipping
$5 for six + shipping
Orders over $20, I ship.

Most of the T0_3 will make very good pass transistors for power supplies. Also have some high current diodes, will post them later.

If you need a personal copy of this list, please e-mail me.

PDRUNEN
KJ4UO
_____-

ECG Number Part Number Type Voltage Current Power Freq
HFE Description Package
ECG103 2N1308 NPN-Ge 30 0.25 0.15 90 "AF
Driver, Preamp, Pwr Output" TO-5
ECG123A 2N929 NPN-Si 40 0.6 0.5 300 200 "AF/RF
Amp, Driver" TO-18
ECG123A 2N3930 NPN-Si 40 0.6 0.5 300 200 "AF/RF
Amp, Driver" TO-18
ECG123A 2N2219A NPN-Si 40 0.6 0.5 300 200 "AF/RF
Amp, Driver" TO-18
ECG128 2N697 NPN-Si 80 1 1 120 90 "AF
Preamp, Driver, Video Amp" TO-39
ECG128 2N1613 NPN-Si 80 1 1 120 90 "AF
Preamp, Driver, Video Amp" TO-39
ECG129 2N1132 PNP-Si 80 1 1 120 90 "AF
Preamp, Driver, Video Amp" TO-39
ECG159 2N2838 PNP-Si 80 1 0.6 200 180 "AF
Preamp, Driver SW" TO-92
ECG175 2N6274 NPN-Si 300 3 40 10 50 AF Pwr
Amp TO-66
ECG175 2N3585 NPN-Si 300 3 40 10 50 AF Pwr
Amp TO-66
ECG175 2N3584 NPN-Si 300 3 40 10 50 AF Pwr
Amp TO-66
ECG180 2N4398 PNP-Si 100 30 200 2 25 AF Amp
TO-3

ECG181 2N6327 NPN-Si 100 30 200 2 25 AF Amp
TO-3
ECG181 2N5301 NPN-Si 100 30 200 2 25 AF Amp
TO-3
ECG219 2N3791 PNP-Si 70 15 150 4 20 "AF
Output, Sw" TO-3
ECG249 MJ4035 NPN-Si 100 16 150 **** 3500 Darlington
Pwr Amp TO-3
ECG249 2N6576 NPN-Si 100 16 150 **** 3500 Darlington
Pwr Amp TO-3
ECG251 2N6283 NPN-Si 100 20 160 *** 2400 Darlington
Pwr Amp TO-3
ECG251 2N6282 NPN-Si 100 20 160 *** 2400 Darlington
Pwr Amp TO-3
ECG252 2N6289 PNP-Si 100 20 160 *** 2400 Darlington
Pwr Amp TO-3
ECG261 2N6534 NPN-Si 100 8 65 *** 1000 Darlington
Pwr Amp TO-220
ECG261 2N6301 NPN-Si 100 8 65 *** 1000 Darlington
Pwr Amp TO-220
ECG262 2N6299 PNP-Si 100 8 65 *** 1000 Darlington
Pwr Amp TO-220
ECG280 2N1489 NPN-Si 140 12 100 6 70 AF Pwr
Amp TO-3
ECG283 2N6307 NPN-Si 325 10 100 6 15 "HV-Hi
current Sw, Horz Output" TO-3
ECG283 2N6307 NPN-Si 325 10 100 6 15 "HV-Hi
current Sw, Horz Output" TO-3
ECG283 2N3902 NPN-Si 325 10 100 6 15 "HV-Hi
current Sw, Horz Output" TO-3
ECG284 2N6262 NPN-Si 180 16 150 6 70 AF Pwr
Amp TO-3
ECG286 2N3739 NPN-Si 250 2 25 8 100 "Pwr Amp,
Sw, Horiz Output" TO-66
ECG288 2N5400 PNP-Si 300 0.5 0.625 50 40 HV Gen
Purpose Ampilifer TO-92
ECG311 2N3866 NPN-Si 30 0.4 5 800 25 "VHF/UHF
Osc, Amp, Driver" TO-39
ECG327 2N6341 NPN-Si 150 25 200 40 30 "Pwr Amp,
Sw tf = 250 ns" TO-3
ECG327 2N5058 NPN-Si 150 25 200 40 30 "Pwr Amp,
Sw tf = 250 ns" TO-3
ECG327 2N5038 NPN-Si 150 25 200 40 30 "Pwr Amp,
Sw tf = 250 ns" TO-3
ECG377 2N5428 NPN-Si 80 10 50 50 60 "Pwr
Driver, PO, Sw" TO-220
ECG38 2N6213 PNP-Si 350 2 35 20 "HV AF Pwr
Amp, Hi" TO-66
ECG384 2N5202 NPN-Si 350 7 45 1 20 "Sw,
Linear Amp" T0-66

ECG384 2N3766 NPN-Si 350 7 45 1 20 "Sw,
Linear Amp" T0-66
ECG384 2N3441 NPN-Si 350 7 45 1 20 "Sw,
Linear Amp" T0-66
ECG386 MJ13335 NPN-Si 500 20 175 *** 30 HV HI
Speed Sw TO-3
Paul J. VanDrunen 904-939-1902

ECG386 MJ13334 NPN-Si 500 20 175 *** 30 HV HI
Speed Sw TO-3
ECG389 BU204 NPN-Si 1500 4 100 4 30 Horiz
Output TO-3
ECG390 TIP33 NPN-Si 100 10 80 3 40 "Pwr Amp,
Hi Speed" TO-3P
ECG459 2N3822
ECG5252 1N1815
ECG53 2N6676 NPN-Si 400 8 50 70 12 "HV, Hi
Speed Switch tf = .7uS" TO-3
ECG53 2N6547 NPN-Si 400 8 50 70 12 "HV, Hi
Speed Switch tf = .7uS" TO-3
ECG53 2N6545 NPN-Si 400 8 50 70 12 "HV, Hi
Speed Switch tf = .7uS" TO-3
ECG5507 2N1849
ECG75 2N3880 NPN-Si 80 5 50 50 40 "Hi Pwr
Amp, Sw" TO-111
ECG94 2N5240 NPN-Si 300 5 100 2.5 30 Gen Pwr DC
Regulator TO-3
ECG98 MJ10005 NPN-Si 500 20 175 *** 40 "HV
Darlington Pwr, tf = .6uS" TO-3
EGC130 2N3055 NPN-Si 60 15 115 0.8 40 AF Pwr
Amp TO-3
XGSR3040

USD345C
UES706
UES602
TIP50
SVT450-5

SUT6060
SDR604
2N6546
2N6436
TO-3
2N6330
2N6258
2N4949
2N404A
2N2905
2N1771
2N1041

1N6305
1N2845B

2004. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <330c1e18.2681877@news.airmail.net>
Source record: 97057

On Wed, 19 Feb 1997 03:43:34 -0800, measures@mail.vcnet.com (R. L.
Measures) wrote:
>BTW, Fred, on page 54 of the September 1984 issue of *Ham Radio* magazine,
>you essentially stated that the cathode-input Z of a Class AB2 g-g
>amplifier can be matched with a broadband toroid transformer. Do you stand
>by your statement?

Of course I do. But only if the conditions I outlined are met. The
situation there was a cathode input impedance that was high enough to
allow it to be swamped by non-inductive resistance. To keep the
grid-to-cathode voltage under control (in effect, to lower the drive
power to the tube) a step-down transformer was used.

As I noted in my article, I deserve no credit for that idea or the
grid-current derived ALC. ETO did both first. What I wanted to do in
that article was to show how their techniques could be implemented in
home-brew amplifiers that protect relatively fragile tubes (8874/8875)
that became very expensive, very quickly.

Fred, W8OY
JFRILEY@AIRMAIL.NET
FREDWA8AJN@AOL.COM

2005. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330B2C03.31A@geocities.com>
Source record: 97058
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Glenn Schultz wrote:

>
> First of all, this clown is just looking for attention and enjoy's pushing
> everyones buttons. He is looking for a response from a large group of
> people, and he got it!

And you are one of the ones who gave it to me.
What is it about spineless hams that they think they can tell others
what to do and not do it themselves? Are you German?

> Don't give him the satisfaction of a response

Like you did?

> I really wonder what his daughter, KA1VBQ thinks about
> Amateur Radio?

She says, "it's boring....I do not relate to them in anyway what so
ever."
quoted at 1133 EST. She is a straight A student.

>Does he really hate Amateur Radio that much? I don't think
> so...His web page has several references, links, etc to Amateur Radio.

Have you READ the references, they are hardly positive.

> He even has some quotes paying homage to CW. Let's see, photo's of him and his
> daughter with their call signs prominently displayed, callsign search,
> links to Ham Radio info, and obviously very proud to be an Amateur Radio
> Operator! At least that's what it looks like from this end!

I do pay homage to CW, it is the one mode where hams get to the point.
READ the K1OIK reference page.

> So Burt, what's the real story? Are you AND your daughter going to give up
> your calls?

She wants to give hers up.

Are you going to continue this rediculous thread? If you feel
> such hatred towards the hobby, why don't you show it on your web page?

Look at the WWW page man, it is all there.

#================#===#
| Burt Fisher | Teacher of video, broadcasting and electronics |

```
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=============================================================================#
```

2006. Quieter Blower??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: jayk@fc.hp.com
Message-ID: <5efdv1$9e@fcnews.fc.hp.com>
Source record: 97059

I'm in search of a quieter blower to replace the Dayton 4C443 in my
2m 8877 amp. Any recommendations out there???

Thanks,

73, Jay K0GU DN70mq jayk@fc.hp.com

2007. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: shnews@laser.net
Message-ID: <330b49af.968294@news1.laser.net>
Source record: 97060
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 19 Feb 1997 11:28:40 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>A man went to a guts store to get some guts for dinner. He sees a sign
>remarking on the quality of guts offered at this particular gut
>store. So he asks the butcher: "How much for Engineer guts?"
> "3 dollars an ounce."
> "How much for teacher guts?"
etc.
>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#
I still can't figure out how one can teach broadcasting.

sean hall/W1SWH

2008. The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330B2A38.2ECD@geocities.com>
Source record: 97061
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

A man went to a guts store to get some guts for dinner. He sees a sign remarking on the quality of guts offered at this particular gut store. So he asks the butcher: "How much for Engineer guts?"
"3 dollars an ounce."
"How much for teacher guts?"
"4 dollars an ounce."
"How much for ham operator guts?"
"100 dollars an ounce."
"Why is ham operator guts so much more?"
"Do you know how many hams you need to kill to get one ounce of guts?

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=====================================================================#
```

2009. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330B29EB.5EB3@geocities.com>
Source record: 97062
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Howard Watson wrote:

> >What is "amature radio?"
>
> OK, got me on that one. :> I have NO idea why I spelled it that way.
> If you kept any of my previous posts (YES, I realize you get way too
> many messages to do so), then you'd see that I usually (if not nearly
> always) spell it correctly.

Well you have the ability to laugh at your self and admit a minor error.
Are you sure you are a ham?

Ham radio defined:

There's just so much more in the world to catch their
eye than a bunch of farts who try to maintain their heirarchy in a
pseudo
secret society, refusing with a vengeance to pass the baton, for fear of
the
tiniest little detail of what's theirs being changed. Even if the change
is
necessary and beneficial to the hobby.

> I have seen you post that comment before. It makes absolutely NO
> sense! "If I have the guts"??? I am confused as to your meaning.

Hams are so gutless that none will meet me on the air to discuss my so
called outrageous views. It is not like I can hit them on the air.

> All kidding aside, my first impression is that you actually do have
> some serious problems. Do you so delusional as to believe that you
> could harm me by merely talking to me?

Maybe not you but most hams I could make look damn silly on the air, not
because I am smarter but I have the facts on my side.

I have the "guts" to talk to
> any human being in this world. Would your conversation be so inane
> that I would die of boredom?

Far less than a TYPICAL ham contact.

I had always imagined it would be an
> interesting conversation. Please explain this "guts" idea. I am
> willing to bet I am not the only one with this question.

You are the only one maybe with the guts to ask.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2010. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970219162900.LAA22604@ladder01.news.aol.com>
Source record: 97063

In article <330b51fb.3089942@news.airmail.net>, jfriley@airmail.net (J. Fred Riley) writes:

>
>The thing that bothered me for days is that the anode voltage appears
>between the anode and grid. And the capacity between the grid and
>anode has to be charged and discharged. The problem is that you can't
>find a return for that much current. But, if you take Gary's approach
>to the circuit analysis, looking at it as a series circuit, then
>everything makes sense.

Hi Fred,

Glad to see this thing get back to common sense.

I disagree with the comment above. The path is very clear, and is not through the tank. The catode to anode path through the tube discharges the anode to grid capacitance. The return for the discharge is through the grid to cathode path.

The charge path is through the tank's impedance, in one form or another. So the charge path is indeed through a few hundred ohms IF you can get the tank to that value. The DISCHARGE path is through the electron stream to the cathode, and the cathode to chassis and chassis to grid impedance.

We can argue all day about where the capacitance is located in the tube, but the end result is the same. The I^2 R losses are a very minor player anyway, the major heating is do to electrons smacking the grid.

The whole argument is silly, because by the time the grid is designed to take the electron heating and support itself, it can carry considerable common mode currents.

Not only that, Rich went off into na-na land with his numbers. The 8877 would be cooked if someone ran 4 kV at 250 MHz, and had a peak anode current of 2 amperes in class AB conduction angle service discharging the anode circuit to a few hundred volts. No one in their right mind would select 4 kV at the upper frequency limit of operation, and then try to drive the anode down to a few hundred volts.

The input power would have to be nearly 4 kW, in the real world the output power would be about 1200 watts at that frequency, and the dissipation would be 2800 watts.

A quick glance shows Rich's numbers indicate an plate efficiency near 70% (something impossible at 250 MHz) and an impossible set of

operating conditions for the tube.

Everyone (except perhaps Rich) understands grid and anode dissipation. Your analysis of the grid circuit agrees with all the other descriptions posted (except Rich's). Remember that the grid dissipation increases sharply when the PA is underloaded.

Arguing about pathological data is a waste of time. Fred, don't you think at any moment someone is going to shout "April Fool"?

73 Tom

2011. Drake L4B problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: jmul@microlink.net
Message-ID: <856379397.27477@dejanews.com>
Source record: 97064
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I have a friend who has a Drake L4B amplifier that keeps blowing what he calls the "large" transformer, which I am guessing is the plate xfmr. He has had the power supply gone through and replaced the relay. The new xfmrs last about a month, and no tube damage has been done when they go. Anyone have any ideas as to where to look for the problem? Any help will be greatly appreciated. Thanks, John N0EE

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2012. Drake TR-4 schematic wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: Bill Redmond <w3ih@riolink.com>
Message-ID: <01bc1e8d$bf556d00$LocalHost@default>
Source record: 97065

I have a Drake TR-4 with manual, but the schematic is not totally correct. For instance, V4 is a 6EJ7 in the schematic, but in my TR-4 it is a 6HS6. There are other differences also, so I am looking for a copy of the schematic that applies to my radio. Any help greatly appreciated, and I am certainly willing to pay any reasonable costs involved. Reply to:

Bill Redmond, W3ih

w3ih@riolink.com

2013. Re: Information on GE MASTR II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: ham440@aol.com
Message-ID: <19970219134400.IAA16562@ladder01.news.aol.com>
Source record: 97066

Hi.
Mastr II Mods.
It's not hard to do it depending how you do it.
I convert them for both amateur and commercial use. I don't have any step by step procedures, BUT they are available from several sources.
Keep looking on the web.
If you deside to have it done, call me.
Good luck

Dick K6DBR
Ham440@aol.com

2014. Re: Silver Plated Strap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <330B3A32.825@apollo.wes.army.mil>
Source record: 97067

Russ Ellsworth wrote:
>
> I am in the process of building a HF Amp and need to find some copper
> strap, hopefully silver plated for tank circuit connections. The silver
> plating is more for looks than efficiency at HF but it would fit better
> with the other components than plain copper. Any ideas??
> Thanks, Russ Ellsworth..WA6CWV, Boise Idaho

Russ,
How much you need? My strapping is "tinned" not silver plated. If
your only talking a few inches its yours gratis. Well, gratis if it
doesnt cost an arm and leg to mail.

Butch KF5DE

2015. Need to find tech info source VARIAN TWT/Klystron

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: dgf@netcom.com
Message-ID: <dgfE5v6xv.E29@netcom.com>
Source record: 97068

How do I get ahold of data sheets or technical data books on VARIAN travelling wave tubes and klystrons? I haven't gotten very far with www.varian.com and would appreciate referral to a helpful tech rep or distributor in US.

73 Dave WB0GAZ dgf@netcom.com

2016. Voltage regulator (7808) question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: lekollar@nyx10.cs.du.edu
Message-ID: <5egc22$eqc@nyx10.cs.du.edu>
Source record: 97069

I have an old laptop computer that needs 8VDC, 1.5A for charging &
on-grid usage. The AC adapter that came with it works IK, but I
was considering building a 12VDC adapter for running it in the car
or for emergency use.

Checking catalogs, I didn't find any 7808s with 1.5A capacity, but
I have several 1/2A regulators in my junk box. Can I wire three
of them in parallel to get 1.5A capacity?

Thanks in advance!
--
Larry Kollar, Dawsonville GA | *** Hatred is murder *** (1 Jn 3:15)
lekollar@nyx.net | http://www.nyx.net/~lekollar/
"So don't try to turn my head away
Flirtin' with disaster every day"

2017. Re: Drake L4B problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: avatar <avatar@frii.com>
Message-ID: <330BA8CD.757A@frii.com>
Source record: 97070
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

jmul@microlink.net wrote:
>
> I have a friend who has a Drake L4B amplifier that keeps blowing what he
> calls the "large" transformer, which I am guessing is the plate xfmr. He
> has had the power supply gone through and replaced the relay. The new
> xfmrs last about a month, and no tube damage has been done when they go.
> Anyone have any ideas as to where to look for the problem? Any help will
> be greatly appreciated. Thanks, John N0EE
>
> ------------------==== Posted via Deja News ====----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet

Your problem description is sparse. Trying to solve it from afar is like giving a haircut by mail. It would help to know if the failure is an open or shorted winding and which winding. Is there anything else connected to the AC line that could produce voltage spikes? Many times a problem is related to a change that was made. Think back and ask, did I do anything between the time the rig worked okay and when it started having a problem.

2018. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <330BFA4C.2BF4@idecc.com>
Source record: 97071
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> A man went to a guts store to get some guts for dinner. He sees a sign
> remarking on the quality of guts offered at this particular gut
> store. So he asks the butcher: "How much for Engineer guts?"

Burt,

The part that takes guts is to promote this hobby of ours in a positive
way,
bitching and moaning about how bad things are takes NO GUTS AT ALL and
that's
all I've ever seen from your posts. Nothing positive, no creative ideas
just good
ole belly achin.

Do you have guts Burt?
--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

2019. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: Tom Sharples <sharples@hooked.net>
Message-ID: <330BDBA3.22D6@hooked.net>
Source record: 97072
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

This sort of thing is one of the reasons that all equipment now sold in Europe has to be CE compliant- meaning that it not only must not emit spurious signals (similar to FCC type B), but also must not be *susceptible* to external RF fields, static charges, and so forth. In this respect the Europeans are ahead of us.

2020. LMB cabinets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: tom martin <tjmartin@ro.com>
Message-ID: <330B98C9.353E@ro.com>
Source record: 97073

I am looking for a source for cabinets for projects, such as
HF amps, and large power supplies.

Is LMB still in business, or does any one has a source for cabinets.

Thanks

Tom KA7SFL

2021. How to choose FET for VLF loop antenna preamplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-19 00:00:00 UTC
From: scott@gorzarg5.phy.bnl.gov
Message-ID: <5efd42$bh4@sun20.ccd.bnl.gov>
Source record: 97074
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Hello,

I am looking for some references to books or articles about how to
choose the proper FET for use in a VLF loop antenna preamplifier.

The RF design books that I have access to are either too theoretical
and don't go into specs at all, or they are too practical and just
say "use an MPF102 here".

The only recommendation I have gleaned from all of this is that the
FET should be "low noise". But nowhere do they give a number that
I can use when looking at data sheets.

Any help would be greatly appreciated.

Thanks,

Scott

--
scott coburn brookhaven national laboratory
mailto:scott@bnl.gov upton, ny, usa
http://gorzarg5.phy.bnl.gov/~scott (on long island)
--
scott coburn brookhaven national laboratory
mailto:scott@bnl.gov upton, ny, usa
http://gorzarg5.phy.bnl.gov/~scott (on long island)

2022. FS 4uf @4000v oil caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Brian <haberlb@cadvision.com>
Message-ID: <330D1684.248B@cadvision.com>
Source record: 96943

```
For sale,6- oil caps 4 uf, 4000vdc. unused.
$10.00 each(cdn) obo.
If interested respond via e-mail
haberlb@cadvision.com
```

2023. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2002971326190001@news.vcnet.com>
Source record: 96944

In article <330bc386.78278252@news.santafe.edu>, jpotter@jpaw.com wrote:

> measures@mail.vcnet.com (R. L. Measures) wrote:
>
...snip...
> With respect to parasitic oscillations, the energy in such
> oscillations is not likely to be well coupled to the antenna or
> anywhere else so the amplitude builds up until internal processes
> limit it.

Agreed.

> Frequently the build up is limited by changing electrode
> voltages and the oscillations appear as "bursts" on the output
> waveform. Parasitic oscillations can cause overheating of the grid,
> but so will light anode loading.
>
In 3-500Z amplifiers such as the L4-B, SB-220, and TL-922, one of the 1A grid to ground chokes sometimes opens during what appears to be a burst of oscillation in the vicinity of 100MHz that seems to damage Rs. Since the fusing current of the copper wire used in these chokes is over 15a, and the copper wire forms melt-balls at the point of failure, I assume that the grid current was over 15a during the event that caused the choke to open. I can't vouch for the L4-B, but in my SB-220, SB-221, and TL-922, mis-loading is not able to produce enough current to open one of the grid chokes.

In several dozen cases of 3-500Z grid-to-filament shorts, I have not seen a case where a bent grid was responsible for the short. However, I have seen many cases where a 3-500Z's filament helices were bent sideways and contacted the (grounded) grid during an event that operators often describe as a 'big-bang'. [see photo on page 15 in the September, 1990 issue of *QST* magazine.]

Some of the naysayers have argued that an anode-to-grid arc---due to internal gas---is responsible for opening grid chokes. However, over 90% of the 3-500Zs I have tested that had a grid/filament short, subsequently exhibited minimal leakage at an anode-to-grid test potential of 8000v.

In my un'expert' opinion, Jim, a 3-500Z grid-to-filament short can not be produced by mistuning.

--
--Rich-- ag6k, 805-386-3734

2024. Free to all Radio Amateurs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Al & Denise Waller <al@qsl.net>
Message-ID: <330CF65C.5D2EF0C0@qsl.net>
Source record: 96945

Dear Fellow Amateur,

An Internet Web Server devoted entirely to Amateur Radio and associated hobbies.

If you would like a home page of your own or for your Radio Club it's absolutely FREE and will always be FREE.

This is my private computer system with the Server on a T1 hi-speed network. It's a hobbie for me
just as Ham Radio is and I'm glad to share my system with everyone.

This is what you'll get:

E-mail account that you can use locally or have forwarded to your regular account

Example: K3TKJ@qsl.net , NE3Y@qsl.net , YOURCALL@qsl.net

FTP privledges

Telnet privledge (after you convince me you need it)

Your own personal Web site....Try these working pages now.

http://www.qsl.net
http://www.qsl.net/k3tkj
http://www.qsl.net/kc8eds
http://www.qsl.net/ve7fym
http://www.qsl.net/n3wdl

Here are the rules:

1) NO COMMERCIAL USE!

2) I'm not going to write the page for you. Isn't it time you learned something new?

3) You have an Amateur License.

That's it.... If you want to try it signup at http://www.qsl.net

Need more info? E-mail: k3tkj@qsl.net

73,

Al Waller K3TKJ
Laurel, Delaware

2025. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: "Howard E. Kirk" <n3kni3@erols.com>
Message-ID: <330CB989.734E@erols.com>
Source record: 96946

```
subscribe
```

2026. Re: Voltage regulator (7808) question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Bill Newkirk <wnewkirk@iu.net>
Message-ID: <330D0D51.5CDF@iu.net>
Source record: 96947

larry kollar wrote:
>
> I have an old laptop computer that needs 8VDC, 1.5A for charging &
...
> Checking catalogs, I didn't find any 7808s with 1.5A capacity, but
> I have several 1/2A regulators in my junk box. Can I wire three
> of them in parallel to get 1.5A capacity?

not easily. one of 'em will produce higher voltage/more current and even
with
isolation, you still have one of the 3 tending to hog the job.

better to use a pass transistor with a single, smaller 7808 or better
yet, use one of the newer, more general purpose regulators (LM317 comes
to mind) that can handle the higher power required.

of course, the purists out there will want to you to build a switcher...

--
Bill Newkirk WB9IVR The Space Coast Amateur Technical
Group
Melbourne, FL duty now for the future of amateur
radio
Lombardi's 1st Law of Business:
Companies succeed in spite of their best effort. If they succeed at
all.

2027. Re: Voltage regulator (7808) question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Satyadev Vyas <ecinst@pacific.net.sg>
Message-ID: <01bc1eef$ff228280$0600a8c0@victor>
Source record: 96993

No, you can't use them in parallel. LM317 is similar 3-pin regulator with 1.5 Amp capacity. But it is variable output. You need to connect two resistors to fix output voltage. Ask any local electronics shop or National Semi dealer, they should be able to help.

2028. Re: Rauchian conspiracy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970219164100.LAA25049@ladder01.news.aol.com>
Source record: 96994

In article <5ebhmu$1q2$3@nadine.teleport.com>, w7el@teleport.com (Roy Lewallen) writes:

>Yeah. The local copies here got snarfed up by some Nichromian Aral
>Measurement society. What gives?
>
>Roy Lewallen, W7EL
>
>

Ive havvve all der copies now heir Roy.

Ven we have da copies edited, you vill have dem back.

Heil Microphone!

2029. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <330be285.11041921@news.erinet.com>
Source record: 96995
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

>Do you so delusional?!?

<sigh> I KNEW somebody would catch that soon as I read it (after I sent it) <G> I simply have to STOP posting at 4:00 a.m. Should have read "Are you so delusional" :>

>***
>* onbelay@ma.ultranet.com *
>* *
>* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
>* Manchester, NH *
>***
>.

2030. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <330bc386.78278252@news.santafe.edu>
Source record: 96996

measures@mail.vcnet.com (R. L. Measures) wrote:

> The idea that electrons originating from the cathode cause gold to
>evaporate from the grid, but that electrons originating from the anode
>don't cause gold to evaporate, is not plausible---unless there are bad-guys
>electrons and good-guys electrons.
>
There is a real difference between those electrons, Rich. The ones going back and forth between the grid and anode stay in the wires and have fairly low energy, The ones from the cathode are removed from the surface of the cathode and accelerated by the grid cathode potential. Those that hit the grid leave behind that energy on the grid. This dissipation can be calculated as V*I integrated over the rf cycle. The contribution of the grid resistance to this loss is quite small by comparison.
On the other hand, the currrent flowing in the grid conductors due to the circulating current in the tank circuit heat the grid by I^2 R effect.. They don't get very energetic (the field required to move an electron in a conductor is quite small) and the dissipation from this source is small compared to the dissipation from the electrons that strike the grid.

To put in the same language you used:

Electrons originating from the cathode cause gold to
evaporate from the grid, but electrons originating from the anode
don't cause gold to evaporate. There are bad-guys
electrons and good-guys electrons.

73 de K9GXC, Jim

PS: The electrons which don't strike the grid get accelerated to even higher energy by the anode voltage. When they strike the anode that energy is lost. This is called anode dissipation. If you look at the anode voltage and current during an rf cycle you will see that when anode voltage is the highest, the current is the lowest (even zero for classs C) and when the anode voltage is lowest, the current is the highest. This has a lot to do with how a tube can make rf with reasonable efficiency. If you screw up the load impedance, e.g. make it too low, the electrons all hit the anode with about the same energy, determined by the anode supply voltage, and the tube gets hot. In this case there is little voltage swing on the anode, so little rf is produced. This, of course is low efficiency operation.

I can tell you what happens for high load impedance as well. The efficiency goes up for a while, but the lower the anode voltage

swings, the less ability it has to yank electrons through the grid, forcing the grid dissipation up. (If you go beyond this you can get clipping of the rf waveform which means distortion and harmonics.)

With respect to parasitic oscillations, the energy in such oscillations is not likely to be well coupled to the antenna or anywhere else so the amplitude builds up until internal processes limit it. Frequently the build up is limited by changing electrode voltages and the oscillations appear as "bursts" on the output waveform. Parasitic oscillations can cause overheating of the grid, but so will light anode loading.

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

2031. Re: Kenwood TH-79E/A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: NOSPAM.wessel@via.nl
Message-ID: <5egut3oc1@news.via.nl>
Source record: 96997
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob Nielsen <nielsen@primenet.com> wrote:

>Ah, yes, and if you look at the figure on page 6, the "E" has a jumper
>at W301, while the "E3" does not,
Nicely spotted Bob!
As the green wire is in series with D308, cutting the wire equals removing
D308. That leaves us with an identical diode-matrix for the E2 and the E3,
which have different transmit ranges.....

In reality it was tested that the difference between E2 and E3 is in diode
D304: with D304 it is an E2, without it an E3 (which is equal to E9).

Sigh.... Am I suffering from dyslexia or what is going on here?....

There may be a NOSPAM. in front of my E-mail address.
It is there to fool machines, not people.

2032. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Madd DOG! <bmoceri@flash.net>
Message-ID: <330C098B.CED@flash.net>
Source record: 96998
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Burt Fisher wrote:
>
> Doug Woodruff wrote:
> >
> > Come on, Burt....
> > Let me see ---- public service events (bike races, marathons, sporting
> > events, Special Olympics, APRS at the real Olympics in Atlanta, etc),
> > search and rescue communications (whether on foot, in vehicles, or in
> > the air), coordination of communications for emergency management
> > agencies (from city/municipal to FEMA), and what about hurricanes,
> > tornadoes, wildfires.....
>
> And what percentage of hams take part in the above?
> And of those that do, ham communication uses 400000 words when 10 will
> do. Hams are horribly inefficent voice communicators.
>
>
> #===============#=====================================================#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#=====================================================#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #=====================================================================#

Damn now thats a first, Hams talk to much......Geeeezzzz.hmmmmmmmmmm??
```

2033. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Madd DOG! <bmoceri@flash.net>
Message-ID: <330C0B15.677B@flash.net>
Source record: 96999
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Doug Woodruff wrote:
> >
> > Burt,
> >
> > I'll be checking the callsign database with bated breath waiting for
> > your call to come open after you resign it......can't imagine why you
> > would want to continue to be identified with such a bunch of losers like
> > us!!
>
> I rarely admit I am a ham to anyone in the normal world (as in REAL
> world).
>
> #================#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

Your a ham{pig meat} Burt, theres no doubt!!!!!!!!!
Brian

2034. Re: Voltage regulator (7808) question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <330C0A9D.7711@rcru.rl.ac.uk>
Source record: 97000

Satyadev Vyas wrote:
>
> No, you can't use them in parallel. LM317 is similar 3-pin regulator with
> 1.5 Amp capacity. But it is variable output. You need to connect two
> resistors to fix output voltage. Ask any local electronics shop or National
> Semi dealer, they should be able to help.

Or you could get a 78S08, the 2 Amp version of the 7808.

2035. Spring cleaning

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: kb7ww@chatusa.com
Message-ID: <5egc38$gbh@lex.zippo.com>
Source record: 97001

Fullerphone MK II, British WW2, These are telegraph terminals
They are in fair to good condition there are 2 ea. One set of
headphones. Price $50.00 for all.

Microphone Headphone combination the mike is marked
"Microphone Hand No. 7 " there is no name or Id on the
headphones. There are other marking that would make one
think that these came from WW2 they have the telltale orange
type of stamps on them on the mike RS-2 & sc5601p. the marks
on the headphones are under the hard ware and I cant read them.
The cord that hooks it all together is of a brownish color with red,
white and blue stripes woven in. The plug on the end is a 5
conductor three sided male plug. It really looks new but dusty.
Offers?

R.L. DRAKE TR-6 original Manual in good condition. Price
$25.00 I'll pay shipping.

Dow-Key #260B-2604 Relay these were made by Dow-Key
while it was part of Kilovac. They are for switching an
amplifiers in and out of line. They have 12 vdc coils and gold
plated contacts. I 'm using one on my DTR 2000 Dentron.
There like having 2 regular ones in one package. Price $50.00

Shipping extra

ARS KB7WW
Art Moe

kb7ww@transport.com

2036. Re: WTB: 10mtr CW Tx strip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5eh4uo$cp3$2@nadine.teleport.com>
Source record: 97002

>> I need a 10mtr low power (~5w or less) transmit strip for a beacon
>> project. simple design, crystal controlled.
>>
>> Anybody got a schematic, kit, pre-assembled one etc?
>>
>> I have had a few replies about converting CB's to 10 etc, but don't
>> have time for that kind of hassle. Need something that will work
>> without a lot of trial and error stuff.

Try the "Universal QRP Transmitter" described in _Solid State Design for the Radio Amateur_, available from the ARRL.

Roy Lewallen, W7EL

2037. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Madd DOG! <bmoceri@flash.net>
Message-ID: <330C0A3B.E69@flash.net>
Source record: 97003
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Burt Fisher wrote:
>
> Barney wrote:
> >
> > WHY do you ONLY want to give away 2 meters, Burtie?
>
> Actually you are correct. Hams need nothing except to SERVE THEMSELVES.
>
> > Why not get all the hams to write the FCC and recommend that they give
> > away ALL of our spectrum?
>
> Great!
>
> > I am sure the readers of this newsgroup are already dashing off letters
> > by the DOZEN to the FCC in response to your great message, since we all
> > follow you like the pied piper!
>
> Actually you all follow each other like the Pied Piper. Listen to a
> contest.
>
> #================#=====================================================#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#=====================================================#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #=========================================================================#

Its called a hobby Burt! Remember!!!!!!!!!
Brian
```

2038. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: "William A. Wetzel" <n6rky@pacbell.net>
Message-ID: <330C0A2C.7DE4@pacbell.net>
Source record: 97004
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Gee wiz Dana!

Just because you know the difference between CCITT, IEEE, IAB, etc; does
that mean you have an IFR and work on radios for a living????

Somehow I really wonder about your relevance in this discussion :)
--
William A. Wetzel
N6RKY@PACBELL.NET
N6RKY@JUNO.COM

2039. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: "William A. Wetzel" <n6rky@pacbell.net>
Message-ID: <330C08EF.10BF@pacbell.net>
Source record: 97005
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Gee wiz Dana!

Just because you know the difference between CCITT, IEEE, IAB, etc; does
that mean you have an IFR and work on radios for a living????

Somehow I really wonder about your relevence in this discussion :)
--
William A. Wetzel
N6RKY@PACBELL.NET
N6RKY@JUNO.COM

2040. Who makes 8x10x*4* chassis?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: rmote@rain.org
Message-ID: <5eh7d7$60c$1@news.rain.org>
Source record: 97006

Been planning to rebuild my old Novice rig with all new components (single 6146 50W oscillator CW rig from '59 ARRL Handbook). Found a nifty dual 400-pF variable but it needs 3.5 inches when open. All the catalogs show the 4-inch high chassis start at 10x17 inches! Does no one make smaller chassis that are 4 inches high? I'd like to do it on a box that's either 8x10 or 10x12 at the most; no need or desire for anything larger.

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

2041. Tiny silver/Teflon coax?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: rmote@rain.org
Message-ID: <5eh83q$60c$2@news.rain.org>
Source record: 97007

I've seen some very tiny coax with Teflon dielectric and silvered braid and center conductor that's really nifty for winding common-mode chokes on small (0.71" o.d.) ferrite cores. I only have a 6-inch sample of one type (black, probably non-Teflon outer jacket, 0.070" o.d., 50 ohm, and definitely not QRO). Have heard of a similar white-jacket (possible Teflon) that's closer to 0.055" o.d. Does anyone have any info on these? I am aware of RG-178B/U at 0.075" o.d. and 50 ohms.

Have also seen unknown Zo white non-Teflon coax with at least 98% braid shielding that is *extremely* flexible. Jacket appears to be some sort of silicone rubber, and both braid and center conductor are silvered. I measured 15 turns of that stuff on what appears to be a mix 75 core 0.71" o.d. and found 1.8 milliHenries. That's one helluva choke! Would like to find a source for this stuff, too, since the o.d. is about 0.058". If nothing else, it's very handy for routing shielded runs from one place to another under a chassis.

73.....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA ex-W6RIC

2042. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5BDE.58CC@geocities.com>
Source record: 97008
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Woody wrote:

> since the idiots in
> Newington have promoted this as a "hobby" and dropped the "service".

It is a hobby, exactly what service does ham radio perform?

Computers, the internet in every
> classroom, more education spending..get it? More utopian spending at
> Burt's place of work.

What a horrible thing to spend money on education.

> I do agree 90% of hams are boring and unskilled, but to get to the
> point, sharing the 2m band will lead to exclusive allocation and then
> what do you do? I will become an outlaw: guns, scanners, ham radios,
> cigarettes, etc.

Hams will never violate the law. If they had the courage to go more than
10 minutes without IDing most would pee in their pants.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=====================================================================#
```

2043. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C59B4.5040@geocities.com>
Source record: 97009
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Madd DOG! wrote:

> Its called a hobby Burt! Remember!!!!!!!!!
> Brian

It is a hobby but the silly FCC calls it a service because that is what
it is SUPPOSED to be.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2044. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5A80.944@geocities.com>
Source record: 97010
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Mark Schneider wrote:

> Hey Burt - how about a little credit where credit's due?

Ham radio defined:
Mark Schneider, WI1W said:

There's just so much more in the world to catch their
eye than a bunch of farts who try to maintain their heirarchy in a
pseudo
secret society, refusing with a vengeance to pass the baton, for fear of
the
tiniest little detail of what's theirs being changed. Even if the change
is
necessary and beneficial to the hobby.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2045. Ham radio defined CREDITED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5A2D.1404@geocities.com>
Source record: 97011
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

I used the following quote without giving credit to the author because most hams are afraid to speak out against the HOBBY. But I found a ham with GUTS!

Ham radio defined:
Mark Schneider, WI1W said:

There's just so much more in the world to catch their
eye than a bunch of farts who try to maintain their heirarchy in a
pseudo
secret society, refusing with a vengeance to pass the baton, for fear of
the
tiniest little detail of what's theirs being changed. Even if the change
is
necessary and beneficial to the hobby.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2046. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5A59.4F52@geocities.com>
Source record: 97012
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Madd DOG! wrote:

>
> Your a ham{pig meat} Burt, theres no doubt!!!!!!!!!
> Brian

Class

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2047. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C5C9E.64F9@geocities.com>
Source record: 97013
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

tim_hynde wrote:
>
> The part that takes guts is to promote this hobby of ours in a positive
> way,
> bitching and moaning about how bad things are takes NO GUTS AT ALL and
> that's
> all I've ever seen from your posts. Nothing positive, no creative ideas
> just good
> ole belly achin.
>
> Do you have guts Burt?

It takes guts to kiss ass?
Thatr is what hams are experts at.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2048. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5ehnte$d7j$1@tilde.csc.ti.com>
Source record: 97014
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

header edited

2049. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Bill WD2AEV <bkantz@monmouth.com>
Message-ID: <330C6682.5C47@monmouth.com>
Source record: 97015
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Bravo

2050. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: smd@ma.ultranet.com
Message-ID: <5ehoulcjd1@decius.ultra.net>
Source record: 97016
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:

>AL7OQ wrote:

>> Ask FEMA (Federal Emergency Management Agency), who has opposed the
>> Little LEOS proposal on the ground that hams provide invaluable
>> emergency communications services on 2 meters.
>>
>> Burt: be honest! Why are you supporting this industry band grab?

>Because I am public service minded person.

I'm glad you said this Burt. The Boston Marathon will be running
on April 21st. We will need additional volunteers. I will be part
of a group using APRS software to keep track of emergency
vehicles. I believe this is a school holiday, so you should be free.

Since you are a teacher of electronics, you should be able to
throw together a tracker if you want to help even more. Simply
interface a GPS unit supplying an NMEA sentence to a TNC
of your choice. Transmit on 145.79 (you can use that 2M
equipment in your closet) . The Shareware is downloadable
from various web sites.

If you don't have, or can't build, a GPS unit, just keep the
serial interface of the TNC free and we can program it with
a laptop.

Maybe we can even put your moped to work!

Anyway, Thanks for volunteering!
73,

Steve

smd@ma.ultranet.com

2051. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330C6E46.3C9@geocities.com>
Source record: 97017
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve D'Amelio wrote:

> >Because I am public service minded person.
>
> I'm glad you said this Burt. The Boston Marathon will be running
> on April 21st. We will need additional volunteers. I will be part
> of a group using APRS software to keep track of emergency
> vehicles. I believe this is a school holiday, so you should be free.

I have heard races covered by ham radio. CBers do better.
Hams are horribly inefficent blabber mouths but I bet your group in
the Boston area actually does a lot of good.

> Maybe we can even put your moped to work!

Now that I would be interested in.

```
#================#=========================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=========================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=================================================================#
```

2052. Re: Frequency Reference...Help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <nEiClGATpFDzEwZV@ddwyer.demon.co.uk>
Source record: 97018

In article <19970219151300.KAA12062@ladder01.news.aol.com>, RWHam
<rwham@aol.com> writes
>I'm looking for pointers from anyone that has gone through the exercise of
>building a WWVB locked local reference.
I use an off air standard (198kHz)in the UK.
Though the long term is good the short term variation is seldom better
than 0.03ppm because of the path induced jitter.
To overcome this your pll must have a time constant of some minutes ,
this still does not overcome the diurnal variations which can be
greater. The best off air standards (Tracor?) used to have very long
time constants.
Which ever way you go I may be able to help;
Ive got some SC cut Frequency References I bought cheaply : 16.384MHz
(binary devides to 1,2,4,8 kHz etc.) OCXOs that pull +-1ppm
electrically and are good to 0.0001 per second and 0.003 per year
typically. Can supply calibrated to 0.1ppm $90 in postage.
Email me for detailed specs and ssb noise plot.

Regards
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

2053. Radio Shack HTX-212

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: mstriani@www.cidef.COM.AR
Message-ID: <c=US%a=_%p=CIDEF_ARGENTINA_%l=MAIL-CIDEF-970220153539Z-743@www.cidef.com.ar>
Source record: 97019

This message is in MIME format. Since your mail reader does not understand
this format, some or all of this message may not be legible.

------ =_NextPart_000_01BC1F2D.B16C85C0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi:
I was wondering if someone has information to release the transmit
frecuency of the HTX-212 ham radio, I asked around but no one knew
nothing, because here in Argentina there is no oficial dealer of Radio
Shack. Please send me an answer. Thanks in advance
Mariano Striani
mstriani@www.cidef.com.ar

Mariano A. Striani ;-)
mstriani@www.cidef.com.ar

------ =_NextPart_000_01BC1F2D.B16C85C0
Content-Type: application/ms-tnef
Content-Transfer-Encoding: base64

<encoded_portion_removed>
PgAAALA/

------ =_NextPart_000_01BC1F2D.B16C85C0--

2054. Re: Frequency Reference...Help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: "Duane C. Johnson" <redrok@pclink.com>
Message-ID: <330C946F.3A41@pclink.com>
Source record: 97020

RWHam wrote:
>
> I'm looking for pointers from anyone that has gone through the exercise of
> building a WWVB locked local reference. I would like to get around the
> continual recalibration of my counter's internal reference. To accomplish
> this I plan to phase lock another (external) reference to WWVB (off the
> air) with the hope that I would be able to achieve an error no greater
> than 0.05 to 0.1ppm (my external reference is quite capable of holding to
> better than this for some period). I'm using the counter for frequency
> determination on 2.3GHz today, and plan to move up to higher bands soon.
>
> Any schematics, pointers, or other suggestions based on actual experience
> in locking to an off the air reference would be appreciated.
>
> Thanks
> Robert K4MRW
> RWHam@aol.com

I have used a small 60KHz amplifier that I have used for calibration.
Here is the full text I have sent to many people. This amplifier was
designed very conservativly. You probably will need an LCR meter to
measure the inductances of the tank toroids.

Have fun.

==========

CALIBRATION SYSTEM USING WWVB AS A TIMING REFERENCE 961106
Print in a plain fixed character width format. Try "Courior New" font.

I have built and used several pieces of test equipment for the calibration of
timing instruments. I have several hobbies including amateur radio,
electronics, astronomy, and of course horology. These all have a common need
for highly accurate timing. I built a specialized receiver to serve as an
absolutely accurate reference for calibrating instruments in each of these
disciplines.

One of my requirements was for a calibration system capable of absolute
accuracy greater than 1 part in 10^9. WWVB is a time keeping transmitter run
by NIST in Fort Collins Colorado. It transmits a partially modulated 60KHz
carrier. At this frequency the radio waves travel parallel to the ground.
These are called ground waves.

NIST also broadcasts short-wave time signals but they are not as useful for
high accuracy timing as the path taken by the radio waves as they refract from
the ionosphere at varying altitudes. This has the effect of making the signals

appear to vary in frequency a small amount over the shirt term.

Another even lower frequency transmitter, 10.2KHz, is the Omega long range navigation beacon at LaMour North Dakota. This station shares this frequency and is coordinated with 8 other Omega transmitters in the world. LaMour is on for 1 seconds out of a cycle of 10 seconds. Each of the 7 other world Omega stations uses 10.2KHz in sequence but is on for .75 sec to distinguish the stations.

Another low frequency reference is the LORAN navigation beacons. These have an advantage because they transmit at 100 to 150KWatt. This is the strongest of the transmitting references. The disadvantage is that all Loran transmitters, there several hundred in the world, use the same frequency, 100KHz precisely, and transmit narrow pulses with varying repetition rates.

Of the several references available clearly WWVB is the best for its simplicity of operation with continuous carrier transmissions. I understand that the accuracy is 1 part in 10^11 at the transmitting site. The short term day to day accuracy is generally 5 parts in 10^12 day to day. This will degrade by a number of factors. As the wave travels over wet, conductive earth or water the curved path length changes because the wave travels at lower altitudes. Humid vs. dry or hot vs. cold atmospheric conditions change the propagation velocity of the wave through the air. All these things and others cause the accuracy at your site to be less that at the transmitter site. I think that all things being equal 1 part in 10^9 is a good worst case estimate of the accuracy throughout North America and it in all probability will be much better. Accuracy should be good for better than 3 parts in 10^8 throughout the world. These accuracy's are for the short term, time scales in the range of minutes to days. The long term accuracy can approach that at the transmitter but this requires specialized integration techniques beyond that in this monograph.

Another more important degradation in system accuracy is the interference due to noise at the voltage comparator. Even though the comparator output is divided by 60,000 to get 1 second pulses the edge of the pulse is determined by the zero crossing point on the incoming wave. If noise interferes with this level then there will be jitter in the sync point on the oscilloscope. Visually one can integrate many traces to average out the noise. A phase locked loop, PLL, can be used at the output of the comparator to integrate the zero crossing point jitter. These can be as simple as a CMOS CD-4046 PLL or as complicated as steering a high stability 10MHz HP reference oscillator.

I will describe a useful Tuned RF Amplifier, TRF, and associated circuitry for a quick calibration of almost any type of clock. All components have been optimized for 60KHz with a 50Ohm input and output. Internal impedance has been set to 5300Ohms as a good compromise for the 100pF variable capacitors and other frequency determining components. The Q was set to 25 for a bandwidth of about 2400Hz. The Q also sets the voltage gain of each stage at about 14db. The circuit should be constructed using good HF/VHF techniques as the transistors used can oscillate in the hundreds of MHz range.

A good construction method is to use a blank PC board for the base. Walls, made of brass shim stock, are soldered around the different stages. Holes in the separation walls bring signals through. The shields prevent self oscillation due to unwanted coupling between sections.

Since the transformers are wound with many turns of wire and the gains are high microphonics may happen. This can be eliminated by hotmelt glue on the transformers and windings after completion of construction and testing.

The transformers are all of the toroid type. I don't have a part number for the ones I used as they came from my junk box but I will describe how to choose them yourself from your junk box. This is an interesting electronic exercise by itself.

The LC circuits needed to have components that were reasonable parts with values that would be both stable and easily obtained. If I made the LC circuits operate at 50Ohms the values, L=1.57H & C=.062uF, got out of hand in size. I then, as a compromise, chose to make the LC circuits out of toroid transformers. Transformers have the advantage of allowing me, through impedance transformation, to adjust the inductance by the number of turns ratio used.

I wanted to use small 100pF variable capacitors of the type used in FM transistor radios. They are small, inexpensive, and stable. To give a 10% tuning range I paralleled the 100pF variable with 500pF mica capacitors. At near midrange this was 556pF in parallel with 95 turns on my toroid which was 12.66mH. I was happy with the combination. You will have to find the correct number of turns on your toroid for a similar match. I suggest that you use the same capacitor values, though, as this type is very inexpensive or free if taken from old radios. Since the impedance of the LC components is, 4771Ohms each and I want to match to 50Ohm I chose 10 turns on my input/output transformer windings. If 75Ohm match is desired the impedance would be 190uH and use 14 turns in my case.

A note about toroid transformers. Turns are counted by the integer number of times the wire passes through the toroid center hole. This means that there can't be any fractional values as a wire either passes through or it doesn't. It is more important to get the LC values correct than to get the input/output impedance's to match. This is just one of many compromises that have to be made when designing electronic circuits.

When testing your toroids a useful parameter is micro Henrys per turns square, uH/turns^2. The inductance of a toroid is dependent on the square of the turns. I usually measure a toroid with 10 turns of wire. This value is then divided by 100. This is the uH/turns^2 value. Use this value to determine the number of turns needed for any inductance. I often use 25 or 100 turns when the toroid is small as my inductance meter is not sensitive enough to measure the single turn value accurately.

There are various chokes in the circuit to prevent unwanted coupling and oscillations. The values of the chokes and associated capacitors have been optimized for 60KHz at a Q of 1. They are not very critical and the values can be within 50% of the ones specified.

This circuit can be used to receive the 10.2KHz Omega navigation broadcasts. Make another amplifier with the tuning capacitors at 1200pF in parallel with a 365pF AM transistor radio variable capacitor. Increase the transformer inductance to 307uH at the 50Ohm nodes and 30.7uH on the internal transformer nodes. The chokes should be increased to about 6.8mH. In my example I used 230 turns and 23 turns on my toroids.

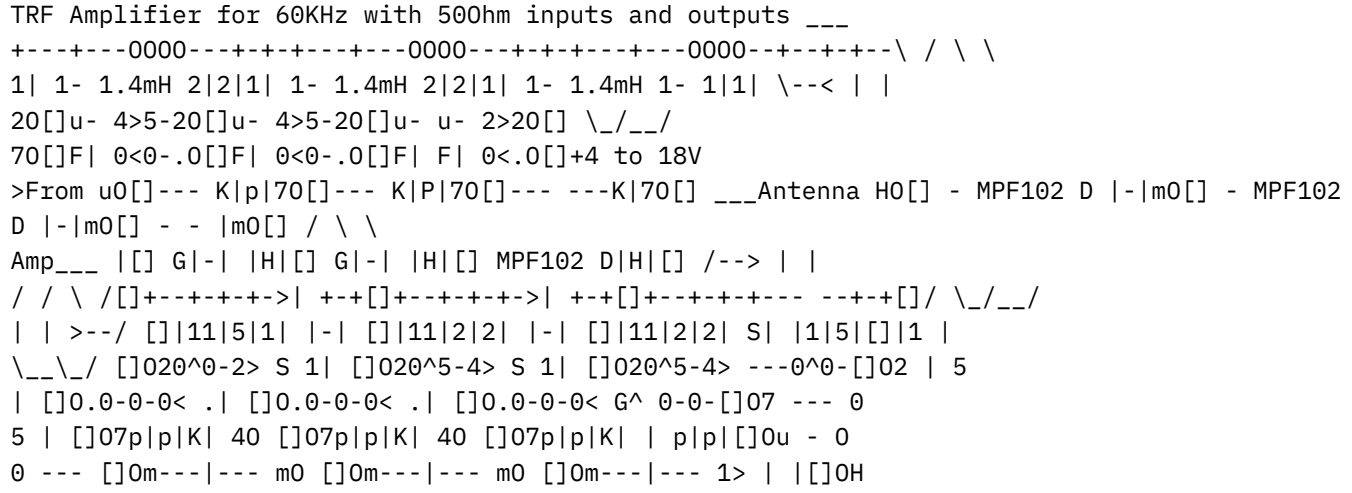
This amplifier supplies DC power to the input coax connection. This power is used to run the amplifier at the antenna without any extra power wiring.

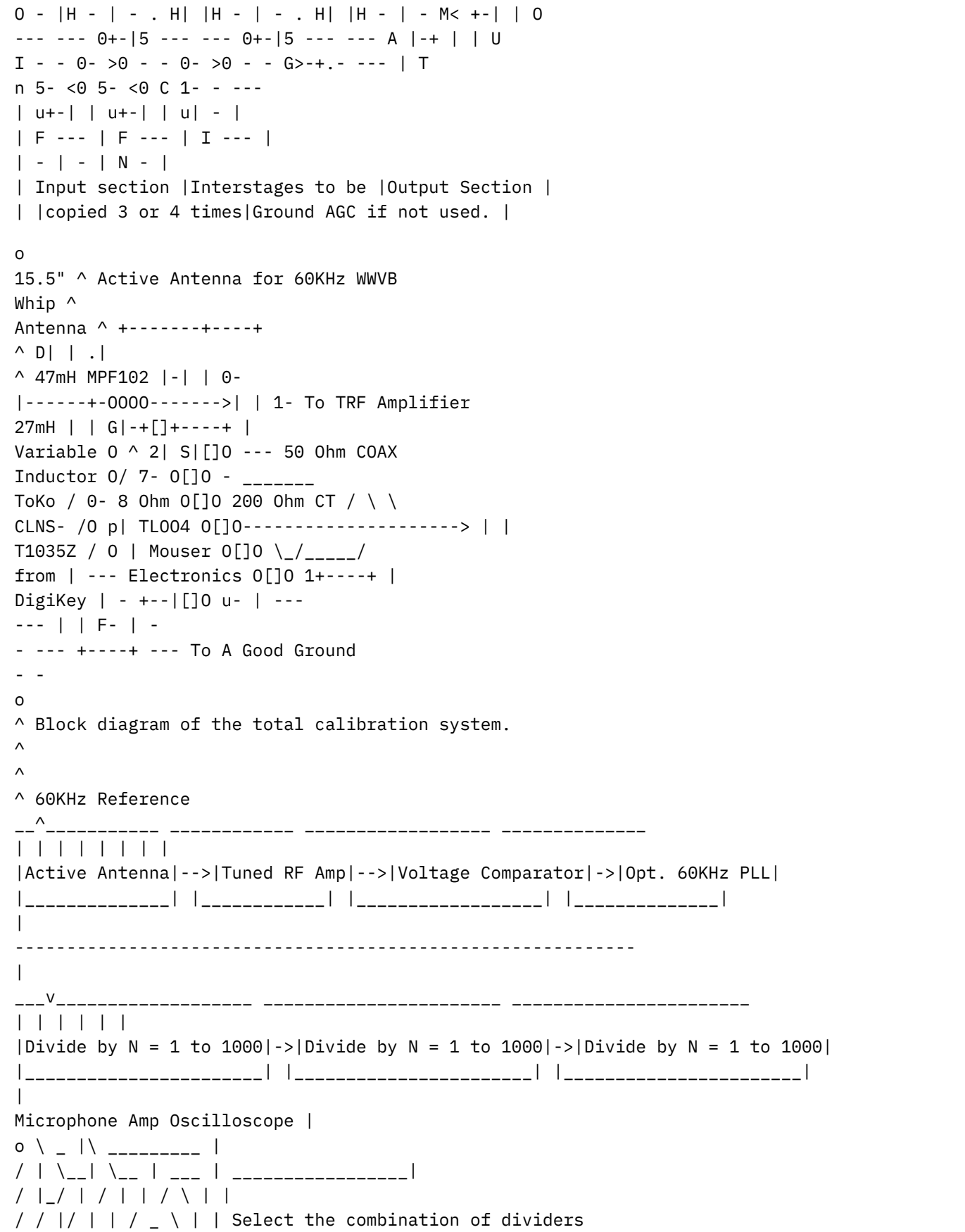
The active antenna circuit is constructed in a waterproof box with the whip antenna attached to the top. The best location for this antenna is on the roof or up a tower. The higher the better. I have use the antenna when placed on a table in the back yard. Try to put it on the side of the house with a clear path toward Colorado. Try to have the antenna outside as noise from electronic devices in the house may cause interference. Of course the lower the antenna the less signal there is to receive. 50Ohm coax cable connects the active antenna to the amplifier. This shielded cable will pickup less noise than an open wire.

The active antenna needs to be grounded for best performance. A good ground rod that is used for antennas only is best. Use #10 gauge stranded or better and remove the sheathing. Slightly untwist the strands and let them weather or tarnish. This weathering can be speeded up by wiping livers of sulfer on the copper. This chemical can be obtained at hobby shops for blackening copper art work. This forms a poor mans "Litz" wire. The multiple insulated strands have lower skin resistance and self inductance than solid wire, especially at these frequencies.

You can try connecting a long wire antenna, about 75 feet in my case, directly to the TRF amplifier through the coax. This works quite well when space is available. The longer the better in fact. The antenna counterpoise needs to be grounded where it enters the coax. The shield of the coax is grounded at this point.

Power for the system can be supplied by a wall mounted DC power supply. Anything up to about 18 volts will work. I used a duel output unit that supplied 12VDC to the amplifier and 5VDC for the logic circuits.




Input section
Interstages to be copied 3 or 4 times
Output Section
Ground AGC if not used.
15.5" Whip Antenna
Active Antenna for 60KHz WWVB
47mH
MPF102
27mH
Variable Inductor
ToKo T1035Z
200 Ohm CT
50 Ohm COAX
Mouser Electronics
DigiKey
To A Good Ground
Block diagram of the total calibration system.
60KHz Reference
Active Antenna
Tuned RF Amp
Voltage Comparator
Opt. 60KHz PLL
Divide by N = 1 to 1000
Divide by N = 1 to 1000
Divide by N = 1 to 1000
Microphone Amp Oscilloscope
Select the combination of dividers

O | || _/ _|| | that outputs a trigger rate that
Pendulum. | ||\/ || | matches the escapement rate. This
| | \ / | | is used to trigger the oscilloscope.
The microphone can be | | ___/ | |
placed near where the | | | | Use the delayed trigger/xpanded
sound is formed. The | | X T | | scale function on the scope to get
closer to the escape- | | R | | the trace to be centered on the
ment the better. +-->| I I |<--+ screen.
| N G |
Use a ceramic phono- |_________| The triggers repeat with exceptional
graph cartridge and accuracy. If there is any movement
contact the frame near in the trace calculate the error in
the escapement. This the escapement repetition rate in
is the best method as micro seconds/second.
the sound travels only
through metal.

A method I have used for electronic watches and clocks is to connect a small capacitor to the battery. There are small electrical noise spikes that occur when time counters operate. Usually the spikes associated with whole seconds counting are the strongest. Watch them move on the trace to measure the drift rate and calculate the error. This method is particularly useful in adjusting electronic crystals as each adjustment can be observed immediately. When there is no drift there is no error within the tolerances of the system.

```
| | | | | | -|<-
-^v- | -||- | -|>- | -OOOO- | | --+ +-- | S| |D |
| | | | | | O[]O | --- | ->|-
| | | | | O ^ | O[]O CT | ^G |
| | | | | | O | O/ | O[]O--- | | D |
> | - | ^ | O | / | O[]O | |-| | | |
< | - | - | O | /O | O[]O | --->| | v -
| | | | | | O | / O | | | | G |-| | - ^
| | | | | | | --+ +--- | S| | | |
| | | | | | |
Resister|Capacitor|Var. Cap.|Inductor|Var. Ind.|Transformer|Transistor|Diodes
| | | | | | |
```

This method of sending schematics in text form works but can be cryptic. I usually print them then using highlighting pens. I mark the components and traces with different colors. The circuits become easier to recognize. I then redraw the schematics to make them clearer. I still retain the printed version in case of a copying error.

I prefer correspondence through the internet email but I can be reached through snail mail also.

Hi Bryan;
Bryan Mumford wrote:
> Duane;
> Some months ago we corresponded about measuring clock pendlums. My interest
> was in making a device to measure "tick" intervals. Since then I've become

> interested in building electromechanical clocks. I believe you said you had
> a pendulum that was impulsed by an electromagnet once per second. Is this
> true? May I ask you a couple of questions about your arrangement?

I don't have a single pendulum. I just use any of several clocks I have around the house.

I have used my system to calibrate and measure my different pendulums.

I have been interested in regulating my local time using the precision radio time reference, WWVB, at 60KHz. In my earlier posts I described my 60KHz filter/amplifier/antenna. With this a stable 60KHz reference local oscillator is adjusted. This stable reference oscillator is used to transfer frequency to a second portable reference crystal oscilator that I use to calibrate my pendulums. This second oscillator can maintaine it's output for a day or so.

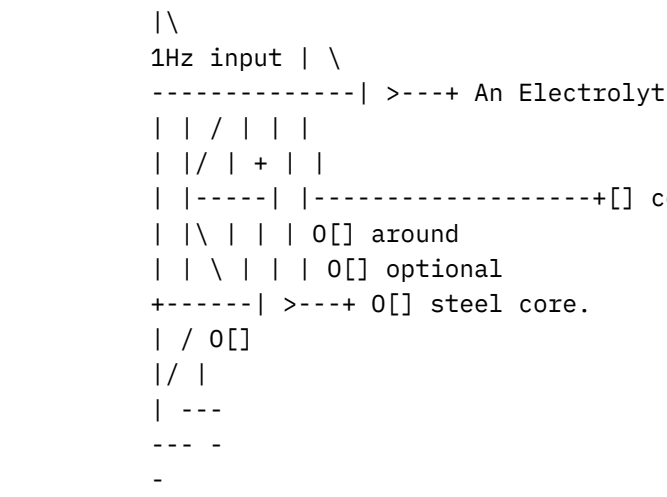
I have diseminated this as an ASCII schematic. This schematic is not easy to read. You need to print it in, plain jane, constant character width format.

Now that I have a local reference it is easy to divide down to a frequency that matches the pendulum I wanted to synchronize. I have an anniversary clock with a 15 sec period. I also have a wall clock with 1 sec period.

The simplest way to synchronize any pendulum is to give it a little kick once per cycle. The simplest may is to have a small electromagnetic or coil close to something magnetic, read steel, on the pendulum. The little kicks induced by the coil will add or subtract movement to the pendulum.

Assuming that you have already got the reference frequency divided down to the frequency of your pendulum.

Several CMOS buffers in parallel



There are a variety of ways to use this driver. If the input is a short pulse then the coil can be placed almost anywhere near the pendulum arc. I usually prefer the bottom of the arc as the pendulum is moving fastest there. This is where the coil can have the most influence in advancing or retarding the movement.

If it is a square wave the frequency should be 1/2 that of the pendulum. Since the coil will be energized only when there is a transition in the input wave and you get 2 of these for each square wave period the frequency needs to be 1/2.

I have also regulated quarts clocks. I have only done this experimentally with some cheap quartz clocks. You know the ones that are all plastic. These clocks have a 32768Hz quartz crystal. I then apply a pulse to the battery terminals. This pulse is about 1uS wide with about 20nS risetime through a capacitor of about 50pF and repeated once per second. This gives the electronics a small kick just as with the pendulum. I think the power needed to synchronize is very small. If you pulse to hard the clock counters skip and the clock runs erotically. Just right and it works like a charm.

==========

--
\ \ RED \ ROCK \ \ ENERGY(R) \ Solar
CUL8ER \ \ \ \ \ \ \ Thermal
\ \ \ \ \ \ \ Receiver
Stupid is Forever. \ Light\From the Sun \ [*]
Ignorance can\be Fixed. \ \ \ \ /////|
\ \ \ \ \ \ / / / / //|
Ziggy \ \ \ \ \ / \/ / /\ / |
WA0VBE \ \ \ /\ / / / / / |
Designer \ \ / / \ / \/ / \ |
\ \/ / /\ \ / \ / /\ |
Duane C. Johnson ===\ / \ / \ === \ / ===
Red Rock Energy === === \ === /
1825 Florence St. Heliostat Mirror Control & Mounts
White Bear Lake, Minnesota \ (C) 97/01 25
USA 55110-3364 \
(612)635-5065 work \ /
(612)426-4766 home \
redrok@pclink.com (my email address:) \ /
dcj2@PO8.RV.unisys.com ===
http://www.geocities.com/SiliconValley/3027/
These are my opinions and not that of Unisys.

2055. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb20.163529.9456@ke4zv.atl.ga.us>
Source record: 97021
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <3309c583.501806@news.monad.net> bbeford@cyberportal.net (Bruce Beford) writes:
>On Sun, 16 Feb 1997 22:00:09 -0500, Burt Fisher
><burtfisher@geocities.com> wrote:
>>snip<
>> The League's objective is to falsely demonstrate there is
>>broad citizen opposition to the industry proposals.
>
>Wrong here. If the League alerts its members to a threat to the
>amateur band allocations, and the membership (and Amateur community at
>large) agrees, it is by no means a "false" demonstration. It
>demonstrates that there is, in fact, STRONG, BROAD opposition to the
>sharing of these band segments with other sevices, as NO method of
>sharing has been proposed that would not severely interefere with
>existing services here, especially to the amateur satellite service. I
>encourage all those amateurs (who have not already done so) to file
>their comments OPPOSING the sharing of these band segments with other
>services.

I don't agree with Burt's position, Bruce, but I haven't seen any engineering study which would indicate that the SS signals of the LEOs would adversely impact amateur operations. Frankly, I think their signals would have negligible impact on most amateur operations, including most amateur satellite operations. There might be some impact on traditional EME operations due to the slightly raised noise floor, but that's a very tiny part of amateur activity on these bands.

The real problem is the other way, with the relatively high power narrowband amateur operations causing interference to the LEO's terrestrial users. Due to the near-far effect, nearby amateur operators would overwhelm the SS coding gain and cause interference to the receivers of terrestrial users of the LEO services. That's where the danger to amateur radio lies in this proposal.

Once they have the camel's nose in the tent, and have established an economic interest in the spectrum with a large user base, the interference to their operations by amateurs would serve as an excuse for them to go back and request exclusive access to the spectrum, IE kick the amateurs out.

Of course if amateurs also adopted SS systems, and practiced proper power control (required by amateur regulations, but ignored in amateur practice), there would be negligible interference in either direction. But amateurs appear unlikely to do that voluntarily, so conflict would

be inevitable. And amateurs don't wield either the economic or political power to prevail in such a conflict.

We may win this time, and I've dutifully filed comments supporting amateur radio, but ultimately we can't continue to warehouse spectrum. The pressure to effectively utilize the spectrum will continue to mount, and unless *we* start using it effectively, others ultimately will.

This is deadly serious. The FCC has made it very plain that they will no longer condone warehousing of spectrum. They are in the process of forcing broadcast to give up the spectrum it has warehoused. Congress has mandated that warehoused military spectrum be released. And that leaves amateur radio as the only major warehouser of spectrum left untouched. That can't last long.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

2056. FS: isolation transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: galcala@ix.netcom.com
Message-ID: <5ehviq$9a2@dfw-ixnews4.ix.netcom.com>
Source record: 97022

Surplus (new) isolation transformers for sale. These are 500VA units rated for 120V, 60Hz. Units are American made.

$50/each plus freight from Texas.

galcala@ix.netcom.com

2057. Re: Mobile HF - Noise from the Car Air-conditoner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5ei0hv$1r2@sf18.dseg.ti.com>
Source record: 97023

Here are a few suggestions:

Install a bypass capacitor from the positive lead of the air conditioner
fan motor to ground. Install it as close as you can to the motor itself.

Make sure the fan motor has a good ground, perhaps installing a bonding
strap from the motor case to the car body.

Run both the positive and negative leads of your transceiver's power cord
directly to the battery. Do not use the car body for your transceiver's
ground connection, and do not route the positive wire through the fuse
panel or cigar lighter circuits.

Make sure the transceiver's chassis is grounded to the car body.

Good luck and 73!
Dean K5DH

In article <33055BAD.6C4E@ppp.nasionet.net>, jamel95@ppp.nasionet.net says...
>
>I need some help to solve the problem of noise from the car
>air-conditioner when operating mobile.
> All the fun of operatinf on mobile is being spoilt the moment the
>car airconditoner is switched on.
>
>I have tried many commercially available noise suppresion kits
>connected between the battery and the rig but with no success.
>
>Anyone can help please email me at email: jamel95@ppp.nasionet.net
>
>Many thanx in anticipation,
>
>de 9M2JP
>
>jamel
>

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)

Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

2058. Hi there. DE KB2HKR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: 666...@worldnet.ATt.NET
Message-ID: <330C9758.7B80@worldnet.att.net>
Source record: 97024

Hi all you Hams out there,

Well Every Sunday Mornings @ 10:00 am There is a

HF Net. On 28.3570 USB All are welcome to join us.

Scott Caden Ream

666...@worldnet.att.net

My E-Mail address is going to change as of May 1st of 97

I am changing my E-Mail address to:

666@worldnet.att.net

73 DE KB2HKR

2059. Question about Henry UHF amp-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.d765023378fbbb3989695@news.infoave.net>
Source record: 97025

I was given a Henry solid-state brick C40D02 UHF amplifier tuned to 468.560 MHz.

1. Anybody have a schematic on it?

2. How difficult would it be to modify it for use on ATV (439MHz)?

Thanks, Web Williams- KR4WM

2060. could u help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: FP <patalong.roki@edina.xnc.com>
Message-ID: <330D16E3.71ED@edina.xnc.com>
Source record: 97026

hi out there!
i=B4m writing a PHD-thesis about news-flow from public-realtion-sources =

through radio. part of it a comparison of the different radio-scenes in =

differnt countries. who could help me to information about the =

radio-scene in his or her country?
my questions:
what is =84the radio=93 like in your country? music-dominated? how much =

information do you get, and about what? culture, politics, economy? =

foreign news? news and infos about foreign companies?
is =84your=93 radio-scene predominantly commercial, state-controlled, publi=
c?
do you think, that radio-stations use public-relations-material a lot?
do you think, they use ready made programs that come, for instance, from =

big compnies?
do you think the people in your country would be interested in things =

like that: industry-public-relations, government-pr and so on?
it would be great to hear from you: let=B4s talk! my email-adress: =

frank.patalong@edina.xnc.com
thanks, frank

2061. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ei5nmkmi3@nadine.teleport.com>
Source record: 97027
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

I really hate to see this stuff spilling out of its normal bucket, rec.radio.amateur.misc. Please take a look at the list of newsgroups you're posting to before you click the "send" button and see that it's limited to the appropriate group. (I personally feel there *is* no appropriate group for this sort of childish tantrum, but most of us have abandoned rec.radio.amateur.misc to it, so please be satisfied with keeping it there.)

Thanks!

Roy Lewallen, W7EL

2062. HELP: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Siegfried Rambaum <siram@light.lightlink.com>
Message-ID: <Pine.SUN.3.95.970220133442.6259B-100000@light.lightlink.com>
Source record: 97028
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Who can identify these variable capacitors?

1 - Cardwell XG-110-XS,
spacing about 3/16 inches between rotor and stator

2 - This one does not have a manufacturer's marking that I would
interpret as a such ... maybe it has and I am just unaware of it
the modell number is NP-150-DS
The spacing between stators and rotors are 1/8 of an inch

What are their capacities and what voltage are they rated for?

Thanks for your help

73 de KB2YVC + DE8FGO, Siegfried

2063. Kenwood's HAM-WINDOWS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <330C9D29.5301@apollo.wes.army.mil>
Source record: 97029
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.digital,rec.radio.amateur.homebrew

Kenwood's Ham-Windows is the software package that does it all for your ham station. It logs, it operates your rigs, it does the digital thing, it shows you where the broadcast shortwave stations are and what time in English, It keeps the DX countries list and maps show where that country is, CIA World Database tell you all you ever wanted to know about the country your working, beam headings from YOUR qth, and on, and on, and on, etc. You need a 386 at least and 4 megs, reccomend 8 megs of ram runs under windows 3.1, and 95. 4 disks and manual, 65.00

2064. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <330ca8c2.492018@news.airmail.net>
Source record: 97030

On Thu, 20 Feb 1997 11:18:45 -0800, measures@mail.vcnet.com (R. L. Measures) wrote:
>Another one of the naysayer-guys would like to have us believe that an
>8874's comples cathode-input Z can be matched by a broadband transformer.
>Only a tank/flywheel circuit can.

Now there you got screwing with me again. I told you via usenet message--and specifically stated in my article--that this techniques was valid only when you had sufficient excess drive to allow the swamping resistor to stabilize the input impedance by absorbing a large portion of the RF drive. And I don't want you to believe it--I don't give a flying you-know-what if you believe it. It's been done. And is being done every day in hundreds of amplifiers.

I have, however, rethunk my analysis of the RF current in the control grid and find that, under the conditions stated, it is in excess of 40 Amps. That number is defensible.

Fred, W8OY
JFRILEY@AIRMAIL.NET
FREDWA8AJN@AOL.COM

2065. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb20.200601.10654@ke4zv.atl.ga.us>
Source record: 97031

In article <330b51fb.3089942@news.airmail.net> jfriley@airmail.net (J. Fred Riley) writes:
>I don't have enough pain in my life; I'm gonna jump in here.
>
>>>measures@mail.vcnet.com (R. L. Measures) writes:
>>>> >When 2651V-rms is applied to capacitor whose reactance is 63.66
>>>> >ohms, the current is volts/ohms: 2651v/63.66 ohms = 41.63A-rms.
>
>There's nothing wrong with the math here.

Yep, the math is fine. It just doesn't describe anything that happens
in the amplifier.

>gary@ke4zv.atl.ga.us (Gary Coffman) wrote:
>>The full mesh also includes the plate tank circuit, and that's
>>about 5000 ohms
>
>I just can't agree with this statement. The tube impedance is
>dependant on the anode current. With the conditions stated (driving
>the grid until the anode voltage drops to 250V) the resonant anode
>impedance is about 2KOhms unless the tube is under-coupled. We can
>assume, arguendo, that we're loaded correctly. And assuming a modest
>tank Q, the impedance between anode and ground (the effective tuning
>reactance) is 200 Ohms. That gives a current through the grid of
>about 10 Amps. But I think that's high; more about that below.

Hold the phone. In one breath you accept a RMS plate voltage of 2651,
and in the next state it is 250. Which is it? It can't very well
be both at the same time. If the voltage is 2651, and we neglect the
other impedances in the current mesh, we get Measures' number for
grid current. But if it is 250, and we continue to neglect the other
impedances in the mesh, we only get a grid current of 250/63.66 = 3.92
amps. That's much less than Measures' value even neglecting other
impedances in the mesh.

The tube's plate impedance is the slope of the load line. That's

1) Zl = (E2-E1)/(I2-I1)

Where Zl is plate load impedance, and E1,I1 and E2,I2 represent
two points on the loadline. Another way to state plate load impedance
is

2) Zl = (Eac)^2/Po

Where Eac is the RMS AC voltage at the anode, and Po is the power output
of the stage. If we accept the Eac value supplied by Measures, and assume
a legal limit output power, we get a value for Zl of 4,685. For the sake of

illustration, rounding that to 5,000 should be perfectly fine.

As a sanity check, an approximation of plate load impedance is given by

3 Zl = (Ehv)^2/(2*Po)

Where Ehv is the power supply DC voltage. In Measures' strawman case, that was stated to be 4,000 VDC, so Zl = 5,333 ohms. Again that will round to 5,000 ohms for sake of illustration.

>>and the chassis return to the grid contact,
>>hopefully a very low impedance, but perhaps as much as a few
>>hundred ohms at VHF.
>
>Here's why I don't agree with that statement. If the grid contact
>impedance were at all significant, a voltage would be impressed on the
>grid opposite to the grid-to-cathode voltage. The net effect would be
>to lower the gain of the tube. Looking at tube gain at HF and VHF, I
>find the gain drops from 15 db to 14 db. I conclude that the
>reactance of the grid connection is very low.

Ok, the impedance from the chassis side of the tank back across the chassis to the grid contact behaves as a transmission line. At 250 MHz, that distance can represent a fair portion of a quarterwave (depending on layout) and will show a fair impedance. It won't be high because the "line" is wide, but it could reach a few hundred ohms in a loosely laid out amp (assume for example a stripline tank). Now that's only significant in relation to stage power gain when compared to the plate load impedance, which is at least an order of magnitude greater in this case, so we don't have to be too concerned about it. It will still allow a gain of 10 to 20 for the amplifier. But it is significant compared to the Xc of the grid-plate capacitance, and must be included in any calculation of grid-plate AC mesh currents.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

2066. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2002971212450001@news.vcnet.com>
Source record: 97032

In article <330b9d1f.1092801@netnews.worldnet.att.net>,
jfriley@worldnet.att.net (J. Fred Riley) wrote:

> On Wed, 19 Feb 1997 03:43:34 -0800, measures@mail.vcnet.com (R. L.
> Measures) wrote:

...snip...
> snip... Let me just
> say again that this is not the exact value. But it's very close: 8
> Watts.

Agreed. Does it seem likely that 8 watts is going to melt and boil the
gold plating off of a (8877) grid whose surface area amounts to over 2000
square millimeters?

...snip...
> No matter what you think, these guys aren't kidding you. They are
> serious investigators who have their reputations riding on their
> designs.

RE: The naysayer-'guys':
One of the naysayer "guys' has a reputation for not understanding algebra
and appears to be curiously-uncomfortable with scientific notation. He
rejects AC Circuit-Analysis out-of -hand whenever the results cast doubt on
one of his utterances. I believe that he has been kidding himself ever
since he quietly cancelled his article of 28 Nov. In that article, he
experimentally added a few ohms of ESR to Ls. The calculated result was a
small reduction in VHF Q---as expected---and an UNEXPECTED,
substantive-reduction in VHF Rp. ..... Oops ..... Since voltage
amplification is basically Mu*Rp, less VHF-Rp in the anode resonant circuit
means less VHF voltage amplification---which is hardly good news for those
trying to build a VHF oscillator or for those trying to defend
silver-plated VHF "suppressors".. In December, 1996, Wes' (N7WS)
scientific measurements confirmed that making Ls out of resistance-wire
decreases Rp. Thus, Mr. F. E. Handy was proven right 70 years after he
wrote about VHF suppression in the 1926 Edition of *The Radio Amateur's
Handbook*.
(Note: *The Radio Amateur's Handbook* is history. It has been replaced by
The ARRL Handbook for Radio Amateurs).

Another one of the naysayer-guys would like to have us believe that an
8874's complex cathode-input Z can be matched by a broadband transformer.
What does Eimac say about the input circuit for the 8873/8874/8875? On
page 6 of their Technical Data, Eimac says:
"When any of these types is operated as a grounded-grid RF linear
amplifier, the use of a resonant tank in the cathode is recommended in

order to obtain the greatest linearity and power output. For best results with a single-ended amplifier it is suggested that the cathode tank circuit operate with a "Q" of five or more."
The scientific reason for the need of an input tank circuit is: the driving impedance fluctuates from under 30 ohms to many thousands of ohms during the driving voltage cycle. However, broadband transformers can't handle this sort of load satisfactorily. A tank/flywheel circuit can.

On page 13.13 of 1995/6/7 editions of *The ARRL Handbook for Radio Amateurs*, one of the naysayer-guys said:

"A significant portion of circulating tank current therefore flows through the blocking capacitor. As a conservative and very rough rule of thumb, the maximum RF current in the blocking capacitor at 28MHz is Ic-block = Ip + 0.15*Cout*Vdc, where Ic-block = maximum RMS current through the blocking capacitor, in A. Cout = output capacitance of the output tubes, in pF. Vdc = dc plate {anode) voltage, in kV. Ip = dc plate current at full output, in A. "

The problem with the formula "Ic-block = Ip + 0.15*Cout*Vdc" is that it is algebraicly indeterminate. It could be taken as Ic-block = (Ip + 0.15)*Cout*Vdc, or it could be taken as Ic-block = Ip + (0.15*Cout*Vdc). Given: An 8877 (Cout=11.2pF max.) operating on 28MHz from 4kV at 1A. Calculating the maximum current in the DC blocking capacitor, Ic-block = 51.52A by one formula and Ic-block = 7.72A by the other formula. Which answer is right? Apparently, neither. I calculated the current through the DC blocking capacitor as approximately 2600v/507 ohms = 5.13a RMS. Apparently, we should not expect our "recognized amplifier experts" to be algebraically-literate or to understand AC Circuit-Analysis.
Why has the ARRL allowed this blunder to appear in 3 issues of the ARRL Handbook?

It seems to me that this discussion has been more about hubris, denial, sycophancy, and psychohistory than about science.
On the 'good source of amplifier tips' thread, science which refutes technoblather has been touted as "bad science"---and science that props up technoblather has been touted as "good science".
Which side of this discussion has largely ignored Wes' scientific measurements?

IMO, The "serious investigators who have their reputations riding on their designs" are most serious about defending their reptutations.
In the David Frost/Richard M. Nixon interview which took place shortly before Nixon's death, Frost tried to get Nixon to admit that he (Nixon) ordered the Watergate-breakin. ....However, Nixon chose to defend his reputation to THE END.

....."These guys" are not kidding me. They apparently are kidding themselves. .....

--
--Rich-- ag6k, 805-386-3734

2067. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: smd@ma.ultranet.com
Message-ID: <5eied3$9o2$1@decius.ultra.net>
Source record: 97033
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:

>Steve D'Amelio wrote:

>> >Because I am public service minded person.
>>
>> I'm glad you said this Burt. The Boston Marathon will be running
>> on April 21st. We will need additional volunteers. I will be part
>> of a group using APRS software to keep track of emergency
>> vehicles. I believe this is a school holiday, so you should be free.

>I have heard races covered by ham radio. CBers do better.
>Hams are horribly inefficent blabber mouths but I bet your group in
>the Boston area actually does a lot of good.

Even Better Burt! Since APRS is digital (but you knew that) you need
not hear any of that horribly inefficent blabber. Just objects on a computer
screen.

BTW, As a former police dispatcher and PO (I even worked in Yarmouth,
hey, maybe I arrested you!) I understand your comments about communication.
But it's easy to critisize from the armchair, isn't it? I have been in radio
communication situations in which life depended upon good skills. Since
a lot of that experience was on the Cape, maybe it was a life of someone you
knew. I don't take this stuff lightly.

I still have a cottage in Dennisport BTW (off Old Wharf Rd.) I even have a
weather station there you could monitor if you were on APRS.

Steve

>
>> Maybe we can even put your moped to work!

>Now that I would be interested in.

>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

2068. Re: Voltage regulator (7808) question. CAUTION CAUTION

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: miker <Nospam.mreiney@hevanet.com>
Message-ID: <330CCA86.5785@hevanet.com>
Source record: 97034

Use extreme caution. Many laptop chargers have charge control circuitry
in the wall brick. If you just stick 8V +/- 5% with arbitrary current
limit to your laptop, you may explode the battery or some other
internal circuitry. I speak from experience.....
miker

woody white wrote:
>
> I wouldn't try paralleling...
> Email me for address, send SASE (actually a small box :-), I will return
> it with a 7808CK. That is the 8 volt reg in the TO-3 package and (I
> believe) is rated at 1.5 amps continuously (w/heatsinking).
> Woody
>
> larry kollar wrote:
> >
> > I have an old laptop computer that needs 8VDC, 1.5A for charging &
> > on-grid usage. The AC adapter that came with it works IK, but I
> > was considering building a 12VDC adapter for running it in the car
> > or for emergency use.
> >
> > Checking catalogs, I didn't find any 7808s with 1.5A capacity, but
> > I have several 1/2A regulators in my junk box. Can I wire three
> > of them in parallel to get 1.5A capacity?
> >
> > Thanks in advance!
> > --
> > Larry Kollar, Dawsonville GA | *** Hatred is murder *** (1 Jn 3:15)
> > lekollar@nyx.net | http://www.nyx.net/~lekollar/
> > "So don't try to turn my head away
> > Flirtin' with disaster every day"
>
> --
> de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
> Work: Electron Microscopist/Microanalysist
> Balance: Ham radio "homebrewer", shade tree mechanic,
> '90 Nissan 240SX, wish still had my Mcycle too!
> http://www.geocities.com/capecanaveral/3722
> .

--
To reply, remove "Nospam." from the return address.

2069. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5eij1rqin1@tilde.csc.ti.com>
Source record: 97035
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

header edited

2070. Help needed with Drake TR-4

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Bill Redmond <w3ih@riolink.com>
Message-ID: <01bc1f79$f88c9d40$LocalHost@default>
Source record: 97036

I have an inop TR-4 with manual, but schematic is incorrect. V4 is a 6HS6
in my rig, but a 6EJ7 in the radio.
There are other differences also. This radio is not the C model either. Did
Drake make some changes in
the basic TR-4? H-E-L-P!

w3ih@riolink.com

2071. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5eii5r$pan@abyss.West.Sun.COM>
Source record: 97037
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <330C08EF.10BF@pacbell.net>,
William A. Wetzel <n6rky@pacbell.net> wrote:
>Gee wiz Dana!
>
>Just because you know the difference between CCITT, IEEE, IAB, etc; does
>that mean you have an IFR and work on radios for a living????
>
>Somehow I really wonder about your relevence in this discussion :)

Well, I admit that my profession is computer science and radio is
primarily a pastime for me, but that doesn't lessen my ability to
read Volume 47 of the CFR and understand the reasons for type acceptance.
I don't need to own a service monitor and get paid to tweak radios to do
that, do I?

If you're trying to bring my credibility into question, please
explain why. Was my comment about the basis of type acceptance
incorrect? Hmm?

;-)

Dana K6JQ

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

2072. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330CDDA5.4EDB@geocities.com>
Source record: 97038
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve D'Amelio wrote:
>
> Even Better Burt! Since APRS is digital (but you knew that) you need
> not hear any of that horribly inefficent blabber. Just objects on a computer
> screen.

I know very little about APRS I must admit.

> BTW, As a former police dispatcher and PO (I even worked in Yarmouth,
> hey, maybe I arrested you!) I understand your comments about communication.
> But it's easy to critisize from the armchair, isn't it? I have been in radio
> communication situations in which life depended upon good skills. Since
> a lot of that experience was on the Cape, maybe it was a life of someone you
> knew. I don't take this stuff lightly.

I have yet to be arrested. You sound like a very competent person.
Yes it is easy for me to bitch but I have paid dues over the years.
Once we could not get hams to help out at a Beach Boys concert at Otis
so my daughter, who was 8 at the time (KA1VBQ) was paired with an adult
Red Cross worker and she did fine.

> I still have a cottage in Dennisport BTW (off Old Wharf Rd.) I even have a
> weather station there you could monitor if you were on APRS.

Call me when you are here. It would be a first for a ham that does not
agree with me to say so in person.

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2073. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <330cd437.4883579@news.airmail.net>
Source record: 97039

gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>Hold the phone. In one breath you accept a RMS plate voltage of 2651,
>and in the next state it is 250.

No, No. I was looking at the grid-to-cathode voltage necessary to swing the voltage down to 250 V to get the drive power. Recollect, he said and anode voltage of 4K swinging down to 250. And I was assuming an higher power output, noted below.

>The tube's plate impedance is...4,685. For the sake of
>illustration, rounding that to 5,000 should be perfectly fine.

You're right. I calculated the impedance on the maximum power available within the tubes ratings, not the legal limit.

>Ok, the impedance from the chassis side of the tank back across the
>chassis to the grid contact behaves as a transmission line. At 250 MHz,
>that distance can represent a fair portion of a quarterwave (depending
>on layout) and will show a fair impedance. It won't be high because the
>"line" is wide, but it could reach a few hundred ohms in a loosely laid
>out amp

I'm not trying to be obtuse but I still don't agree. Here's my problem with your analysis: If the voltage on the anode, with respect to the chassis is 2600 VRMS and the grid-to-plate capacity is 10 pf, then the current is 40 Amps. I cannot view it any other way yet--although I'm trying. This nagged at me until I trudged down the hall to visit a few of the old timers, telling them of my reluctance to believe what was calculated. The unanimous opinion--right or wrong--was that the grid RF current is equal to the tank current. And that the tank must resonate out the reactance of the tubes internal capacity. If the tank resonated out the GP capacity, the circulating current in the grid is the tank circulating current plus the output current (which is fairly small here). I've tried to look at it as a series circuit and can't agree with that approach. I also don't like the fact that the operating Q appears to be 75!! That alone makes me think my approach might be wrong.

I'm an eager student. I'm willing to admit to a mistake in logic which it's pointed out. But let's just say Rich might be right, arguing by analogy. The 5CX1500B is widely used in FM broadcast service. The Suppressor Grid to Anode capacitance is about 15 pf, roughly 100 Ohms at 100 MHz. This capacity is used to shorten the 1/4 wave line that the tube has as its output tank. [Now think about that: we're presenting a shortened line section to the tube whose

inductive reactance resonates the total anode-to-ground capacity of the amplifier and gives an operating Q of 30, high--but believable.] Operated under normal conditions for 2500W output and 4350 VDC HT supply, the RMS RF voltage is about the same as the previous example: 2600 volts. If I'm approaching this correctly, the current in the suppressor (which also happens to be rated for 25 Watts) is 26 Amps. Twenty-six amps sounds all the more reasonable when you think about what happened when Eimac changed the suppressor grid contact plating from silver to nicket. Suppressor grid contact ring failure started to occur everywhere, burning the contact fingers in two. If the current were lower, that should not have happened; there just wouldn't have been enough current.

Now, the important part about the above example (at least to me) is that the 25 Watt suppressor grid had no trouble with damage caused by the RF current. This argues that the high RF current causes no significant heating of the grid structure--the arguement that I made to Rich about his 8877 example.

Gary, if I'm wrong about my analysis I'll be happy to admit my mistake. But I think I'm right which, God help us all, means Rich was right about the RF current. Not the implications of the current, just the current.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

2074. Re: TUBE HOMEBREWERS READ!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: buster <lathrop@azstarnet.com>
Message-ID: <330C95FE.772E@azstarnet.com>
Source record: 97040

Cruzn wrote:
> Brian Carling AF4K/G3XLQ wrote:
> > wa5dxp@worldnet.att.net (Jim Overstreet) whistled a happy tune like:
> > |>bry@mnsinc.com.NO_SPAM (Brian Carling AF4K/G3XLQ) wrote:
> > |>>http://www.mnsinc.com/bry/
> > I will ask my ISP about this. You are the second person (out of almost 7,000
> > callers!) who has grumbled about this so maybe there is something to it.
> > I have never found a cookie on ANY web site and don't care about them
> > myself.
> > Cookies, schmookies!
> >
> > I think Cookie-detecting is for the paranoid anyway, right guys?
> > |>Tried the site, won't go back, too many cookies to enjoy the site....
>
>
>
> What's a cookie?
> tnx,
> wb1eim

"cookie n. A handle, transaction ID, or other token of agreement between
cooperating programs. "I give him a packet, he gives
me back a cookie." The claim check you get from a dry-cleaning shop is a
perfect mundane example of a cookie; the only thing
it's useful for is to relate a later transaction to this one (so you get
the same clothes back)."

That's all I've managed to find about "cookie"??

Buster C.

2075. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: buster <lathrop@azstarnet.com>
Message-ID: <330C93A9.4B07@azstarnet.com>
Source record: 97041
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

wdr@world.std.com wrote:
>
> In article <32F8B927.F24@tntech.edu>, John Noel <jhn5012@tntech.edu> wrote:
> > I have neighbors who play loud music. Is their a way to jam their
> [newsgroups trimmed somewhat.]
[snip, trimmed more]
> With only 30W into a GE loudspeaker, mono, I got the 100W+/channel into
> Cerwin-Vega's rock&roller to close his balcony slider...
> Album was "Controversy of Pipers", a scottish bagpipe festival;
> should still be available from Roundup Records.
>
> 73 de N1VUX BPL with Tech-No-Code
> Bill Ricker wdr@world.std.com http://world.std.com/~wdr
[snip]

I've found "Parade of the Pipes", Shotts & Dykehead Caledoia Pipe Band,
to work well too. It's under the Emerald Records license.

It's also an excellent way to shutdown an out of control party in
your home:-)

Buster C.
KC7KMJ
2m,70,23cm DM42

2076. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Fred <peerenbf@dma.org>
Message-ID: <Pine.LNX.3.95.970220172221.10495B-100000@dmapub.dma.org>
Source record: 97042
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 19 Feb 1997, Burt Fisher wrote:

>
> > I really wonder what his daughter, KA1VBQ thinks about
> > Amateur Radio?
>
> She says, "it's boring....I do not relate to them in anyway what so
> ever."
> quoted at 1133 EST. She is a straight A student.
>
Burt, Just what are you doing to make ham radio more interesting to the young folks. What are you doing to bring more young folks into the hobby and keep them there??

It is real easy to sit back and spout a lot of hogwash about how boring, and how stupid and all of the rest of the blah blah blah that I see comming from you.

Have you started to put together a high speed packet network, at a speed high enough to use the internet browsers on? If computers interest the kids, Add computers to the radio, only do it at a speed that will hold their interest. If you come to Dayton this year look me up. The Consolidated Electronics Booth as I work for them and get stuck there for the three days. I will introduce you to a friend of mine, in fact several. One started the 19k2 network around here on 440 several years ago. He and I along with hams around the country are trying to get 900 megs off the ground with spread spectrum. All to get more speed so that ham radio can compete with the internet. Another friend is a scout leader, Their class this time around has over 40 students, all looking for that ticket as he has made ham radio interesting to the scouts by arrainging field day out at the scout camp. He has set up a satellite station to work the birds with the boys right there.

Ponder those things Burt, You claim to be an educator, yet you cut, slice and condem rather than teach and enhance. I have kept my silence for a long time now and read what you have said. Perhaps I should continue to keep it, but I feel that someone has to point the truth out to you as you seem to be oblivious of it. There are many of us out here trying to put the ham back in ham radio and make it fun again, both for us and the young folks. Please quit lumping all hams in one heap and cutting us down. You are the one that gives ham radio a bad name to the non hams that read the news groups that you post your tirades to.

Fred ke8tq ke8tq@n8acv.#day.oh.usa.noam

Come to Dayton this year and stop at the TAPR booth to say hello......

2077. Re: Re-Crystal a walkie talkie.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970220064931.13064C-100000@supreme>
Source record: 97075

On Tue, 18 Feb 1997, Schembri Joseph Saviour wrote:

> This might sound stupid but.... Is it not possible to re-crystal a
> childs walkie talkie to a frequency in the 6m band and even add a slight
> tuning capability. If this is possible could you please Email on how to
> do this....Thanks.
>
>
Schembri - recrystaling should be possible but you would have to put in new tuned circuits and get the superregenerative receiver to work on the higher frequency. A bit fiddly though.

As for the tuning capacity, as you will be using 3rd overtone crystals, this is pretty well impossible. You would have to make a VXO on HF using fundamental crystals (or even overtone xtals on the fundamental freq) and multiply upwards. This would get so messy that you'd be better off building a rig from scratch.

73, Peter VK1PK

2078. Re: [Q] 2 Meter Transciever Kits???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970220064210.13064B-100000@supreme>
Source record: 97076

On Sat, 15 Feb 1997, buster wrote:

> Been entertaining the notion to build my own radio.
>
> I've been operating for a little while now, and have been having
> lot's of fun with SSB on 6,2 and 1296. Weak signal terrestrial has
> been a blast. I just would like something more.
>
> I was going to pick up a Downeast 70cm transverter kit to play with,
> but I just purchased an ICOM 451 for 70cm.
>
> I'd like to build a 2 meter transciever. I've checked out the ten tec
> homepage and the 2m FM kit is just a bit than what I want, and I'd
> prefer SSB.
>
> I'd like to build a 2-meter, SSB transciever. It doesn't have to be
> much. A couple of watts output. Maybe xtaled on 144.2 with a little
> bit of tuning from there(144.150-144.250??). Analog tuning, I don't
> need any digital stuff. I'd like to eventually get the unit smaller
> and smaller.

Have a look at Solid State Design for the Radio Amateur. There's a circuit of just what you are looking for - a VXO 2m DSB transmitter with a tuning range similar to what you want and a power output of a watt or so. It would be interesting to add a direct conversion receiver to get a transceiver.

73, Peter VK1PK

2079. Re: WTB: 10mtr CW Tx strip

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <Pine.SOL.3.91.970220065426.13064D-100000@supreme>
Source record: 97077

On Wed, 19 Feb 1997, doug wrote:

> I need a 10mtr low power (~5w or less) transmit strip for a beacon
> project. simple design, crystal controlled.
>
> Anybody got a schematic, kit, pre-assembled one etc?
>
> I have had a few replies about converting CB's to 10 etc, but don't
> have time for that kind of hassle. Need something that will work
> without a lot of trial and error stuff.

Assuming you're using an xtal controlled handheld CB or even one of the older rigs that were xtal controlled, only a little tweaking and no component changes would be required. This would be quicker than buying a kit or building something from scratch in my opinion.

73, Peter VK1PK

2080. Re: Rauchian conspiracy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: w8jitom@aol.com
Message-ID: <19970219140300.JAA23980@ladder01.news.aol.com>
Source record: 97078

In article <5ebhmu$1q2$3@nadine.teleport.com>, w7el@teleport.com (Roy Lewallen) writes:

>Yeah. The local copies here got snarfed up by some Nichromian Aral
>Measurement society. What gives?
>
>Roy Lewallen, W7EL
>
>

Ive havvve all der copies now heir Roy.

Ven we have da copies edited, you vill have dem back.

Heil Microphone!

2081. WTB: 4-1000A CHIMNEY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: nimski1@aol.com
Message-ID: <19970219135900.IAA22537@ladder01.news.aol.com>
Source record: 97079

LOOKING FOR A 4-1000A GLASS CHIMNEY. E-MAIL ME AT NIMSKI1@AOL.COM OR
PHONE AT 508-222-1261 73'S STEVE W1SN

2082. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: akent@bga.com
Message-ID: <5eg8nr$179a@news3.realtime.net>
Source record: 97080
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hey Davedickhead:

I am a relatively young ham peckerwood, and I take major offense to
your ranting.

F... YOU in your smallest orifice.

Who do you think invented this communications stuff anyway, Jack...?

You are the reason that the world is in bad shape these days.

>holstein@erols.com (David Holstein) wrote:

><Attitude & Inappropriate Language Snipped>

>>Whatever...I give up on getting help from ham operators...you are all
>>a bunch of turn-of-the-century jack-asses who cannot handle progress
>>and new technology.

>>From on generation X-er, I can't wait 'till you all die.

>>David Holstein, Jr.
>>holstein@erols.com
>>N3NGB@KE3GP.MD.USA.NOAM

2083. Re: 624 Kits List of PC Boards and Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: jonweiner@aol.com
Message-ID: <19970219142300.JAA00784@ladder01.news.aol.com>
Source record: 97081

Please let me know what is available. Thanks.

2084. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <330b9d1f.1092801@netnews.worldnet.att.net>
Source record: 97082

On Wed, 19 Feb 1997 03:43:34 -0800, measures@mail.vcnet.com (R. L. Measures) wrote:

>Why wouldn't
>grid-heating be determined by RMS values instead of peak values?

The only time the grid is heating is during the time it draws grid current. The correct solution to determine the grid power dissipation is to solve the equation for the integral of voltage * current during that period. A rule of thumb for this service--this service-- is that the peak current is about ten times the DC current. That peak current olnly occurs at the peak of RF drive. So we have to integrate the value over time. Because most of the time there's no grid current. Again, you can do the math to get the exact value for sinusoidal drive but you can get a close result, as in my example, by multiplying the DC grid current times the peak grid-to-cathode voltage. Let me just say again that this is not the exact value. But it's very close: 8 Watts.

> Are we to believe that less
>than 0.5 amperes of DC grid current boils gold off a grid that was designed
>to carry over 40 amperes at 250MHz?

Well, again, yes you must believe that. Think about an electric welder. The reason you use DC is to keep the electrons hitting the work piece and not heating the welding rod. The heating because of RF current is a function of the resistance and current only. The Grid current heats the grid too. But the average current is so much lower than the circulating current we can reasonably ignore it.

> The next time you run into an AL-1500 owner on the air, Fred, ask
>him/her: How many 8877s failed in the amplifier during the first 12 months
>of use.

That doesn't prove a thing, Rich. It's all anecdotal and proves nothing. Look at one example: I designed the 600 KW MW transmitters in use at Radio Kuwait. And I ran the grids quite nicely, thank you. The PA grid was heavily swamped, and operated well within their ratings. The PA's were absolutely stable; you couldn't make them oscillate if you tried. But we lost three 4CM400,000AG tubes in seven weeks. It wasn't a bad design on my part. Eimac got some bad screen grid wire and the impurities were causing the screen grid to warp into the grid. I was only running 4000 Watts of screen grid dissipation (and they're rated for 7500 Watts) so my design didn't do the tubes in. You can't blame me for those tube failures. And it's wrong to say, on the basis of anecdotal evidence alone, that some other

designer screwed up because a tube fails. In the 600 KW MW I put in for VOA Kuwait, a Thomson TH-558 failed during its tests. Same type of failure. My designs starting to look suspicious. Well, not exactly. The shock watch indicator on the shipping carton was smashed all to smitereens. Just as one of the grid insulators was. When the defective tube was replaced with a shipping survivor, the PA worked and hasn't stopped since.

No matter what you think, these guys aren't kidding you. They are serious investigators who have their reputations riding on their designs. If they had a failure mechanism to control failures they'd implement it in a minute; there's money involved here. If you'll just rethink these threads, remove all the emotion and start with an open mind, your conclusion must be, in the final anaysis, that the mechanism you have described is not the mechanism that killed the tubes in question.

Fred

jfriley@worldnet.att.net jfriley@airmail.net fredwa8ajn@aol.com

2085. Re: 624 Kits List of PC Boards and Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: jonweiner@aol.com
Message-ID: <19970219142300.JAA00673@ladder01.news.aol.com>
Source record: 97083

Please let me know what is available. Thanks.

2086. Re: 624 Kits List of PC Boards and Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: jonweiner@aol.com
Message-ID: <19970219154400.KAA16622@ladder01.news.aol.com>
Source record: 97084

Please let me know what is available. Thanks.

2087. Frequency Reference...Help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: rwham@aol.com
Message-ID: <19970219151300.KAA12062@ladder01.news.aol.com>
Source record: 97085

I'm looking for pointers from anyone that has gone through the exercise of building a WWVB locked local reference. I would like to get around the continual recalibration of my counter's internal reference. To accomplish this I plan to phase lock another (external) reference to WWVB (off the air) with the hope that I would be able to achieve an error no greater than 0.05 to 0.1ppm (my external reference is quite capable of holding to better than this for some period). I'm using the counter for frequency determination on 2.3GHz today, and plan to move up to higher bands soon.

Any schematics, pointers, or other suggestions based on actual experience in locking to an off the air reference would be appreciated.

Thanks
Robert K4MRW
RWHam@aol.com

2088. Frequency Reference...Help?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: rwham@aol.com
Message-ID: <19970219140600.JAA25015@ladder01.news.aol.com>
Source record: 97086

I'm looking for pointers from anyone that has gone through the exercise of building a WWVB locked local reference. I would like to get around the continual recalibration of my counter's internal reference. To accomplish this I plan to phase lock another (external) reference to WWVB (off the air) with the hope that I would be able to achieve an error no greater than 0.05 to 0.1ppm (my external reference is quite capable of holding to better than this for some period). I'm using the counter for frequency determination on 2.3GHz today, and plan to move up to higher bands soon.

Any schematics, pointers, or other suggestions based on actual experience in locking to an off the air reference would be appreciated.

Thanks
Robert K4MRW
RWHam@aol.com

2089. Re: Voltage regulator (7808) question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5egfns$oja@mtinsc04.worldnet.att.net>
Source record: 97087

I wouldn't try paralleling...
Email me for address, send SASE (actually a small box :-), I will return
it with a 7808CK. That is the 8 volt reg in the TO-3 package and (I
believe) is rated at 1.5 amps continuously (w/heatsinking).
Woody

larry kollar wrote:
>
> I have an old laptop computer that needs 8VDC, 1.5A for charging &
> on-grid usage. The AC adapter that came with it works IK, but I
> was considering building a 12VDC adapter for running it in the car
> or for emergency use.
>
> Checking catalogs, I didn't find any 7808s with 1.5A capacity, but
> I have several 1/2A regulators in my junk box. Can I wire three
> of them in parallel to get 1.5A capacity?
>
> Thanks in advance!
> --
> Larry Kollar, Dawsonville GA | *** Hatred is murder *** (1 Jn 3:15)
> lekollar@nyx.net | http://www.nyx.net/~lekollar/
> "So don't try to turn my head away
> Flirtin' with disaster every day"

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2090. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <330b93a2.87306232@news.ma.ultranet.com>
Source record: 97088
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 19 Feb 1997 03:20:18 GMT, hwatson@erinet.com (Howard Watson) wrote:

>On Tue, 18 Feb 1997 08:33:24 -0500, Burt Fisher
><burtfisher@geocities.com> wrote:
>
>>Howard Watson wrote:
>>
>
>>What is "amature radio?"
>
>OK, got me on that one. :> I have NO idea why I spelled it that way.
>If you kept any of my previous posts (YES, I realize you get way too
>many messages to do so), then you'd see that I usually (if not nearly
>always) spell it correctly.
>>
>>
>

SNIP

>>Nothing is more boring than that. But I will be glad to meet you OR
>>ANYONE on the air, if you have the guts.
>
>I have seen you post that comment before. It makes absolutely NO
>sense! "If I have the guts"??? I am confused as to your meaning.
>All kidding aside, my first impression is that you actually do have
>some serious problems. Do you so delusional as to believe that you
>could harm me by merely talking to me? I have the "guts" to talk to
>any human being in this world. Would your conversation be so inane
>that I would die of boredom? I had always imagined it would be an
>interesting conversation. Please explain this "guts" idea. I am
>willing to bet I am not the only one with this question.

Do you so delusional?!?

```
**************************************************************
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
**************************************************************
```

.

2091. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <330b9433.87450783@news.ma.ultranet.com>
Source record: 97089
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 19 Feb 1997 11:27:23 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

SNIP

>Ham radio defined:
>
>There's just so much more in the world to catch their
>eye than a bunch of farts who try to maintain their heirarchy in a
>pseudo
>secret society, refusing with a vengeance to pass the baton, for fear of
>the
>tiniest little detail of what's theirs being changed. Even if the change
>is
>necessary and beneficial to the hobby.
>
>
Hey Burt - how about a little credit where credit's due?
>

SNIP

Mark

****
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
****
.

2092. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <330b9502.87658076@news.ma.ultranet.com>
Source record: 97090
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On 19 Feb 1997 03:22:01 GMT, "Glenn Schultz" <glenn@spacestar.net>
wrote:

>Burt Fisher <burtfisher@geocities.com> wrote in article
><3308E218.57CD@geocities.com>...
>> #===============#===#
>> | Burt Fisher | Teacher of video, broadcasting and electronics |
>> | Amateur call | South Dennis, Ma. (Cape Cod) |
>> | K1OIK | http://www.geocities.com/WallStreet/5169 |
>> #===============#===#
>> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
>> #===#
>>
>Before this thread get's any further out of hand, I have a couple of
>questions:
>
> First of all, this clown is just looking for attention and enjoy's pushing
>everyones buttons. He is looking for a response from a large group of
>people, and he got it! He's no better than a jammer on your local repeater;
>the more you respond to his drivel, the more he enjoy's it. If he is just
>ignored, he will eventually go away. Don't give him the satisfaction of a
>response, he has shown that he doesn't really care about the issues, he
>just like to push your buttons!

SNIP

Burt's been going like this for about 7 years I can account for.

Mark

****
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
****
.

2093. WTB: 4-1000A CHIMNEY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: nimski1@aol.com
Message-ID: <19970219140600.JAA25222@ladder01.news.aol.com>
Source record: 97091

LOOKING FOR A 4-1000A GLASS CHIMNEY. E-MAIL ME AT NIMSKI1@AOL.COM OR
PHONE AT 508-222-1261 73'S STEVE W1SN

2094. Re: Information on GE MASTR II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-20 00:00:00 UTC
From: ham440@aol.com
Message-ID: <19970219145300.JAA07352@ladder01.news.aol.com>
Source record: 97092

Hi.
Mastr II Mods.
It's not hard to do it depending how you do it.
I convert them for both amateur and commercial use. I don't have any step by step procedures, BUT they are available from several sources.
Keep looking on the web.
If you deside to have it done, call me.
Good luck

Dick K6DBR
Ham440@aol.com

2095. Re: Question on HF mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <330e2ee4.41221693@news.flash.net>
Source record: 96893
Cross-posted to: es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

On Fri, 21 Feb 1997 09:32:33 GMT, jorgegc@lander.es (Jorge) wrote:
The problem is that
>I can not use it when moving the car because of the poor
>catch of me magnet mount. I have tried several times to
>mount the aerials in a hatchback mount, but performance and
>SWR are very bad indeed
Hola, Jorge!
There are mag-mounts with 3 or 4 magnets that should hold your antenna. Otherwise, here are 2 ideas that may help your swr when you move the antenna. First, make sure you have a good ground. Much better than you ever thought you'd need. Without a good ground, your mobile antenna will have a LOT of loss. This may not be your problem, because if you have a lot of loss, your swr curve will be pretty broad if you ever get it tuned.

My mobile antenna is mounted on the back bumper of my pickup. It never matched very well until I tried this. I got a small coil, about 10 turns, 2-1/2 inch dia., and used it as a shunt feed. The bottom of the coil is grounded to the truck, and on 40m I put a clip lead about 2 or 3 turns from the top to the feedpoint of the antenna. This is a bad description, but if you look in the ARRL Handbook or the Antenna Book, it has pictures of how to do it. Now my swr is about 1.5:1 and bandwidth on 40m is about 35 or 40 KHz between 3:1 points.

73,
Kerry, WD5ABC

2096. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: chainsaw@tfs.net
Message-ID: <330e266f.884530@news.tfs.net>
Source record: 96894
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Could somebody please post Burt Fisher's home address and telephone number on these newsgroups he keeps crossposting to so we can call him (like maybe when I'm reading the news at 2:00 A.M.) and tell him what we think of his abusive drivel and/or mail him dead rodents and such?

I read somewhere about some guy being a public pain in the ass and being subscribed to like 300 "bill me later" subscriptions to everything from porn magazines to Forbes. Surely somebody out there has a similarly wonderful idea about how to deal with Butt Fisher. If he wants to make himself a public figure, then we can treat him as such, you know posting details about his formerly private life, what kind of undergarments his wife wears, etc. I'd suggest to Butt Fisher that life as a private citizen is a little nicer than life as a public figure. I think a good argument can be made that his repeated controversial postings on USENET already make him a public figure. Thoughts?

Burt Fisher <burtfisher@geocities.com> wrote:

>Bob wrote:
>
>> Simple: He just refers them to the following newsgroup:
>> news://alt.radio.pirate
>> Just because this guy has NEVER been involved in SkyWarn, RACES, ARES, or built his own
>> repeater network from the ground up, he thinks these things should be left to the
>> broadcasters, and commercial guys only! He's obviously got the knowledge, and spent some
>> time doing some technical things (he's an extra), but he must now be bored.
>
>Do not give me that much credit. I takes few brains to pass ANY ham
>license TODAY.
>I was in RACES.
>
>
>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

2097. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Kory Hamzeh <kory@avatar.com>
Message-ID: <Pine.BSI.3.91.970221162227.28010B-100000@avatar.avatar.com>
Source record: 96895
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Fri, 21 Feb 1997, Steve - KF2TI wrote:

> In article <Pine.LNX.3.95.970220172221.10495B-100000@dmapub.dma.org>,
> peerenbf@dma.org says...
> > If you come to Dayton this year look me up. The
> > Consolidated Electronics Booth as I work for them and get stuck there for
> > the three days.
>
> Unfortunately or fortunately (depending on your point of view), the man
> who challenges others intestinal fortitude wouldn't have the guts to face
> the very group(s) of people he so easily insults. It's far easier to
> insult from a distance (however, that will change towards the end of
> March..more on that as time progresses..and it will be something GREAT!!.
> a hint...a special event station from a certain town on Cape Cod
> celebrating the ham who everyone loves to dislike)
>
>

Some people could constantly mail bomb his account until his ISP cuts him off. Of course, he could switch to another ISP, and then the mail bombing might start again. However, I'm not recommending such a thing....

But..., its real easy to set up a cron jobs under unix to send it a huge 100k message every five minutes. If 50 people started doing that ... well, you get the pictures.

Kory
AC6RN

2098. Re: Support Little Leo instructions (NOT)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: ka1tox@bmugbos.org
Message-ID: <ka1tox-ya02408000R2102972135270001@news.tiac.net>
Source record: 96896
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>I don't agree with Burt's position, Bruce, but I haven't seen any
>engineering study which would indicate that the SS signals of the
>LEOs would adversely impact amateur operations.

In case you missed the number of birds...
From Edupage:

TELEDESIC LOOKS AT SCALING BACK
Teledesic Corp., the high-profile, $9-billion satellite communications project backed by cellular magnate Craig McCaw and computer mogul Bill Gates, is exploring options to scale back its 840-satellite system, beginning initially with just 288 "birds." The satellites will occupy a low-Earth orbit, 400-700 miles above the Earth, circling in 12 orbital planes or "rings," with 24 satellites in each ring. A spokesman for Teledesic says the company "has not altered" its original plan, but may start off with a more modest arrangement. (Wall Street Journal 19 Feb 97)

2099. 4uf@4000vdc caps sold

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Brian <haberlb@cadvision.com>
Message-ID: <330E60E3.7142@cadvision.com>
Source record: 96897

all 6 caps, 4uf@4000vdc have been sold.
Thanks to all that inquired.

2100. Re: HELP: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: dave eckhardt <davee@hp5800.desk.hp.com>
Message-ID: <330E4391.399B@hp5800.desk.hp.com>
Source record: 96898
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Siegfried Rambaum wrote:
>
> Who can identify these variable capacitors?
>
> 1 - Cardwell XG-110-XS,
> spacing about 3/16 inches between rotor and stator
>
> 2 - This one does not have a manufacturer's marking that I would
> interpret as a such ... maybe it has and I am just unaware of it
> the modell number is NP-150-DS
> The spacing between stators and rotors are 1/8 of an inch
>
> What are their capacities and what voltage are they rated for?
>
> Thanks for your help
>
> 73 de KB2YVC + DE8FGO, Siegfried

I can't resist this one. Capacitors are no mystery. The BASIC
equation for ANY capacitor (including varactors) is:

(dielectric constant of vacuum)*(area of plates)
Capacitance (fd) = ____

plate spacing

dielectric constant of vacuum = 8.85e-12 fd/m
area of plates in square meters
plate spacing in meters

If you want, do the appropriate unit comversions (I personally like
metric). In case you forgot, the area of a circle is
2
A = pie*r .

Then multiply by the number of plates. You shouldn't miss the actual
maximum capacitance by more than 5 %.

2101. FS B&W inductor/switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Brian <haberlb@cadvision.com>
Message-ID: <330E6D5A.3BAD@cadvision.com>
Source record: 96899

For sale, Barker & Williamson model 851 band switching pi-network
inductor. used but in perfect workable condition.
$45.00 cdn. + shipping.

2102. FS HP 608D sig gen

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Brian <haberlb@cadvision.com>
Message-ID: <330E6F4A.554D@cadvision.com>
Source record: 96900

```
For sale Hewlett Packard model 608D signal generator
10 MHz to 420 MHz am cw pulse ext mod or 400/1000 Hz
$100.00 cdn. obo + shipping
```

2103. Wanted: large ferrite rods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Glenn Jolly <glenn@snmail.jsc.nasa.gov>
Message-ID: <01bc2040$2e236a80$427fa98b@sn-glenn.jsc.nasa.gov>
Source record: 96901

Looking for a source of large ferrite rods 12 inches or longer, and 3/4" in diameter or larger. Anybody know who still makes these? I don't want to cement smaller ones together...

glenn@snmail.jsc.nasa.gov

2104. Help with Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Simon Robinson <pls5i50e@pop.plasma.co.uk>
Message-ID: <330DE6F2.725C@pop.plasma.co.uk>
Source record: 96902

Can anyone help me with details on the CR Snelgrove F1400-12L and 12U filters e.g. frequency, bandwidth, impedance etc..

Thanks

Simon - G8POO

2105. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Bob <pmw5@cornell.edu>
Message-ID: <330D719C.7C75@cornell.edu>
Source record: 96903
Cross-posted to: alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

To all who have seen Burt Fisher's relentless attacks in various newsgroups:
Don't feel alone. He got a new Packard Bell for christmas and discovered that he could try to force his views on more people than if he just stuck to the classroom full of ninth graders he's trying to teach broadcasting. I wonder if he still needs help getting rid of that bus mouse he doesn't really have?

AUTHOR PROFILE: Burt Fisher <burtfisher@geocities.com>

177 unique articles posted.
Number of articles posted to individual newsgroups (skewed by cross-postings):
69 rec.radio.amateur.misc
51 alt.support.divorce
35 rec.radio.amateur.digital.misc
4 ne.weather
2 comp.sys.ibm.pc.hardware.cd-rom
2 comp.sys.ibm.pc.misc
2 misc.invest.stocks
2 ne.forsale
1 alt.child-support
1 alt.support.diet
1 alt.test
1 comp.sys.ibm.pc.hardware.storage
1 misc.foresale.computers
1 rec.radio.amateur.boatanchors
1 rec.radio.amateur.dx
1 rec.radio.amateur.equipment
1 rec.radio.amateur.policy

>
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | | 389 Old Bass River Rd |
> | Amateur call | South Dennis, Ma. 02660-2779 (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

This is true. You can't see a thing on his web site unless you let him execute Media Player on your machine. I've got a problem just allowing executables being sent to, and run on my machine to suit someone elses whim. With this guy's attitude, who knows what you'd end up with.
--

```
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.2

mQBtAzK9lTgAAAEDALNAegQHu6xJ7isCW1c57zKpN2N97N14FO6OcHQ1JLQNpbsB
bXmt2KaZMu4+4qLKiaM3S94CANtQlMc/VrQ6fZJNmu2Abg68PrP5RM9PkrKasLiU
8OJ86NbesAZWzN0PFQAFEbQ+Um9iZXJ0IFdleWJyZWNodCwgSlIgLSBOMlFFVyAt
IHBtdzVAY29ybmVsbC5lZHUgLSA2MDctNzU3LTk0MzQ=
=Df2X
-----END PGP PUBLIC KEY BLOCK-----
```

2106. Rf amplifier uhf /vhf

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: CORTICOL@MAIL.TELEPAC.PT
Message-ID: <5eike7$qal@duke.telepac.pt>
Source record: 96948

Hello could anibody send me a pictures for rf amplifier for uhf/vhf
base 4cx250 and Gi7b
Tkank&#65533;s
73&#65533;s
ct1dta-paulo gariso

2107. Re: 2 Meter Eggbeater Ant, again.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <E5xIAE.8F0@world.std.com>
Source record: 96949

A friend of mine found and passed around these plans for an Eggbeater antenna. They're good for omni-directional horizontal and up-pointing circular polarized, which makes them good for non-seeking satellite stations. They were posted to the net in '95.

http://world.std.com/~wdr/eggbeater.txt

73 de N1VUX BPL with Tech-No-Code
Bill Ricker wdr@world.std.com http://world.std.com/~wdr n1vux@amsat.org
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials know you'll be voting in the next division and section elections.

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

2108. Re: Voltage regulator (7808) question. CAUTION CAUTION

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5eish9$atj@mtinsc04.worldnet.att.net>
Source record: 96950

FWIW... Changing the hook-up and adding one resistor of the appropriate
value and power rating will change the device from a voltage to a
current regulator.... Also, I think the 7808 will self-limit, but
don't know what the exact value might be...Have to measure, but would
guess is maybe 2 amps?
The short circuit current is rated as 750 ma. _Woody_

miker wrote:
>
> Use extreme caution. Many laptop chargers have charge control circuitry
> in the wall brick. If you just stick 8V +/- 5% with arbitrary current
> limit to your laptop, you may explode the battery or some other
> internal circuitry. I speak from experience.....
> miker
> <snip>
--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2109. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <E5xIpB.C63@world.std.com>
Source record: 96951
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <32F8B927.F24@tntech.edu>, John Noel <jhn5012@tntech.edu> wrote:
> I have neighbors who play loud music. Is their a way to jam their
[newsgroups trimmed somewhat.]

I've found that Bagpipe music is useful convincing neighbors with
bigger sound-systems to close their windows/patio doors.

With only 30W into a GE loudspeaker, mono, I got the 100W+/channel into
Cerwin-Vega's rock&roller to close his balcony slider...
Album was "Controversy of Pipers", a scottish bagpipe festival;
should still be available from Roundup Records.

73 de N1VUX BPL with Tech-No-Code
Bill Ricker wdr@world.std.com http://world.std.com/~wdr n1vux@amsat.org
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.

--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

2110. Haw to calculate a coil for 100 Mhz at 50 Ohm ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc1f8c$51ecfee0$68b630ce@pass>
Source record: 96952

Hello

Can somone calculate for me an coil at 50 Ohm at 100 Mhz.

What diameter, and haw many turns, and thikness of the wire ?

I like to use it like this.

```
IN ---------------------------------------- OUT
c
c
c
GND --------------------------------------- GND
```

ALL INFORMATION IS WELKOM

THANKS IN ADVANCE

GEERT

2111. FS: Radio Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: ekugrad@mindspring.com
Message-ID: <5ej0so$3nv@camel0.mindspring.com>
Source record: 96953

I have the following books for sale:

Radio Books

1. Industrial Electronics by Gulliksen and Vedder
First Edition 1935 245 pages
Excellent condition
Price $10 Shipped

2. Electronic Engineering Handbook by Batcher and Moulic
First edition 1944 456 pages
Excellent condition
Price $12 Shipped

3. Fundamentals of Vacuum Tubes by Eastman
Third Edition 1949 644 pages
Very Good Condition
Price $20 Shipped

4. High Frequency Measurements by Hund
Second Edition 1951 676 pages
Very Good Condition
Price $20 Shipped

5. Dictionary of Electronic Terms by Allied Radio
Seventh Edition 1965 88 pages
Excellent Condition
Price $5 Shipped

Will trade any of the above for ARRL Handbooks and or ARRL
Publications Pre-1970.

Also collect Old Amateur Radio Log books and anything of historical
interest to Amateur Radio.

Thanks

David
KA4IKH
ekugrad@mindspring

2112. Chassis punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: David Medley <davemed@postoffice.worldnet.att.net>
Message-ID: <01bc1fa0$ae2f5fe0$e7eb92cf@dave>
Source record: 96954

I need a 3/4" chassis punch to work on my R390-A audio mod in accoedance
with the description in Electric Radio. Does anyone have one they would
like to part with or can you tell me where to buy one?
Thanks
Dave KI6QE/7
<davemed@worldnet.att.net>

2113. F.S. - Tubes, radios, much misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970221044900.XAA09375@ladder02.news.aol.com>
Source record: 96955

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #201-T.

2114. CQ USUARIOS ICOM 706

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: jorgegc@lander.es
Message-ID: <330f6a3a.2800853@news.lander.es>
Source record: 96956
Cross-posted to: es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hola estimados amigos y colegas:

Desearia ponerme en contacto con otras estaciones que tengan
el equipo ICOM 706 para intercambiar impresiones.
Me gustarï¿½a que me resolvierais algunas dudas, como la
potencia que realmente os sale en SSB HF, si el VOX funciona
correctamente con otros micrï¿½fonos, quï¿½ micrï¿½fonos usais
ademï¿½s del original de mano, decidme si el altavoz interior
os vibra o distorsiona un poco cuando se sube el volumen,
etc. Cualquier comentario al respecto o cualquier impresion
sobre el IC-706 es bienvenida. Tambien mejoras y
modificaciones, asï¿½ como experiencias en mï¿½vil, etc.
Espero vuestras respuestas, yo estoy a la espera de un
software para controlar el IC-706 desde un PC, ya os dirï¿½
algo al respecto. Espero noticias.
Francisco Garcï¿½a Apartado Correos 123 46080 Valencia

/|\
@ @
-----oOO-(_)-OOo----------
e-mail: jorgegc@lander.es

2115. Question on HF mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: jorgegc@lander.es
Message-ID: <33106a42.2809794@news.lander.es>
Source record: 96957
Cross-posted to: es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Dear friends I have one question and want you to help me. I
own a Icom 706 rig and two sticks for 20 and 40 meters. The
antennas are Valor Pro-am 3/8" conectors and they provide me
very good performance when used with a single magnet mount
on the roof of my 1990 Ford Fiesta car. The problem is that
I can not use it when moving the car because of the poor
catch of me magnet mount. I have tried several times to
mount the aerials in a hatchback mount, but performance and
SWR are very bad indeed. I donnot know how to improve it or
how to use it on the move. The aerials are almost 2 meters
long, half helicoidal half steel stick.
Also will be wellcome any mods, commnets, improvements or
anything about the ICOM 706 rig, how much power can it run,
etc.
Sorry for my English, thanks for your help.

/|\
@ @
-----oOO-(_)-OOo----------
e-mail: jorgegc@lander.es

2116. Mobile antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: jorgegc@lander.es
Message-ID: <330e6a2d.2788316@news.lander.es>
Source record: 96958
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Dear friends, i am very interested in buying or building a
mobile antenna for hf (20, 40 & 80 metres). please any
offers or ideas. could be exchanged for any material or
anything of your interest from my country. please also
offers on base verticals for hf.
I actually use a windom wire aerial about 41 metres long,
please tell ideas for improving the system. the fed point
with a 1:6 balum is about 9 meters high and the end points
about 3 meters high and i have about 2 or 2,5:1 swr in all
bands but work better on the warc bands (ï¿½?). It should be
working without the need of a tuner ATU, but I use it
always.....The long part is pointing East and the short one
is pointing West. Some people says that it has some
directivity through the long wire, but most says that the
directivity is perpendicular to the dipole. Any help on
this.

EA5VD Francisco
P.O.Box 123
E-46080 Valencia Spain

/|\
@ @
-----oOO-(_)-OOo----------
e-mail: jorgegc@lander.es

2117. Hello friends:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: jorgegc@lander.es
Message-ID: <330d6a1b.2770778@news.lander.es>
Source record: 96959
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hello friends:

My name is Francisco and I am located in Valencia, which is
a sunny and warm city in the East coast of Spain, in the
Mediterranean coast of the country. The Ham scene over here
is very interesting as you can find Hams almost every day in
the VHF band making FM or packet, and also a lot of friends
keen on HF.

This message is because I would like to get schemas, draws,
sizes and way of construction on antennas for HF (easy
vertical or wire ones, but also mobiles for 20 or 40
meters), so if you can help you can write by post to EA5VD
Francisco P.O.Box 123 E-46080 Valencia SPAIN, or by
E-mail, but please see if you can help.

As I have seen in the last days there is some activity on
Internet with Hams (most of them from the States), but it
will be of great help to know about WEBs of interest.

Write back soon !!!!!

73ï¿½s EA5VD

/|\
@ @
-----oOO-(_)-OOo----------
e-mail: jorgegc@lander.es

2118. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d76e1d458fab9079897cf@news.planet.net>
Source record: 96960
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <Pine.LNX.3.95.970220172221.10495B-100000@dmapub.dma.org>, peerenbf@dma.org says...
> If you come to Dayton this year look me up. The
> Consolidated Electronics Booth as I work for them and get stuck there for
> the three days.

Unfortunately or fortunately (depending on your point of view), the man who challenges others intestinal fortitude wouldn't have the guts to face the very group(s) of people he so easily insults. It's far easier to insult from a distance (however, that will change towards the end of March..more on that as time progresses..and it will be something GREAT!!. a hint...a special event station from a certain town on Cape Cod celebrating the ham who everyone loves to dislike)

> Please quit lumping all hams in one heap and cutting us down. You
> are the one that gives ham radio a bad name to the non hams that read the
> news groups that you post your tirades to.
>
water off a ducks back

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

2119. Learn to Make $$$FAST CASH$$$ With Honest Work

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: fucuco@hamlet.net
Message-ID: <330d8112.8019440@news.uoknor.edu>
Source record: 96961
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Dear Friend,
Five minutes and five dollars can change your life!!!THIS IS THE FAIREST, MOST HONEST WAY I KNOW TO SHARE THE WEALTH! Would you like to make thousands of dollars, quickly, legally, with NOCATCH? Then keep reading..... please take five minutes to read thisarticle; it will change your life, just like it did mine. It's true! You can make up to, or over, $50,000.00 in 4 - 6 weeks; maybe sooner! I SWEAR I'M NOT LYING TO YOU, AND THIS IS NOT A SCAM! If you're interested, keep reading; if you're not, I apologize forwasting your time.

Here we go. A little while back, I was browsing through these newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of dollars in weeks, with only an initial investment of $5.00!! So, I thought, "Yeah, right, must be a scam", but, I was curious, like most of us are, and kept reading. Anyway, it said that you send $1.00 to each of the five names and addresses stated in the article. You then place your own name and address in the article at the bottom of the list at #5, and post the article in at least 200 newsgroups, (there are thousands). No catch, that was it! So after thinking it over, talking to a few people first, I tried it.I figured what have I got to lose except for 5 stamps, and $5.00, right? Well, guess what....within 7 days, I started getting money in the mail! I was shocked! I still figured it would end soon, and didn't give it another thought. But then money kept coming in , tripling in size and multipying by 10 - 20 times the amount that I got the first week! In my first week I made about 20 - 30 dollars. But, by the end of the second week, I had made a total of over $1000.00!!!! In the third week, I had over $10,000.00, and its still growing. This is my fourth week, and I've made about $42,000.00 TOTAL, and the money is still coming in.....Let me tell you how this works, and most importantly, WHY it works, also, make sure you print a copy of the article NOW, so you get the information off of it, and begin making money.The process is very simple, and it consists of 3 EASY steps:

STEP 1: Get 5 separate pieces of paper and write the following on each sheet of paper...."PLEASE PUT ME ON YOUR MAILING LIST", and then write your NAME AND ADDRESS. Get five $1.00 bills and place ONE inside each piece of paper that you just wrote on. Fold each paper so the bill will not be seen in the envelope, (otherwise, nosey people who like to steal envelopes with money in it won't get yours). Put one paper inside each envelope, and seal it. Do the same for all five. You should now have 5 envelopes, sealed, EACH with a piece of

paper AND a $1.00 bill, stuffed inside of the paper. Make sure those words that were stated above, are written on each paper. What you are doing is creating a service; this is PERFECTLY LEGAL. Now then, mail the 5 envelopes, with the paper and $1.00 bill in each, to the following 5 addresses:

1. D. Ellis, 8301 W. 92nd St., Overland Park, KS 662122.

2. J. Krakowiak , 1112 W. Broadway #1, Anaheim, Ca 928053.

3. J. Sides, Lamar Box 1, South Plains College, 1401 S. College Ave.,Levelland, TX 79336

4. Areg Mkrian, 15 Alma Ave. Belmont, MA 02178-4404

5. A Karns, 4000 NW 53rd, Oklahoma City, OK, 73112

STEP 2: Now take the #1 name off the list that you see above, move the other 4 names up, (5 becoming 4, 4 becoming 3, etc.), and put YOURNAME as number 5 on the list. You can slightly alter this article ifyou need to; editing what you need to edit.

STEP 3: Post your amended article, (with your name at #5), to at least 200 newsgroups, (There are close to 19,000 of them). HOW TO DO THIS:If you are using Netscape 3.0, do EXACTLY the following:
1) Click on any newsgroup, like normal, THEN click on 'TO NEWS',which as on the far left when you're in the newsgroup page. This will bring up a box to type a message in.
2) Leave the newsgroup box like it is. CHANGE the subject box to something flashy, like, "NEED CASH $$$ READ HERE $$$" or "FAST CASH"!!
3) Tab once, and you should be ready to type. Now, re-type, (onlyonce), this WHOLE ARTICLE WORD FOR WORD, except to insert your name at#5, and to remove #1 off the list; plus any other small changes youthink you need to make. Keep most of it the same!!
4) When you're done typing the WHOLE article, click on FILE in THISBOX, right above send, not where it says Netscape News On The FirstBox. Click on SAVE AS when you're under FILE. Save your article as a text file to your C: or A: drive. DO NOT SEND OR POST YOUR ARTICLE UNTIL YOU DO THIS. Once saved, move on to number 5 below.
5) If you still have all of your text, send, or post, to this news group, now, by just clicking send; which is located below FILE, and right above Cc:.
6) Here's where you're going to post all 200. OK, click on any newsgroup, then click on 'TO NEWS', again, in the top left corner. Leave theNEWSGROUPS BOX alone. Again, put a flashy subject title in the SUBJECT BOX. Hit TAB once you're in the body of the message, and then click on ATTACHMENTS, which is below the SUBJECT BOX. You will get another box to come up. Click on ATTACH FILE, then find YOUR file that you saved; click once on the file, and then click 'OPEN'. Now click on OK. If you did this right, you should be able to see your file name in the attachments box, and it will be shaded green.If you use IE EXPLORER, it's just as easy......HOLDING DOWN THE LEFT BUTTON,

HIGHLIGHT THIS ARTICLE. THEN PRINT THIS ARTICLE FOR YOURRECORDS TO HAVE THE NAMES OF THOSE YOU WILL BE SENDING $1.00 TO. NEXT, GO TO THE NEWSGROUPS AND PRESS "POST AN ARTICLE". A WINDOWWILL OPEN. TYPE YOUR HEADLINE IN THE SUBJECT AREA AND THEN CLICK INTHE LARGE WINDOW BELOW. PRESS "CRTL" AND THEN "V", AND THE ARTICLE WILLBE PLACED IN THE WINDOW. IF YOU WANT TO EDIT THE ARTICLE, DO SO, AND THEN HIGHLIGHT AND COPY IT AGAIN. NOW EVERY TIME YOU POST THE ARTICLE IN A NEWNEWSGROUP, ALL YOU HAVE TO DO IS REPEAT "CRTL" AND "V" AND PRESS POST.
7) That's it. Each time you do this, all you have to do is type in a different newsgroup, so that way, it posts to 200 different newsgroups. You see? Now you just have 199 to go!!! (Don't worry, eac hone takesabout 30 seconds; once you get used to it). REMEMBER ..200 IS THE MINIMUM. The more you post, the more money you'll make.AND THAT'S IT!!!! THOSE ARE THE ONLY 3 STEPS THERE ARE!!! You are now in the mail order business, and will start receiving $1.00 envelopes from various people, all over the world, within days.(HINT: THE MORE NEWSGROUPS YOU POST TO, THE MORE MONEY YOU WILLMAKE!). You may want to rent a PO Box, eventually, because of all the mail. If you wish to stay anonymous, you can come up with a name, suchas "manager" or"investor". Just make sure all the addresses are CORRECT, please! LET ME TELL YOU WHY THIS SYSTEMS WORKS!! Out of every 200 postings, let's say I ONLY receive 5 replies, (this is actually VERY LOW). So, I made $5.00 with my name at #5. Now then,each person who just sent me $1.00 makes, say, only 200 postings, now with your name at number 4, WHICH IS A TOTAL OF 1000 POSTINGS, not including yours too. 50 people send you $1.00 now; that's $50.00 you just made! Now then, your new 50 agents post 200 each with YOUR NAME AT NUMBER 3, or10,000 postings, (50 X 200). Average return is 500 at $1.00 each, which is $500.00! They make 200 postings, which is 5000 returns at $1.00 each,which is $5000.00!! And finally, 5000 people make 200 postings each,with YOUR NAME AT NUMBER 1. YOU NOW GET A RETURN OF $50,000.00 BEFOREYOUR NAME DROPS OFF THE LIST!! AND THAT'S IF EVERYONE MAKES ONLY 200 POSTINGS, AND IF ONLY A SMALL % PEOPLE RESPOND!!!When your name is no longer on the list, you just take the latest posting that is appearing in the newsgroups, and SEND OUT ANOTHER $5.00 to THE NAMES ON THE LIST, PUTTING YOUR NAME AT #5 AGAIN, AND START POSTING AGAIN!! The thing to remember is, do you realize that THOUSANDS OF PEOPLE ALL OVER THE WORLD ARE JOINING THE INTERNET AND ARE READING THESE ARTICLES EVERY DAY!! JUST LIKE YOU ARE RIGHT NOW!!! So, can you afford $5.00 and see if it really works? I think so.......People have said, "What if the plan is played out and no one sends you the money?" So what! What are the chances of that happening when there are TONS OF NEW, HONEST USERS AND NEW, HONEST PEOPLE joining theInternet and Newsgroups everyday? and, are willing to give it a try? Estimates are at 20,000 to 50,000 new users, each and every day!! Remember, play FAIRLY and HONESTLY and this WILL WORK, I PROMISE YOU!! You just have to behonest. Make sure you print this article out, RIGHT NOW, also, try to keep a list of everyone that sends you money, and always keep an eye on the newsgroups to make sure everyone is playing fairly. REMEMBER: HONESTY IS THE BEST POLICY!!

YOU DON'T NEED TO CHEAT THE BASIC IDEA TO MAKE MONEY! GOOD LUCK TO ALL, AND PLEASE, PLAY FAIRLY; YOU WILL REAP THE HUGE REWARDS FROM THIS.....WHICH IS TONS OF CASH!!! ****By the way, if you try to deceive people by posting the messages with your name on the list, and by not sending the money to the people already on the list, you will not get much. Someone I talked to knew someone who did that, and he only made $150.00; and that was after seven or eight weeks!! Then, he sent the 5 $1.00 bills; people addedhim to their lists, and in 4 - 5 weeks, he had over $10,000.00. THIS IS THE FAIREST, AND MOST HONEST, WAY I HAVE EVER SEEN TO SHARE THE WEALTH OF THE WORLD WITHOUT COSTING ANYTHING BUT OUR TIME! GOOD LUCK, AND HAVE FUN!!!!

2120. NEC C2221 transistor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5ej96e$hhj@news.Hawaii.Edu>
Source record: 96962
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc

Is there a generic version of the NEC C2221 transistor? It's
used in the PA of a Tempo S1 HT. It's overheating quite badly
(on rcv).
Jeff KH2PZ

2121. Linear amplifier circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: pete@adinet.COM.UY
Message-ID: <199702211311.KAA15910@mail.adinet.com.uy>
Source record: 96963

<---- Begin Forwarded Message ---->
From: pete@adinet.com.uy
To: Ham-Homebrew@UCSD.Edu

Wanted: a circuit diagram of a linear amplifier for tha HF bands, using four
811A tubes.
If you have one, please contact-me.

Nestor Belzarena
<pete@adinet.com.uy>
<---- End Forwarded Message ---->

2122. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: pete@adinet.COM.UY
Message-ID: <199702211309.KAA15814@mail.adinet.com.uy>
Source record: 96964

Wanted: a circuit diagram of a linear amplifier for tha HF bands, using four
811A tubes.
If you have one, please contact-me.

Nestor Belzarena
<pete@adinet.com.uy>

2123. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <CJPDIJA6bVDzEwcF@ifwtech.demon.co.uk>
Source record: 96965

R. L. Measures wrote:
> In 3-500Z amplifiers such as the L4-B, SB-220, and TL-922, one of the 1A
>grid to ground chokes

Leaving aside the question of what happened next, please can someone explain why the designers of those amplifiers chose to lift the grids above chassis ground in order to insert the Ig meter?

Is there some hidden advantage, or some hidden problem in rearranging the B- circuit to meter grid current with the grids nailed firmly to RF/DC ground? Or was it just the "follow-my-leader" effect?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2124. Re: Chassis punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Eddie Hill <ehill@bnr.ca>
Message-ID: <330DA5B2.4018@bnr.ca>
Source record: 96966

David Medley wrote:
>
> I need a 3/4" chassis punch to work on my R390-A audio mod in accoedance
> with the description in Electric Radio. Does anyone have one they would
> like to part with or can you tell me where to buy one?
> Thanks
> Dave KI6QE/7
> <davemed@worldnet.att.net>
Dave.

If you have a W.W.GRAINGER warehouse or other electrial equipment sales company around your location they should have a GREENLY 3/4" chassis punch avaiable..

Hope this helps
Eddie Hill
WD5CVD

2125. Re: Question on HF mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <330DA553.AD3@rcru.rl.ac.uk>
Source record: 96967
Cross-posted to: es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Jorge wrote:
>
> Dear friends I have one question and want you to help me. I
> own a Icom 706 rig and two sticks for 20 and 40 meters. The
> antennas are Valor Pro-am 3/8" conectors and they provide me
> very good performance when used with a single magnet mount
> on the roof of my 1990 Ford Fiesta car. The problem is that
> I can not use it when moving the car because of the poor
> catch of me magnet mount. I have tried several times to
> mount the aerials in a hatchback mount, but performance and
> SWR are very bad indeed.

Your problem is possibly the poor ground. The hatch may be metal
but might not be well grounded to the roof of the car. What you need to
do is bond the antenna ground at the mount firmly to the chassis of the
car. Don't ground the hatch if it is used for the car radio aerial....
otherwise ground it. Use the shortest possible connection and heavy
guage wire.

Alternatively, there are magnetic mounts available with sufficient power
to hold the aerial. You still need a good ground.

2126. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <330DA413.57B9@rcru.rl.ac.uk>
Source record: 96968

Ian White, G3SEK wrote:
>
> R. L. Measures wrote:
> > In 3-500Z amplifiers such as the L4-B, SB-220, and TL-922, one of the 1A
> >grid to ground chokes
>
> Leaving aside the question of what happened next, please can someone
> explain why the designers of those amplifiers chose to lift the grids
> above chassis ground in order to insert the Ig meter?
>
> Is there some hidden advantage, or some hidden problem in rearranging
> the B- circuit to meter grid current with the grids nailed firmly to
> RF/DC ground? Or was it just the "follow-my-leader" effect?
>
> 73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)

Perhaps by doing it that way you measure the current in each grid and
can bias each individually while using only 1 heater transformer?

2127. info needed switching supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: d888888@juno.com
Message-ID: <5ekc7r$nbd@tracy.protocom.com>
Source record: 96969

Hi,

I have a dual 5 volt 33 amp dc pwr supply that I want to know more about. Do high power switching supplies usually have an output overvoltage protection circuit? What happens if the switcher transistor shorts? Do they have a crowbar type overvoltage protection? This one is made by a British company called Advance.

Tnx,

B

2128. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330DC007.628E@geocities.com>
Source record: 96970
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Fred wrote:
>
> Burt, Just what are you doing to make ham radio more interesting to the
> young folks. What are you doing to bring more young folks into the hobby
> and keep them there??

I show 30 9th graders ham radio every year on the air, they also see the
ARRL self serving video tape and I talk about the hobby spewing the
company line.
And you are doing just what?

> There are many of us out here trying to put
> the ham back in ham radio and make it fun again, both for us and the young
> folks. Please quit lumping all hams in one heap and cutting us down. You
> are the one that gives ham radio a bad name to the non hams that read the

There may be "many" as you say but overall these many are a very small
percentage.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=======================================================================#
```

2129. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330DC12F.466C@geocities.com>
Source record: 96971
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:

> Unfortunately or fortunately (depending on your point of view), the man
> who challenges others intestinal fortitude wouldn't have the guts to face
> the very group(s) of people he so easily insults. It's far easier to
> insult from a distance (however, that will change towards the end of
> March..more on that as time progresses..and it will be something GREAT!!.
> a hint...a special event station from a certain town on Cape Cod
> celebrating the ham who everyone loves to dislike)

I will be very pleased to present myself anywhere on Cape Cod that you
invite me to.
I will not barge in UNINVITED.
I will speak to any group about my views but if off CApe travel is
involved, I need expenses.

> > Please quit lumping all hams in one heap and cutting us down. You
> > are the one that gives ham radio a bad name to the non hams that read the
> > news groups that you post your tirades to.

Most belong in one group.
The reason few here agree with me is that all those that agree with me
left the HOBBY.

```
#================#=======================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=======================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2130. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330DC1A3.4981@geocities.com>
Source record: 96972
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:

> Simple: He just refers them to the following newsgroup:
> news://alt.radio.pirate
> Just because this guy has NEVER been involved in SkyWarn, RACES, ARES, or built his own
> repeater network from the ground up, he thinks these things should be left to the
> broadcasters, and commercial guys only! He's obviously got the knowledge, and spent some
> time doing some technical things (he's an extra), but he must now be bored.

Do not give me that much credit. I takes few brains to pass ANY ham
license TODAY.
I was in RACES.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2131. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2102970809310001@news.vcnet.com>
Source record: 96973

In article <330cd437.4883579@news.airmail.net>, jfriley@airmail.net (J. Fred Riley) wrote:

> gary@ke4zv.atl.ga.us (Gary Coffman) wrote:
>
> >Hold the phone. In one breath you accept a RMS plate voltage of 2651,
> >and in the next state it is 250.

Alas, Gary seems to confuse rms voltages and peak voltages. Your chances of winning the teddy bear are fading fast, Gary.

>
> No, No. I was looking at the grid-to-cathode voltage necessary to
...snip...
I also don't like
> the fact that the operating Q appears to be 75!! That alone makes me
> think my approach might be wrong.
>
> I'm an eager student. I'm willing to admit to a mistake in logic
> which it's pointed out.
...snip...
According to the method whereby Eimacï¿½ calculates operating tank Q in *Care and Feeding...*, Q is equal to 2000 ohms divided by the reactance of 10pF at 250MHz., =2000/63.66.
Hence, Q=31.

--
--Rich-- ag6k, 805-386-3734

2132. Radio Shack mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: mstriani@www.cidef.COM.AR
Message-ID: <c=US%a=_%p=CIDEF_ARGENTINA_%l=MAIL-CIDEF-970221155034Z-906@www.cidef.com.ar>
Source record: 96974

```
This message is in MIME format. Since your mail reader does not understand
this format, some or all of this message may not be legible.

------ =_NextPart_000_01BC2001.1D056440
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hola a todos:
Quisiera saber si alguno de ustedes sabe si se puede liberar la
frecuencia de transmision del HTX-212 lo unico que pude lograr es
transmitir de 143-149 Mhz. Espero ansioso algun tipo de respuesta.
Muchas Gracias.
Mariano A. Striani ;-)
mstriani@www.cidef.com.ar

------ =_NextPart_000_01BC2001.1D056440
Content-Type: application/ms-tnef
Content-Transfer-Encoding: base64

<encoded_portion_removed>
SURFRi05NzAyMjExNTUwMzRaLTkwNkB3d3cuY2lkZWYuY29tLmFyPgAAAJsi

------ =_NextPart_000_01BC2001.1D056440--
```

2133. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: mxjokine@cc.helsinki.fi
Message-ID: <5ekk1n$pfv@oravannahka.Helsinki.FI>
Source record: 96975
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

David Holstein (holstein@erols.com) wrote:

: > > marine band instead of buying another radio
:
the alinco 2m ht's can just by
: snipping a wire.

: all the unsolicited e-mails from cranky old men who have nothing
: better to do than to tell me this is illegal (which it is not).

I do not believe you, it is illegal. I really hope you will get caught
with your snipped wires and lose you rig and a part of the boat also, as
just happened to a ham in Australia...
MJ

2134. Filter synthesis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970221172601.MAA01869@ladder02.news.aol.com>
Source record: 96976

Anyone with a copy of "Handbook of Modern Filter Synthesis" Author named "SAAL"

Would like a copy, or Publishers name or ISBN number or anything that would help track it down. May be in German or German/English translation.

Thanks in advance

W4ZCB

2135. Re: How do Xtals determine transmitter frequency??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Tim Nagle <timothy.nagle@unisys.com>
Message-ID: <01bc201a$b31d6d60$50783dc0@nagle>
Source record: 96977

Can someone send me a copy of the discussion this refers to? It
aged out of our system before I could read it.

Thanks,

Tim
timothy.nagle@unisys.com

Web Williams <kr4wm@sccoast.net> wrote in article
<MPG.d6ecf5b9382f26989688@news.infoave.net>...
> Excellent treatise! I learned a lot from reading that...
>
> On the off chance that Joel was asking something of a different meaning,
> I offer an explanation from a different perspective:
>
> There are FUNDAMENTAL oscillators and MIXED oscillators. In a fundamental

> circuit, the circuit operates at the same frequency as the crystal. In a
> mixed circuit (more than one crystal to get a "mixed" frequency), there
> exists the fundamental frequency of each crystal, the SUM of the two
> crystal, and the DIFFERENCE between the two crystals. They're usually
> used at the frequency of either the sum or difference, and the offending
> "other" frequencies are filtered away.
>
> i.e. an 8MHz crystal and a 10MHz crystal would produce, for example, both

> 18MHz and 2MHz. (the subject is much more complex than that, but this is
> merely an example...) 73, Web Williams- KR4WM
>

2136. 2C39 Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: mramos@originet.COM.BR
Message-ID: <199702211809.PAA13065@netra02.origin.com.br>
Source record: 96978

Hi:

I read a lot of 2C39 references, but never pay too much attention. But now it's my time: I'm looking for some cavity schemes to one or two 2C39, 1/4 or 1/2 WL. Will be applied at 902/928 and 1296MHz.

Best regards.
Marcus Ramos
PY3CRX

2137. Re: Voltage regulator (7808) question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Jim Devenport <jdevenport@lanl.gov>
Message-ID: <330DD357.34F@lanl.gov>
Source record: 96979

Actually, you can successfully parallel regulator IC's, as outlined in
such application notes as National Semi's Linear Handbook #1, page
1-69. You have to install .2 (!) ohm ballast resistors in the output
legs of each parallelled regulator to prevent one device from "hogging"
all the current. Several years ago we at LANL discovered this to be a
much superior method of getting increased current output to the more
common practice of using 2 or 3 LM195 power transistors in parallel in
the output circuitry. The output transistors turn out to be VERY
sensitive to capacitive coupling between devices, etc, and prone to
oscillation under certain load currents where the parallelled regulators
themselves were much more stable.
Jim

larry kollar wrote:
>
> I have an old laptop computer that needs 8VDC, 1.5A for charging &
> on-grid usage. The AC adapter that came with it works IK, but I
> was considering building a 12VDC adapter for running it in the car
> or for emergency use.
>
> Checking catalogs, I didn't find any 7808s with 1.5A capacity, but
> I have several 1/2A regulators in my junk box. Can I wire three
> of them in parallel to get 1.5A capacity?
>
> Thanks in advance!
> --
> Larry Kollar, Dawsonville GA | *** Hatred is murder *** (1 Jn 3:15)
> lekollar@nyx.net | http://www.nyx.net/~lekollar/
> "So don't try to turn my head away
> Flirtin' with disaster every day"

--
|---|
|Jim Devenport |
|All Standard Disclaimers Disclaimed |
|My views rarely (if ever) reflect those of my employers|
http://nis-www.lanl.gov/~jdport/

2138. Time machine?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: hal <hcking@acssun.pstcc.cc.tn.us>
Message-ID: <Pine.GSO.3.95.970221123723.28560B-100000@acssun>
Source record: 96980
Cross-posted to: rec.radio.amateur.homebrew,comp.protocols.time.ntp,alt.comp.hardware.pc-homebuilt

Does anyone know of a kit or schematics to build a radio time reciver?
Heath had one but I think they've gone the way of all flesh. It was cool
had a serial port for your PC. Any links would be welcomed.

thanks in advance
hal

2139. Re: Chassis punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5ekto9$oft@news1.mnsinc.com>
Source record: 96981

"David Medley" <davemed@postoffice.worldnet.att.net> whistled a happy tune
like:

|>I need a 3/4" chassis punch to work on my R390-A audio mod in accoedance
|>with the description in Electric Radio. Does anyone have one they would
|>like to part with or can you tell me where to buy one?
|>Thanks
|>Dave KI6QE/7
|><davemed@worldnet.att.net>

I am also looking for chassis punches of ANY size here!

Reply ONLY to bry@mnsinc.com

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

2140. LM3361

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: raaf@ibm.uci.agh.edu.pl
Message-ID: <5eku61$h40@galaxy.uci.agh.edu.pl>
Source record: 96982

I try to find some informations about LM3361. It's an oscilator and squelch
etc. use in homemade trancivers 144MHz (430 MHz).
Please, help me to find some pdf's files about it (or another infos).

2141. Linear amplifier- wanted circuit design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: pete@adinet.COM.UY
Message-ID: <199702212013.RAA05048@mail.adinet.com.uy>
Source record: 96983

Wanted: circuit design of a Linear Amplifier for the HF bands, using four 811A tubes.
If you have one or information on where find this circuit, please email to: pete@adinet.com.uy

2142. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Madd DOG <bmoceri@flash.net>
Message-ID: <330DFD45.72D7@flash.net>
Source record: 96984
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Glenn Schultz wrote:
>
> >
> > First of all, this clown is just looking for attention and enjoy's pushing
> > everyones buttons. He is looking for a response from a large group of
> > people, and he got it!
>
> And you are one of the ones who gave it to me.
> What is it about spineless hams that they think they can tell others
> what to do and not do it themselves? Are you German?
>
> > Don't give him the satisfaction of a response
>
> Like you did?
>
> > I really wonder what his daughter, KA1VBQ thinks about
> > Amateur Radio?
>
> She says, "it's boring....I do not relate to them in anyway what so
> ever."
> quoted at 1133 EST. She is a straight A student.
>

Straight A student, who gives a SHIT!!!Im supposed to be impressed?
Damn, I will have to call her for every decision in my life..hehehehe..
Shes a straight A student..Carefull guys, your dealing with the power of
GOD now...Her statements will mean everything now..

> >Does he really hate Amateur Radio that much? I don't think
> > so...His web page has several references, links, etc to Amateur Radio.
>
> Have you READ the references, they are hardly positive.
>
> > He even has some quotes paying homage to CW. Let's see, photo's of him and his
> > daughter with their call signs prominently displayed, callsign search,
> > links to Ham Radio info, and obviously very proud to be an Amateur Radio
> > Operator! At least that's what it looks like from this end!
>
> I do pay homage to CW, it is the one mode where hams get to the point.
> READ the K1OIK reference page.
>

> > So Burt, what's the real story? Are you AND your daughter going to give up
> > your calls?
>
> She wants to give hers up.
>
> Are you going to continue this rediculous thread? If you feel
> > such hatred towards the hobby, why don't you show it on your web page?
>
> Look at the WWW page man, it is all there.
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

2143. Yaesu Radios Memory Hacks and Programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: davidm@hous.inmet.com
Message-ID: <E5yy56.680.0.-s@inmet.camb.inmet.com>
Source record: 96985
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

All:

If anyone is interested I'm looking into developing information about how to program Yaesu radios. I'm especially interested in learning about the FT51R and the FT8500. I want to develope C code that will allow me to program these radios on different platforms. If anyone is interested in this please let me know. Or if you have information to share please let me know.

I wanted to start this last year, but I started some serious course work
in college so this project suffered as did a few others.

+===+
David W. Martin, Engineer
Intermetrics, Inc. - Houston, Texas
Email: davidm@hous.inmet.com
Disclaimer: The opinions expressed herein are mine
and not my employer's. [Amiga 4000 owners unite!]
+===+

2144. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Villy R&#65533;lv&#65533;g <la4gy@online.no>
Message-ID: <330E09F9.26B6@online.no>
Source record: 96986
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Tom@astro.net wrote:
>
> In article <330BFA4C.2BF4@idecc.com>, tim_hynde@idecc.com wrote:
> >Burt Fisher wrote:
> >>
> >> A man went to a guts store to get some guts for dinner. He sees a sign
> >> remarking on the quality of guts offered at this particular gut
> >> store. So he asks the butcher: "How much for Engineer guts?"
> > >
> > >Burt,
> > >
> > >The part that takes guts is to promote this hobby of ours in a positive
> > >way,
> > >bitching and moaning about how bad things are takes NO GUTS AT ALL and
> > >that's
> > >all I've ever seen from your posts. Nothing positive, no creative ideas
> > >just good
> > >ole belly achin.
> > >
> > >Do you have guts Burt?
> >
> > Ignore Burt please. This crap has no place in this newsgroup. Save it for
> > policy or the CB group.
> >
> > Tom
> >
> > E-mail me with the address below, not with the above address.
> > That address is to help stop junk e-mail!
> >
> > Tom Randall Amateur Radio - KB2SMS
> > trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
> > Member: AAVSO Solar Division
> >
> > Opinions herein are mine and may not be that of MHV.NET!
I am looking in to this groups for the first time.
Is this the normal level of discussion on these groups ??
Just want to know, before moving on to more serious groups...
73 de Villy (Will by the way be active from EU-062 next weekend)
--
Villy Rolvaag E-mail: la4gy@online.no
Langneset 10 AX-25 : LA4GY@LA3M.MO.W.NOR.EU
N-8600 Mo i Rana Tel. : +47 75 15 85 90 (priv)
```

Norway Tel. : +47 75 12 96 17 (work)

2145. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5ektla$oft@news1.mnsinc.com>
Source record: 96987
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

adell@planet.net (Steve - KF2TI (Landing, NJ)) whistled a happy tune like:

.and it will be something GREAT!!.
|>a hint...a special event station from a certain town on Cape Cod
|>celebrating the ham who everyone loves to dislike)

ROTFLVVL Steve !! I can't WAIT to see what this is all about!
Will they list this "Burtie's Special Event Station" in QST
as "Celebrating 5 years of obnoxiousness and Stupidity from Cape Cod?"

Maybe they could issue a special QSL. Any suggestions?

2146. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5ejhurcan2@news.mhv.net>
Source record: 96988
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <330BFA4C.2BF4@idecc.com>, tim_hynde@idecc.com wrote:
>Burt Fisher wrote:
>>
>> A man went to a guts store to get some guts for dinner. He sees a sign
>> remarking on the quality of guts offered at this particular gut
>> store. So he asks the butcher: "How much for Engineer guts?"
>
>Burt,
>
>The part that takes guts is to promote this hobby of ours in a positive
>way,
>bitching and moaning about how bad things are takes NO GUTS AT ALL and
>that's
>all I've ever seen from your posts. Nothing positive, no creative ideas
>just good
>ole belly achin.
>
>Do you have guts Burt?

Ignore Burt please. This crap has no place in this newsgroup. Save it for policy or the CB group.

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club / ARRL / 10-10
Member: AAVSO Solar Division

Opinions herein are mine and may not be that of MHV.NET!

2147. Need data for PT 6067&PT6068 transistors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: yu1ol@eunet.YU
Message-ID: <330DF6E8.7D94@eunet.yu>
Source record: 96989

Hi,

I need data for PT6067 and PT6068 transistors.

Tku es vy 73's de YU1OL, Batko

2148. Re: HELP: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: macino <macino@ibm.net>
Message-ID: <330E13A0.BC6@ibm.net>
Source record: 96990
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Siegfried Rambaum wrote:
>
> Who can identify these variable capacitors?
>
> 1 - Cardwell XG-110-XS,
> spacing about 3/16 inches between rotor and stator
>
> 2 - This one does not have a manufacturer's marking that I would
> interpret as a such ... maybe it has and I am just unaware of it
> the modell number is NP-150-DS
> The spacing between stators and rotors are 1/8 of an inch
>
> What are their capacities and what voltage are they rated for?
>
> Thanks for your help
>
> 73 de KB2YVC + DE8FGO, Siegfried

Hi,

If you supply me with the exact spacing, the diameter of the
rotor and the total number of plates, I will calculate the
values with my handy dandy soon to be released program.

Jim W9LZ

2149. Re: Equipment designation on old QSL cards --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: carterg@oeonline.com
Message-ID: <5ekv7s$819@usenet81.supernews.com>
Source record: 96991

In article <5e4ajv$qli@dallas1.connect.net>, philk5pc@connect.net (Phil Clements) says:
>
>In article <jwg6-1002971419010001@cu-dialup-0823.cit.cornell.edu>, jwg6@cornell.edu (Joel Govostes) says:
>>
>>...snip....
>>
>>Question is this:
>>
>> On many of the oldest cards, transmitters and receivers were listed
>>separately (no compact transceivers back then!). BUT they don't give the
>>tube names. All they will have is a set of numbers, separated by hyphens,
>>denoting the circuits used.
>>
>>What do these numbers stand for? Are they prefixes to the tube types or
>>something? How can you tell what the circuit was like just by these sets
>>of numbers?
>>
>>...snip....
>
> Hi, Joel...give some examples and we old coots will take a stab at 'em!
>
> (((73)))
> Phil, K5PC

Well, you're on the right track. The numbers ARE the tube types; (27 and 37 very common for receiving, 45s for transmitting)

73,
Carter
K8VT

2150. Re: LM3361

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-21 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970221162608.13975A-100000@Stratus.CAM.ORG>
Source record: 96992

The LM prefix is for National Semiconductor devices. I don't know if
they make it. The MC3361 is the original, I'm pretty certain. It's
from Motorola. They do have a website, though I don't happen to have
the URL. Use Yahoo.com with "Motorola" as the search word. Or
contact Motorola directly and ask them for the data sheet.

USA:
Motorola Literature Distribution
PO Box 20912
Phoenix, Arizona 85036

Europe:
Motorola Ltd.
European Literature Center
88 Tanners Drive
Blakelands
Milton Keynes
MK14 5BP, England

(I didn't know which country ".pl" refers to)

These addresses are taken from a 1990 data book, so there is always
the possibility that one or both of them have changed.

Michael VE2BVW

On 21 Feb 1997, Rafal Wojtanowski wrote:

>
>
> I try to find some informations about LM3361. It's an oscilator and squelch
> etc. use in homemade trancivers 144MHz (430 MHz).
> Please, help me to find some pdf's files about it (or another infos).
>
>

2151. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Fred <peerenbf@dma.org>
Message-ID: <Pine.LNX.3.95.970222082153.19622B-100000@dmapub.dma.org>
Source record: 96843
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Fri, 21 Feb 1997, Burt Fisher wrote:

> Fred wrote:
> >
> > Burt, Just what are you doing to make ham radio more interesting to the
> > young folks. What are you doing to bring more young folks into the hobby
> > and keep them there??
>
> I show 30 9th graders ham radio every year on the air, they also see the
> ARRL self serving video tape and I talk about the hobby spewing the
> company line.
> And you are doing just what?
>
> > There are many of us out here trying to put
> > the ham back in ham radio and make it fun again, both for us and the young
> > folks. Please quit lumping all hams in one heap and cutting us down. You
> > are the one that gives ham radio a bad name to the non hams that read the
>
> There may be "many" as you say but overall these many are a very small
> percentage.
>
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>
>
Nope, sorry Burt but I am not an ARRL type person. Those of us that work
with the young folks here show them **REAL*** ham radio and not the tripe
that is spouted by some on the news groups or on the HF bands in certain
places. But then I doubt that you would do any differant to lure the
young in as your posts show that you really only do the motions of trying
not put any heart into it. It is plain to see that your love is in the
commercial area. Yup, I was in the commercial area too, I guess if you
call being a chief engineer for a couple of radio stations commercial.
But that is a differant story....And only has enhanced my abilities and
enjoyment of ham radio.

enuff said. end of thread.

Fred Ke8tq

I may not always agree with what you say. But I will defend to the
death your right to say it.

2152. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: vsn@ic.ac.uk
Message-ID: <5en3l3$918@deimos.ee.ic.ac.uk>
Source record: 96844
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

mxjokine@cc.helsinki.fi (Matti A Jokinen) writes:
>
>I do not believe you, it is illegal. I really hope you will get caught
>with your snipped wires and lose you rig and a part of the boat also, as
>just happened to a ham in Australia...

Laws differ in different parts of the world. In the UK possession of an amateur tranceiver is legal whether the owner has an amateur license or not. Totally legal. In fact you can buy them over the counter with no questions asked. Using it is a different question.

--
Vartan

2153. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5en3to$2pi@dfw-ixnews12.ix.netcom.com>
Source record: 96845
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In <330EFED7.20D0@geocities.com> Burt Fisher <burtfisher@geocities.com>
writes:
>
>---
--
> I may not always agree with what you say. But I will defend to the
> death your right to say it.
>
>---
--
>
>The above quote clearly does not apply to Packet SYSOPS, does it?

The right of free speech comes as a bundle with the responsibility of free speech. Since you demonstrate little responsibility yourself it would appear that packet sysops are forced to take responsibility. The pity is that now you will have your electronic tantrums on the news groups. Perhaps if all of those on the news groups who were tired of your spamming were to flood your provider with complaints your provider would take the same action as the packet sysops. Then you could scream your complaints out on the beach.

To answer your as yet unasked question, Yes I would say the above to your face, I just would not fly across the country to do it.

>
>#===============#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#===============#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

2154. Re: HELP: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <5ellbe$dhd@q.seanet.com>
Source record: 96846
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

macino <macino@ibm.net> wrote:

>Siegfried Rambaum wrote:
>>
>> Who can identify these variable capacitors?
>>
>> 1 - Cardwell XG-110-XS,
>> spacing about 3/16 inches between rotor and stator
>>
>> 2 - This one does not have a manufacturer's marking that I would
>> interpret as a such ... maybe it has and I am just unaware of it
>> the modell number is NP-150-DS
>> The spacing between stators and rotors are 1/8 of an inch
>>
>> What are their capacities and what voltage are they rated for?
>>
>> Thanks for your help
>>
>> 73 de KB2YVC + DE8FGO, Siegfried

> Hi,

> If you supply me with the exact spacing, the diameter of the
> rotor and the total number of plates, I will calculate the
> values with my handy dandy soon to be released program.

> Jim W9LZ

Hi All,

This may be done at my page's java applets:
http://www.seanet.com/~rwclark/ham/java/Hamcalc.htm

73's
Richard Clark, KB7QHC

2155. Re: Time machine?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: hal <hcking@acssun.pstcc.cc.tn.us>
Message-ID: <Pine.GSO.3.95.970222110749.11859C-100000@acssun>
Source record: 96847
Cross-posted to: rec.radio.amateur.homebrew,comp.protocols.time.ntp

On 22 Feb 1997, Bob Winingham wrote:

> >Does anyone know of a kit or schematics to build a radio time reciver?
> >had a serial port for your PC ... Heath.....
>
> A GPS unit from your friendly Marine boat store will work better
> and cost less. ALSO The Tripmate unit comes with street Atlas and GPS
> all for about $115-$130
>
I was looking for a project. Thanks hal

2156. Re: 2C39 Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb22.162731.4296@ke4zv.atl.ga.us>
Source record: 96848

In article <199702211809.PAA13065@netra02.origin.com.br> mramos@originet.COM.BR (Marcus Ramos) writes:
>I read a lot of 2C39 references, but never pay too much
>attention. But now it's my time: I'm looking for some
>cavity schemes to one or two 2C39, 1/4 or 1/2 WL. Will
>be applied at 902/928 and 1296MHz.

There are a number of such designs in The ARRL UHF/Microwave Projects Manual, including the famous one by Chip Angle. All the gory mechanical details are shown in drawings and pictures.

Gary

--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

2157. WTB: WESKIT Mdl BN-1 Transceiver (Western Radio)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <330F4C24.46BE@erols.com>
Source record: 96849
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

Now that my KnightKit "Ocean Hopper" and Ameco AC-1 projects
are well underway, it's time for yet another DXpedition into
Nostalgialand.....

The BN-1 is one of a series of small, battery operated, tube radios
(transceivers and receivers) produced by Western Radio of Kearny, NE.
The BN-1 was aimed at the Novice (hence, the "N") and covered
80/40 Meters, was XTAL controlled, and was battery powered
(hence, the "B"). It was available as a BN-1K (kitform) and also
the BN-1A (improved circuitry). The normal small cabinet was
fiberboard material, although a metal case was available for $3.50!!!

The tube was a dual triode (3A5) that served as the XMTR and RCVR.

you started QRP with a single 45 Volt battery
and could work up to QRO with a couple of 90 Volt batteries.

They normally adversized with small (one colum inch) ads in the
back of Electronics Illustrated and Popular Electronics.
The Western Radio (WESKIT) line also included:

Allband Transceiver (BAB-1)
Six Meter Xcvr (BA6-1)
Two Meter Xcvr (BA2-1)
Citizens Band (C27B)
All Band Receiver (BR-1)

If all this nostalgia peaks your interest, Sheldon Wheaton,
KC 0 CW, has a BN-1 illustrated on his web site at:

http://www.sky.net/~swheaton/bn1.html

[[Thanks, Sheldon!]] :-)

I had one of these as a kit (isn't that always the story); but,
traded it to a local radio shop for a batch of SWL books,
(Actually a good deal at the time - before nostalgia set in!)

If you have one of this cute little rigs you'd like to part
with, drop me an E-Mail at: willi6@erols.com

73 Dave K7HMP

2158. Livonia Michigan Radio Club Swap and Shop Feb 23

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Jim Harvey <wb8nbs@ameritech.net>
Message-ID: <330F1FC9.166B@ameritech.net>
Source record: 96850
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.digital,mi.wanted

Dearborn Michigan, February 22, 1997

On Sunday February 23 at 8:00 AM the
Livonia Amateur Radio Club
Presents its 27th annual

SWAP -n- SHOP

Buy or sell Amateur radio gear, computers or
electronic equipment
at the Dearborn Civic Center, Michigan Avenue at Greenfield
(East of Southfield Road, North of I94)
Tickets $5, VE exams by Appointment only
For information, tables or exam seats call (313) 261-5886
Talk-In on 146.52 Sx, or 145.35 Repeate

info and maps on www.larc.mi.org
--
Jim Harvey WB8NBS ac224@detroit.freenet.org
18538 Inkster Amiga Person wb8nbs@ameritech.net
Redford, Mi 48240 LINUX person james.b.harvey@ameritech.com
The only difference between men and boys is the price of their toys.

2159. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <3310229d.1756047@news.airmail.net>
Source record: 96851

"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:

> My personal experience starts above 30MHz.

OK, you're the guy we need to answer the question: "What's the RF
current in the grid?" Can we get this question on "Brain of Britain?"

>what about the cases
>where the amplifier works for tens or hundreds of hours, and then
>suddenly goes bang? What's the trigger mechanism?

That is the whole reason for this thread starting.
Rich thinks it's cosmic rays when it goes bang during idling condx,
parasitics if it goes bang when its operating..
Tom, Joe, and others (including my very own self) believe
defective--or damaged--tubes are at fault.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

2160. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <330f204f.1166162@news.airmail.net>
Source record: 96852

"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:

> My personal experience starts above 30MHz.

OK, you're the guy we need to answer the question: "What's the RF
current in the grid?" Can we get this question on "Brain of Britain?"

>what about the cases
>where the amplifier works for tens or hundreds of hours, and then
>suddenly goes bang? What's the trigger mechanism?

That is the whole reason for this thread starting.
Rich thinks it's cosmic rays when it goes bang during idling condx,
parasitics if it goes bang when its operating..
Tom, Joe, and others (including my very own self) believe
defective--or damaged--tubes are at fault.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

2161. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc20df$c5be2520$85c1e1ce@cstevens.usr.com>
Source record: 96853
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
-----BEGIN PGP SIGNED MESSAGE-----

Michael P. Deignan <kd1hz@anomaly.ideamation.com> wrote in article
<5en1qt$62c@anomaly.ideamation.com>...
> Dana Myers wrote:
> >
> > Well, I admit that my profession is computer science and radio is
> > primarily a pastime for me, but that doesn't lessen my ability to
> > read Volume 47 of the CFR and understand the reasons for type
acceptance.
> > I don't need to own a service monitor and get paid to tweak radios to
do
> > that, do I?
>
> According to Carl Stevenson, unless you own an electronics repair house
> and sit around all day "inventing" new radio stuff, you're not a 'real
ham'.
> You're just a yacker, beeper, or CBer (and multiple combinations
thereof).

No, Mike ... I don't view Dana that way ... I have seen enough of Dana's
postings to realize that there's a mind at work at Dana's QTH ... a
curious,
inquisitive mind that puts forth the effort to LEARN about radio technique
and technology and views ham radio, not as a competitive sport "para los
machos," but a fascinating learning experience. Too bad some of that
doesn't rub off on you, Mike ...

Carl - wa6vse
carl@ais.net

p.s. I've decided to start "signing" selected postings with PGP to prevent
the
forgeries and alterations thereto that various pro-coders have created in
the
past
-----BEGIN PGP SIGNATURE-----
Version: 4.5

iQCVAwUBMw8ibOIP1XFmaCFVAQHh1AP+Pm1QbCgZsJTckyNW/mdOEuj8HiLQK78H
ZmmbTzFgCv26QzIzEJnOeIWczr7TElj2bJ9Ruh0vvNT5DG0X1IIOj/eSfGPmwYV4
tQowqVeGudJJjpeBMZlmX4bcKdfNm37llBi7dfx+Zn4y1xAzsD9gR+3dvVISRd3f
4xeVXtyKmyM=
=L9wK
-----END PGP SIGNATURE-----
```

2162. Amplificador Lineal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: pete@adinet.COM.UY
Message-ID: <1.5.4.16.19970201054715.1a970ec8@adinet.com.uy>
Source record: 96854

Necesito saber como calcular donde van las tomas para las bandas de 15-20-40
y 80 metros, en la bobina tanque (salida) de un amplificador lineal que
utiliza 4 v=E1lvulas 811A.
La bobina consta de dos secciones: una de 4 y 1/2 espiras N=BA 10, 1 1/2 "=
de
di=E1metro y 1 y 1/2" longitud (banda de 10 metros) y luego 13 espiras N=BA=
12
con 2 1/2" di=E1metro y 2" longitud, donde deben ir las tomas para las=
bandas
de 15-20-40 y 80 metros.
Si alguien puede indicarme donde se deben poner las tomas para estas bandas,
favor contactarme.
Saludos.

Nestor
email: pete@adinet.com.uy

2163. Re: _-^-_-^- Anybody know of a mod for the HTX-212??? -_-^-_-^

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: elspider@interl.net
Message-ID: <5em0br$cs3@Mournblade.interl.net>
Source record: 96855
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello everyone,

>>> >A Yaesu FT-2500 will easily do this. The mod is in the Artsci
>>>books- you >just cut a green wire. I've used this rig on the
>>>marine bands with no >problem. Also have done the same with a
>Yaesu FT10 HT. >>
>>> I hope everyone understands this is against FCC regulations.
>>>Amateur tranceivers are not TYPE ACCEPTED for this service.
>>>There are reasons for this. I take it no out of amateur band
(snipping)
>>a warrrant for arrest. The FCC will get a plane ticket and show up
>>to your door and confront you with your e-mail admission. They
>>will search your house and confiscate your radios and computers.
>>So make sure not to admit to violating out of band rules!
>>Jim, N0JD
>That's a good attitude, Jim. Sarcastic, I hope. So what you are
>saying is since we know nobody is looking, it's OK to break all the
>rules, right ??

I think what everybody misses is a point I saw in Popular Communications a
few months ago./

If you're going to use your vhf/uhf rig out of band, e.g. in the marine
band,
have a marine license, even though it isn't type accepted, who's going to
ask which radio you're operating. SAme for gmrs, or other services. If
youy're licensed to use the service, even though your radio isn't type
accepted, you can operate out of band and get away with it. It's kind of
a "DOn't ask, don't tell thing."

73.

Richard, kb0ruu

>73, Jim KH2D

It's always darkest right before you step on the cat.

Net-Tamer V 1.08.1 - Test Drive

2164. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb22.170851.4664@ke4zv.atl.ga.us>
Source record: 96856

In article <measures-ya02408000R2002971212450001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>On page 13.13 of 1995/6/7 editions of *The ARRL Handbook for Radio
>Amateurs*, one of the naysayer-guys said:
>
> "A significant portion of circulating tank current therefore flows through
>the blocking capacitor. As a conservative and very rough rule of thumb,
>the maximum RF current in the blocking capacitor at 28MHz is Ic-block = Ip
>+ 0.15*Cout*Vdc, where Ic-block = maximum RMS current through the blocking
>capacitor, in A. Cout = output capacitance of the output tubes, in pF.
>Vdc = dc plate {anode) voltage, in kV. Ip = dc plate current at full
>output, in A. "
>
>The problem with the formula "Ic-block = Ip + 0.15*Cout*Vdc" is that it is
>algebraicly indeterminate. It could be taken as Ic-block = (Ip +
>0.15)*Cout*Vdc, or it could be taken as Ic-block = Ip + (0.15*Cout*Vdc).
>Given: An 8877 (Cout=11.2pF max.) operating on 28MHz from 4kV at 1A.
>Calculating the maximum current in the DC blocking capacitor, Ic-block =
>51.52A by one formula and Ic-block = 7.72A by the other formula. Which
>answer is right? Apparently, neither. I calculated the current through
>the DC blocking capacitor as approximately 2600v/507 ohms = 5.13a RMS.
>Apparently, we should not expect our "recognized amplifier experts" to be
>algebraically-literate or to understand AC Circuit-Analysis.
> Why has the ARRL allowed this blunder to appear in 3 issues of the ARRL
>Handbook?

Probably because they expect any competent reader to understand
operator precedence in standard equation notation. Multiplication
has a higher precedence than addition, so the parentheses are
unneeded. That is, they are unneeded unless you are algebraically
illiterate and fail to understand AC Circuit Analysis.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

2165. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb22.165326.4485@ke4zv.atl.ga.us>
Source record: 96857

In article <measures-ya02408000R2202970432200001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>In article <1997Feb22.031908.1225@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us >(Gary Coffman) wrote:
>> Now Tom offered a bit more information. The bulk of the 10 pf Rich
>> is using is not capacitance between the grid wires and the plate.
>> So the grid wires don't have to carry even the portion of the tank
>> circulating current assignable to tube output capacitance. Tom offered
>> that the actual capacitance attributable to the grid structure is on
>> the order of 0.1 pf. That immediately looks much better.
>
>I measured the grid to anode C in two 8877s and it was slightly more than
>10pF in each. The Eimac specification sheet is accurate and Tom isn't.
>IMO, self-recognized "experts" are reluctant to admit to anything that
>might errode that which was self-bestowed.

Tell us, Rich, how did you separate the external anode to grid ring structure capacitance from the internal anode to grid wire capacitance in your measurements?

No one is doubting that total output capacitance for the tube is 10 pf. The question of interest is how much of it is attributable to the grid wires? They are rather small diameter, so they wouldn't be expected to make very good capacitor plates. Perhaps you can reassemble one of your disassembled 8877s leaving the grid wires out and measure the capacitance of that. The difference should be the capacitance attributable to the grid wires.

If you are right, there will be virtually no capacitance left with the grid wires removed. If Tom is right, the change will only be about 0.1 pf with the grid wires removed. Simply looking at the tube outline drawings, it is apparent that there should be some capacitance between the external anode and external grid ring. The geometry makes it a bit hard to calculate what that would be using a simple two plate formula, but it appears to be more than negligible. You have what is needed to settle this. Make the measurement without grid wires and get back to us.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

2166. source for S-AV7 or S-AV17 for ARRL 2m brick amp ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: nprogres@aol.com
Message-ID: <19970222175600.MAA22531@ladder02.news.aol.com>
Source record: 96858

I am looking for a source of either of the above power modules. So far I have had no luck in location them and would really like to build the amp . If you know of a dealer that sells them please let me know. Thanks.

2167. DTMF decoder ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: nprogres@aol.com
Message-ID: <19970222175700.MAA22757@ladder02.news.aol.com>
Source record: 96859

Anyone know where I might find info on building a DTMF decoder that could be connected to a radio or scanner ? Thanks.

2168. Re: Chassis punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: dhhogan@lightside.com
Message-ID: <330f30bf.323947@netnews.lightside.com>
Source record: 96860

Dave for sizes 3/4" and under I use a set UNIBITS. They
drill holes 1/8" to 3/4" and chamfer them. The holes
look like they are punched.

MSC, 800-645-7279 abot $50.00 for a 3 bit set.

Dan Hogan WA6PBY
dhhogan@lightside.com

2169. HF computer-remote control

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: joe haas <joeh@rollanet.org>
Message-ID: <5en64q$a3$1@gamma.rollanet.org>
Source record: 96861

I am searching for computer control specs for Yaesu, Kenwood, or ICOM radios (specifically, the FT-890 or the IC-706). These are the computer commands to change frequency, mode, etc..., on radios so-equiped.

Has anyone found these resources on-line? I have had NO LUCK getting the info from dealers or the big guns direct. I guess you have to buy the radio to get the docs...but I don't want to spend the $$$ until I know what it will do (I know, I'm crazy).

Thanks,

Joe Haas
ke0ff
joeh@rollanet.org

2170. FS: Centralab pots,switches and shafts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: yerke@csrlink.net
Message-ID: <5endnp$q09$1@news3.microserve.net>
Source record: 96862

I have a cigar box full of new Centralab pots(twelve various values)
on-off switches(eight) and shafts (about fifteen) $16 plus shipping
--
Rick Yerke
42 Williams St.
P.O. Box 392
Moscow Pa. 18444 Phone (717)842-4857 yerke@csrlink.net
USA

2171. B & W 851 sold

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Brian <haberlb@cadvision.com>
Message-ID: <330F3929.1DB0@cadvision.com>
Source record: 96863

The Barker & Williamson model 851 band switching pi-network inductor has
been sold.
Thank you to all that inquired.

2172. Re: Any way to rejuvinate Nickel metal Halide batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: steve100@dircon.co.uk
Message-ID: <330f486a.1835887@news.dircon.co.uk>
Source record: 96864

On 22 Feb 1997 01:18:01 GMT, Bigdad <Bigdad@Rworld.com> wrote:

>The title just about says it all....any way to bring a laptop
>battery back to life? The darned things are so dang expensive.
>
>
I had some success with a microprocessor controlled charging and
conditioning unit from METABO, manufacturer of rechargable cordless
drills. We bought it for the workshops but by hardwiring it, it seems
to do a nice job of ressurecting dead ni-cads.
I understood that NMH cells did not suffer from the dreaded memory
effect, so I wonder why the loss of performance?
****
* steve100@dircon.co.uk *
* *
* M1BJR Plymouth *
****

2173. FS: UHF/Microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: George Keller <gakeller@worldnet.att.net>
Message-ID: <330F5026.23A8@worldnet.att.net>
Source record: 96865

I have a large assortment of like new boards, modules, 1/8" flexible hard
line with SMA connectors on both ends, BNC chassis connectors, various interconnecting cables,etc.

The many boards contain such things as SAWTEK SAW filters of various bandwidths, transitors, IC's, miniture relays, torriods, trimmer capacitors,
filters, modules, etc.

I am selling as a "grab box". If you are a builder, this is a gold mine of
goodies.

I will sell the above for $50 plus $10 shiping.

I also have one have one Hewlett Packard 33314A coaxial switch left. DC to 4 GHz. Will sell for $45 shipped UPS.

One Amplica broad band pre amplifier which works from 1 to 3 GHz perhaps even lower and higher. I only checked it in that range. Letting it go for $25 shipped UPS.

Seller: George Keller W3SAP
Email: gakeller@worldnet.att.net

2174. Spectrum Analyser for Rigs with PC interface.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: dthimm@unix.newnorth.net
Message-ID: <330f22da.7217577@news.newnorth.net>
Source record: 96866

I wrote a program several years ago for the C-64 to make my Yaesu 757
serve as a "Spectrum Analyser" for contesting. I recently converted
it into a windows based program.

Anyway, I am wondering if anyone would be interested in such a
program. (Either the original C-64 program or the WIndows program)

Also, if this interests you and you don't have a Yaesu, but do have
a computer interface to the rig, let me know and I can probably adapt
this program to your rig too.

If there is a reasonable amount of interest, I will make it available
as a downloadable file on my website.

Dan T.
N9IPV
"Robots, Rockets and More!"
http://unix.newnorth.net

2175. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <330f7b54.2957840@netnews.worldnet.att.net>
Source record: 96867

On Sat, 22 Feb 1997 02:56:37 -0800, measures@mail.vcnet.com (R. L.
Measures) wrote:

>The electron-tube engineers who designed, refined and tested the 8877 were
>of the opinion that gold-sputtering from the 8877's grid was due to an
>'oscillation condition'. Have a look at a gold-sputtered 8877 grid through
>a microscope, Gary. You might learn something.

Rich,
Ooooops.

The letter you have was about an 8875, was it not? Foote actually
thanked you for your letter about parasitics, and said the 8875's were
overheated, apparently the result of an oscillation condition.

If you'd like a copy of the letter I can send you one.

73 Tom

2176. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <330f75e5.1566340@netnews.worldnet.att.net>
Source record: 96868

On Sat, 22 Feb 1997 04:32:20 -0800, measures@mail.vcnet.com (R. L. Measures) wrote:

>> Now Tom offered a bit more information. The bulk of the 10 pf Rich
>> is using is not capacitance between the grid wires and the plate.
>> So the grid wires don't have to carry even the portion of the tank
>> circulating current assignable to tube output capacitance. Tom offered
>> that the actual capacitance attributable to the grid structure is on
>> the order of 0.1 pf. That immediately looks much better.
>
>I measured the grid to anode C in two 8877s and it was slightly more than
>10pF in each. The Eimac specification sheet is accurate and Tom isn't.
>IMO, self-recognized "experts" are reluctant to admit to anything that
>might errode that which was self-bestowed.

Actually what I said is NONE of us have any idea how that capacitance is distributed, All ten pF absolutely is not between the grid wires and the anode, and Rich certainly would have no idea how the capacitance is distributed from the perspective of his test bench, even if he uses his sophisticated Q measuring dip meter.

I do have data published by Eimac that indicates the actual grid capacitance is quite low, but the output capacitance is much higher.

In any event, it makes no difference for two reasons:

1.) If Measures is correct, he has just proven that parasitics can't damage the grid. After all, if 41 amperes of displacement induced current won't hurt the grid in continuious operation it is impossible for one of Measure's pathologiocal parasitic oscillations to wipe out that extremely tough grid in a wink of an eye,

2.] If Measures is correct, then the desired operating frequencies drive power can't ever hurt the grid either. So we need no grid protection at all.

Of course this all begs us to explain why Eimac recomments a grid overload system that removes drive with excess grid current, and why they rate Mr. Measures 41 ampere grids at 25 watts dissipation in the 8877, and less than 5 watts in the 3CX800.

The whole 41 ampere argument is placed against the entire world, and even reputes Measure's own claims a "sudden burst of VHF energy can damage the grid".

73 Tom

2177. Re: WTB: 4-1000A CHIMNEY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <330FD818.E8B@mwt.net>
Source record: 96869

NIMSKI1 wrote:
>
> LOOKING FOR A 4-1000A GLASS CHIMNEY. E-MAIL ME AT NIMSKI1@AOL.COM OR
> PHONE AT 508-222-1261 73'S STEVE W1SN

If you can't find a used one, RF Parts in California has them (SK506) for (gulp!) $114.00. (619) 744-0700 or fax at (619) 744-1943.

I have one, but will be using it on a 6M amplifier project.

73, Scott, N0EDV

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

2178. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: kb1gg@juno.COM
Message-ID: <19970113.153308.7695.0.KB1GG@juno.com>
Source record: 96870

unsubscribe

2179. How to be a class ham (not always any oxymoron).

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330F721F.53D4@geocities.com>
Source record: 96871
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Released with the permission of the author who required no editing take
place:
(this is what a person of class and intellect says, it does not
necessarily agree
with me and where he does not he resorts to facts over insults).
Burt

>Hello Burt,
> I just wanted to drop you a note concerning the thread currently running
on the rec.radio.amateur.equipment newsgroup. After ready the many
replies,
flames, etc, I would have to agree with *some* of your comments and
thoughts. I think you have a picture in your minds-eye of the "typical"
ham
operator being a rag-chewing, cigar smoking, foul-mouthed,
over-glorified
CB'er. Though there are MANY that fit that bill, but, I think better
than
half don't fit that desciption. As I'm sure you know, there are many of
us
who do public service such as Skywarn, RACES, ARES, etc. To group those
of
us who do public service with the lids is an unfair condemnation. I
literally put myself at risk when I go out and spot for the weather
service
and don't look at myself as being involved with a hobby at that point,
but
rather, an important part of a system that can and does save lives.
> After looking over your website, following the thread for the past few
days, and reflecting on the garbage I hear on some of the bands, I can't
argue with a good portion of your comments. Many of the respondants have
been very articulate, others have shown that they think with their
southern-most body part. I believe you are a person who is truly
concerned
about the state of Amateur Radio and it's related services. Your
opinions
may not neccessarily be within the mainstream of the hobby, but they do
count, and I respect that. I hope that you can also respect the efforts
of
those of us who DO look at Amateur Radio as a way to help others, and
show
that by doing the service work. We are not all lids, and I hope you can
see

that.
> I decided to send this note to you personally, rather than through the newsgroup, so as to try and get it back to the subject it is supposed to cover. I look forward to your reply, and your thoughts on my comments.
>
>Best Regards,
>
Glenn
10x #68391
N0VYK

interNET ==>> glenn@spacestar.net

Check out the IPL Amateur and Antique Radio Homepage:
http://www.spacestar.net/users/glenn/

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2180. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330F7381.5365@geocities.com>
Source record: 96872
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Gerald Schmitt wrote:

> The right of free speech comes as a bundle with the responsibility of
> free speech. Since you demonstrate little responsibility yourself it
> would appear that packet sysops are forced to take responsibility.

It is curious how would write me nice Email put in public you have to
impress the "boys."

> your spamming were to flood your provider with complaints your provider
> would take the same action as the packet sysops. Then you could scream
> your complaints out on the beach.

What spam? I merely reply to messages AS SENT.
What provider?

> To answer your as yet unasked question, Yes I would say the above to
> your face, I just would not fly across the country to do it.

Why is a guy down the street will not do it either?

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2181. REQ : Circuit FTPs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: ankersr@vossnet.co.uk
Message-ID: <5enqu9$o4s@serv1.vossnet.co.uk>
Source record: 96873

Where can I get a circuit diagram for a simple 6m SSB transceiver?
I have been looking for FTP sites but cannot find any.
73 de 2E1DFM.

2182. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc2113$f2a18c60$050f2399@desktop>
Source record: 96874
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Tom Sharples <sharples@hooked.net> wrote in article
<330BDBA3.22D6@hooked.net>...
> This sort of thing is one of the reasons that all equipment now sold in
> Europe has to be CE compliant- meaning that it not only must not emit
> spurious signals (similar to FCC type B), but also must not be
> *susceptible* to external RF fields, static charges, and so forth. In
> this respect the Europeans are ahead of us.

The 10 V/m and even 100 V/m susceptability requirements are essentially
meaningless. The field from a close HT easily exceeds this.

10,000 V/m would assure protection for safety-critical equipment such as
life support, 1000 V/m
for mission-critical equipment such as cash registers, and maybe 250 V/m
for other stuff would
be much more realistic.

...Peter

2183. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Michael and Jayne Goad <ka4ezy@flinet.com>
Message-ID: <330F56CB.78B2@flinet.com>
Source record: 96875
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:

> Hams are so gutless that none will meet me on the air to discuss my so
> called outrageous views. It is not like I can hit them on the air.

I suspect you are a ham in the tradition of KV4FZ, that notorious personality of the (14.313 MHz) airwaves. Never the less, I would enjoy meeting you on the air sometime, say, on 20 Meter phone in the General class portion of the band. I know you are a cw buff but I think phone would give a bigger audience for you and allows others to make comments more readily. However, if hams are as gutless as you say, there should be few comments.

As far as the facts about Little Leo's are concerned, I am sure you are armed with all sorts of technical data about their compatibility with the existing uses in the bands. However, I would like to know where you got such data because everywhere I go says that such data does not exist.
This is not to say that such data would change my position. I am against any commercial intrusion into the amateur radio allocations, especially the ones that are being fully utilized such as the 2 M and 75 cm bands.

I look forward to your reply.

Sincerely,

Michael Goad
KA4EZY

2184. Re: source for S-AV7 or S-AV17 for ARRL 2m brick amp ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Michael and Jayne Goad <ka4ezy@flinet.com>
Message-ID: <330F5852.61EA@flinet.com>
Source record: 96876

NPROGRES wrote:
>
> I am looking for a source of either of the above power modules. So far I
> have had no luck in location them and would really like to build the amp .
> If you know of a dealer that sells them please let me know. Thanks.

RF Parts Company in San Marcos, CA has both of those. Their sales phone
is 1-800-737-2787. I just bought a S-AV7 from them for my Azden
PCS-4000.

Mike Goad
KA4EZY

2185. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Michael and Jayne Goad <ka4ezy@flinet.com>
Message-ID: <330F4EB7.57EF@flinet.com>
Source record: 96877
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:
>
> Anyone wishing to register opposition for the ARRL/AMSAT submission
> should send a brief e-mail message to wrc97@fcc.gov. The Subject line
> should say "Reference No. ISP-96-005 IWG-2A." A simple statement to this
> effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
> allocation proposal," will be included in the public record and will
> help to drive home the point that there is broad-based approval to well
> conceived 2 metere sharing proposals. It ought to be clear to the FCC
> the public good is poorly served by allowing hams exclusive use of these
> valuable
> frequencies.
>
> Please note! The proposals the League opposes are not FCC proposals, nor
> are
> they endorsed by any other branch of the government. They are industry
> proposals. The League's objective is to falsely demonstrate there is
> broad citizen opposition to the industry proposals.
>
> Additional arguments or evidence also is welcome. Important! Comments
> should
> reach the FCC no later than March 4, 1997!
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

Actually, Burt, your news article has helped me to decide in favor of
sending the FCC an e-mail in SUPPORT of the ARRL's position and to
further encourage every ham I talk with to do the same. If you are so
against amateur radio and all it is and does that you are willing to let
the commercial interests come in and take over (you know they won't be
"shared" for long) two of the most utilized bands we have, why don't you
turn in your license and get out of ham radio all together.

If you believe that protecting the interest of amateur radio is not in
the best interest of the general public, perhaps you should come down
and
talk to some of the victims and rescuers involved in the aftermath of
hurricane Andrew in Dade County, FL. Amateur radio's ability to be used

in times of disaster is highly dependent on the bands the little leo's want. We cannot allow any intrusion on these bands if we are to be useful
to the public in times of emergency.

For the record, I am a communications technician for the fire-rescue department of a local county, so I do have some first hand knowledge of the events following hurricane Andrew and the utilization of amateur radio there prior to the arrival of outside help from FEMA and others. Because of its usefulness, there has been a greater effort by the local governments in south Florida to work with the amateur radio community to ensure that this service will be available in the future. Many agencies now have amateur radio stations in key facilities and have lined up operators to run them in emergencies. Some have provided learning materials for their own personnel who expressed interest in becoming ham radio operators.

I am not sure what your motivation is in backing the little leo's, but I suspect it is financial. What we are talking about here goes way beyond the almighty dollar in my book. I am here to let you and all who read this that we will fight this to the end.

Sincerely,

Michael Goad
KA4EZY

2186. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d795bdf414cfe259897d1@news.planet.net>
Source record: 96878
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <330F56CB.78B2@flinet.com>, ka4ezy@flinet.com says...
> Burt Fisher wrote:
>
> > Hams are so gutless that none will meet me on the air to discuss my so
> > called outrageous views. It is not like I can hit them on the air.
>
> I suspect you are a ham in the tradition of KV4FZ, that notorious
> personality of the (14.313 MHz) airwaves. Never the less, I would enjoy
> meeting you on the air sometime, say, on 20 Meter phone in the General
> class portion of the band. I know you are a cw buff but I think phone
> would give a bigger audience for you and allows others to make comments
> more readily. However, if hams are as gutless as you say, there should
> be few comments.

In actuality, Burt has been invited numerous times to a moderated roundtable type forum on the band and frequency of his choosing. Each time, he is, what is referred to as a no show, thus proving the saying that those who talk the talk (the gut vs gutless scenario) don;t necessarily walk the walk

Look for the Burt special event station to be setup VERY near his home sometime around the end of March. The amateurs of Cape Cod and surrounding areas will be invited to attend this. One special feature will be to show Burt in his true environment. Hopefully, Burt will make an appearance and even work some stations (after all, we will be parked in his neighborhood) We (and there is going to be more than one) will be connected to the Internet and will be demonstrating the public minded Burt to all his neighbors

More details as time progresses

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

2187. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Kory Hamzeh <kory@avatar.com>
Message-ID: <Pine.BSI.3.91.970222172337.1843A-100000@avatar.avatar.com>
Source record: 96879
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Sat, 22 Feb 1997, Burt Fisher wrote:

> Kory Hamzeh wrote:
> >
> > Some people could constantly mail bomb his account until his ISP cuts him
> > off. Of course, he could switch to another ISP, and then the mail bombing
> > might start again. However, I'm not recommending such a thing....
>
> Some people coul;d look you up in the call book, rape your wife to see
> your reaction, However, I'm not recommending such a thing....
>

Or your daughter ...

> > But..., its real easy to set up a cron jobs under unix to send it a huge
> > 100k message every five minutes. If 50 people started doing that ...
> > well, you get the pictures.
>
> The sword goes two ways tough guy.
>

Most certainly does....

2188. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330FB6D8.1487@geocities.com>
Source record: 96880
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Michael and Jayne Goad wrote:

> I am not sure what your motivation is in backing the little leo's, but I
> suspect it is financial. What we are talking about here goes way beyond
> the almighty dollar in my book. I am here to let you and all who read
> this that we will fight this to the end.

Your suspicions are wrong.
Fight all you want, it is ATYPICAL of a ham to fight for ANYTHING.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2189. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330FB795.58CF@geocities.com>
Source record: 96881
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Michael and Jayne Goad wrote:

> I suspect you are a ham in the tradition of KV4FZ, that notorious
> personality of the (14.313 MHz) airwaves. Never the less, I would enjoy
> meeting you on the air sometime, say, on 20 Meter phone in the General
> class portion of the band. I know you are a cw buff but I think phone
> would give a bigger audience for you and allows others to make comments
> more readily. However, if hams are as gutless as you say, there should
> be few comments.

I will appear on 20 meter voice and you can gather a crowd as I doubt
you can talk to me without a fan club for support. Hams are as gutless
as I say. If there are comments there will be no calls attached to them.

> As far as the facts about Little Leo's are concerned, I am sure you are
> armed with all sorts of technical data about their compatibility with
> the existing uses in the bands.

I have zero facts except any use has got to be better than loser hams.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2190. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330FB8C5.2A3B@geocities.com>
Source record: 96882
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:

> In actuality, Burt has been invited numerous times to a moderated
> roundtable type forum on the band and frequency of his choosing. Each
> time, he is, what is referred to as a no show, thus proving the saying
> that those who talk the talk (the gut vs gutless scenario) don;t
> necessarily walk the walk

Total bullshit. Tommorow is Sunday let us have a go at it.
I can go on almost ANY band.
Why don't you cite ANY time a ham has accepted my challenge, they always have an excuse, (my rig is packed away, the antenna is down, or just no reply).

> Look for the Burt special event station to be setup VERY near his home
> sometime around the end of March. The amateurs of Cape Cod and
> surrounding areas will be invited to attend this. One special feature
> will be to show Burt in his true environment. Hopefully, Burt will make
> an appearance and even work some stations (after all, we will be parked
> in his neighborhood)

I already told a local ham of your offer. If I am invited I will come.
The local hams despise me more than you do but they have zero guts.

You know I do not hide, you can see AND hear me on my WWW page, can you say the same for any others around here?

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=====================================================================#
```

2191. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Michael and Jayne Goad <ka4ezy@flinet.com>
Message-ID: <330FB0F9.6B35@flinet.com>
Source record: 96883
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:
>
>
> I read somewhere about some guy being a public pain in the ass and
> being subscribed to like 300 "bill me later" subscriptions to
> everything from porn magazines to Forbes. Surely somebody out there
> has a similarly wonderful idea about how to deal with Butt Fisher. If
> he wants to make himself a public figure, then we can treat him as
> such, you know posting details about his formerly private life, what
> kind of undergarments his wife wears, etc. I'd suggest to Butt Fisher
> that life as a private citizen is a little nicer than life as a public
> figure. I think a good argument can be made that his repeated
> controversial postings on USENET already make him a public figure.
> Thoughts?
>

As much as I disagree with Burt Fisher, I think that if any ham radio
operator follows your suggestions then they are no better than the
people
Burt is talking about. We must rise above this.

Mike Goad
KA4EZY

2192. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330FBC7C.2DBE@geocities.com>
Source record: 96884
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Kory Hamzeh wrote:
>
> > > But..., its real easy to set up a cron jobs under unix to send it a huge
> > > 100k message every five minutes. If 50 people started doing that ...
> > > well, you get the pictures.
> >
> > The sword goes two ways tough guy.
> >
>
> Most certainly does....

Shall I visit?

AC6RN HAMZEH, KOUROSH LIC ISU
12-JAN-1996
EXTRA 6217 MELBA AVE LIC EXP
10-JUL-2005
DOB 6-FEB-1965 WOODLAND HILLS CA 91367 LST UPD
12-JAN-1996
(PREVIOUSLY KE6VWO, GENERAL)

Hamzeh, Kourosh K 6217 Melba Ave, Woodland Hills, CA
91367-1520
Phone: (818)884-7503
#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2193. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Michael and Jayne Goad <ka4ezy@flinet.com>
Message-ID: <330FB1B3.E57@flinet.com>
Source record: 96885
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:
>
>
>
> If he wants to make himself a public figure, then we can treat him as
> such, you know posting details about his formerly private life, what
> kind of undergarments his wife wears, etc.
> ...Thoughts?
>

As much as I disagree with Burt Fisher, I think that if any ham radio operator follows your suggestions then they are no better than the people
Burt is talking about. We must rise above this.

Mike Goad
KA4EZY

2194. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: The Bakers <mbaker@monmouth.com>
Message-ID: <330FC081.2643@monmouth.com>
Source record: 96886
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:
>
> (however, that will change towards the end of
> March..more on that as time progresses..and it will be something GREAT!!.
> a hint...a special event station from a certain town on Cape Cod
> celebrating the ham who everyone loves to dislike)
>
What a great idea! Will you operate on the beachfront road in
Hyannisport down by the actual Kennedy compound? Will Senator Kennedy
stop by in person to chat with everyone?

Oh, you mean "ham" as in Amateur Radio?

Never mind.....

2195. Re: Haw do I calculate a coil for 100 Mhz ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: "Douglas \"Lonely Planet Boy\" Shawhan" <lysdexia@evansville.net>
Message-ID: <Pine.SOL.3.91.970222215049.8833D-100000@world.evansville.net>
Source record: 96887

On Sat, 22 Feb 1997, Jan Axing wrote:
> > Can somone calculate for me an coil at 50 Ohm at 100 Mhz.
> >
> > What diameter, and haw many turns, and thikness of the wire ?
>
> I suppose you want a coil whose reactance is 50 ohm at 100 MHz.
> That will be around 80 nH of inductance. Try 5 turns of 0.7 mm
> wire with 5 mm inner diameter and just over 7 mm long.
> ---
> Jan, SM5GNN
> Linkoping, Sweden
>
>

Jan and everybody else who has made their own coils:

Can you suggest a good, inexspensive reference for winding coils? I have seen many neat schema that require "twisting yer own" but have never found easy-to understand instructions.... Please don't direct me to the ARRL handbook! I have gotten them from the library and they seem more geared toward someone who:

A. Has a ton of time
B. A ton of money
C. Wants to buy _their_ kits!

(asbestos shorts are now on....)

Thank you kindly.

d

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2196. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5elm3c$15@news.Hawaii.Edu>
Source record: 96888
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

As a former California firefighter I feel qualified in respectfully
saying that kr4wm's comments below are just horse poop.

kr4wm@sccoast.net wrote

>I am a career firefighter. I work in a <paid> department, and do it for a
>living. I'm not some yahoo volunteer out to make a name for myself by
>doing stupid things.

Save the rivalry for the FIRE-L newsgroup; you know full well that over
75% of our nation's firefighters are volunteer/paid-call. I won't allow
you to degrade over 3/4 of our country's firemen.

>When I got my amateur license, it was then that I found out that
>certain ham radios could be modified to work out-of-band. At the time,
>our department was stiffed for funds, and occasionally, some of us would
>be inside a burning building with no way to communicate with the outside
>(lack of radios).

No excuse for using a 2m HT. Daily I see very good prices on Motorola
HTs on rec.radio.swap; just last week someone had 100 Mot HTs for
VHF-hi going for $25 each (see below). And resellers such as Tele-Path
have excellent prices on used gear, too. Once single fund-raiser would
have earned your department enough money to go the legal route.

Here's an example from rec.radio.swap:

Subject: Re: Motorola walkie-talkies for sale: $25.00 each
Newsgroups: rec.radio.swap
Radioshop@aol.com wrote:
>Quantity available 30: Motorola HT-220, 1 channel, 4 watt, $25.00 each.

What's your department's class rating? It must be very bad (which trans-
lates to expensive fire insurance for your community's residents) if
your comms are lacking as you say.

>It was a godsend that I obtained permission from our
>department's chief to use my amateur HT and mobile to transmit on the
>fire department frequencies!

Did you explain to him you were endangering your department's license?
Did you explain to him that modified amateur equipment might interfere
with other services and thus possibly endanger lives?
Did you explain to him that your amateur HT is not built to commercial
standards and might fail due to the heat of fire?
Did you explain to him that your HT is frequency agile and a slight

bump during firefighting might result in a change of frequency?

Regarding these last to points, having an HT gives one more of a
sense of security during a fire and thus, you might place yourself
further "into it" than if you didn't have the radio. Failure due
to heat or freq'y change have now placed you in greater danger
than if you didn't have any HT at all (you probably wouldn't have
gone as deeply into the structure).

The fire radio service was created for you and your department's safety.
Very high standards (e.g. NFPA) are set for comm gear; don't endanger
yourself and those depending upon you by being so thrifty/lazy.

> I've
>also used my mobile rig when I was off-duty to call the F.D. Dispatcher
>and inform them of auto accidents that may have gone unreported for long
>periods of time.

Still no justification for not going the legal route. The proper gear is
out there and a very reasonable price.

>Or to let them know that no emergency response was
>necessary, saving the wear and tear on our engines. At $700 per run, it
>adds up. Yes, all things considered, it costs about $700 to put a fire
>truck in the street for EACH CALL!

The your department needs a new fiscal officer. Even if you include
depreciation, fuel, engine and pump wear, et cetera, it should be
far below $700/run. Please document how you arrived at that figure
(and don't include FF salaries - that's a cost to the department
regardless of the number of runs).

> 73, Web Williams, KR4WM, City of Myrtle Beach Fire
>Department, Myrtle Beach, SC

73,
Jeff KH2PZ (former Fireman II for City of San Clemente, and Calif.
Division of Forestry)

P.S. I'd say it's about time to petition manufacturers to design
amateur-only radios; the major benefit would be better performance.

2197. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: bbeford@cyberportal.net
Message-ID: <331006de.1435008@news.monad.net>
Source record: 96889
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Sat, 22 Feb 1997 09:12:39 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>---
> I may not always agree with what you say. But I will defend to the
> death your right to say it.
>
>---
>
>The above quote clearly does not apply to Packet SYSOPS, does it?
>
Not so long as the FCC holds them responsible for message content
transmitted through their systems. Besides, I don't mind you speaking
your opinions, but not over my radios.

2198. audio base band tapping

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: victor <vicjong@pi.net>
Message-ID: <330F1D2D.3F5A@pi.net>
Source record: 96890

how to tap audio base band from a AOR8000

thanks

Vic

2199. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: rb@cyberhighway.net*
Message-ID: <330ebb1d.116856396@news.cyberhighway.net>
Source record: 96891
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Thu, 20 Feb 1997 09:15:58 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>It takes guts to kiss ass?
>Thatr is what hams are experts at.

Burt,

You call yourself a teacher? A mentor entrusted to help shape the minds of our young children? Heaven forbid, a roll model? By your posts you have proven that you are incredibly opinionated, not above using foul language in an open forum of mutual learning that is easily accesable by curious young minds, you point your "holier-than-thou" finger at Amateur Radio Operators and seem to have no problem speaking ill-will of this group of human beings. Can you tell me just what exactly it is that makes you a better person than any of these people you speak so poorly of? I am an Amateur Radio Operator myself and I take great pride in it, I also pride myself on being a volunteer interpreter for the deaf, a volunteer for the American Legion, an advocate for the rights of Veterans and the disabled, among other similar interests. I literally volunteer more of my time than I work for a wage, I may be poor but if pride were gold I'm a very rich man.. Can you say that, Burt?

This is America, Burt, and you are by the first ammendment entitled to voice your opinion, but you already know that. I too am an American and am entitled to my opinions and my opinion is that you are a bigot and have no business in the teaching profession if you are incapable of treating other human beings as the equals that they are. In the mean time, I'll be praying for your students..

If you have such a problem with Hams, why not (on the way to church next Sunday) rip up your FCC license into little pieces and go about helping your fellow man in a manner more constructive than the one you have chosen.

John KB7VZL (and darn proud of it)

2200. PA lowpass filters as matching networks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: rohrwerk@pcOnline.com
Message-ID: <rohrwerk-2202971421560001@tsa-p2.pconline.com>
Source record: 96892

A couple of things came together in my recent upgrades to my portable 40/20 meter rig. Its final is based on W1FB's notebooks -- the 5-watt nominal broadband final with a feedback winding through the output transformer. I was using an NTE236 transistor -- rated at 12 watts output in SSB service up to 50 MHz -- and I had lots of problems getting more than 3.5 watts output on 20 meters, when I could easily get 9 watts on 40. Now of course these amps won't be totally flat even with feedback, but I thought this was not too good, so I proceeded to dig deeper.

Surprise! Even a hefty driving power (up to 1 watt!) did not push that durned transistor beyond 3.5 watts! The original driver was a 2N3866 with feedback... the new one was a 2N3553 with hefty idling current (from "Solid State Design...") which would go to about a watt if you weren't concerned about perfect linearity.

Well, the big thing I had forgotten was a capacitor at the transistor output to suppress those little VHF parasitics! Sure enough, 200 pF let me soar right up to 9 watts at 20 meters with the hefty driver.

This was fine when watching the unfiltered output on my scope into a dummy load. But... now why the heck am I back down to 4 watts when I put that durned lowpass filter back in, I thought? (40 meters was still an FB 9+ watts max...)

After some more headscratching, it dawned on me that all impedance matching with a broadband transformer is an approximation .. and I also surmised that impedances might remotely be different at different frequencies... and I remember Wayne Burdick mentioning how folks got tons more output in their Sierras by squeezing/stretching the turns on their output toroids (Dec. 1994 QRPp...)

So, fiddling with the lowpass filter finally maximized the output!
It was a five-element lowpass filter with 2 coils, and adding a turn to the input coil and removing a turn from the output coil let me get finally a full 9+ watts on 20! How did I figure which direction to go? Squeeze the turns and see where the power went. If you squeeze the turns on the toroid and the power goes up, you need more inductance. If you spread 'em, and the power goes up, you need less. And verse visa -- er, vice versa...

Lacking instruments and energy to make full impedance measurements, from the evidence above I conclude that the actual PA impedance at 20 meters is somewhat higher than 50 ohms, since a lot of older projects in QRP Classics or such use lowpass filters as matching networks, usually with lower inductance/higher C on the input (less than 50 ohms to match the collector) and higher inductance/lower C on the output (50 ohms)

The moral of the story: a little fine tuning could go a long way toward improving your output and/or efficiency, especially on the higher bands. Just because your kit doesn't provide trimmers on the output networks, don't assume that you can't goose that little final for a bit more.

John Seboldt K0JD
http://www.pconline.com/~rohrwerk/k0jd/

2201. Re: LM3361

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc2055$9fe7aa40$c2c1e1ce@cstevens.usr.com>
Source record: 96904

try the National Semi web site:

http://www.national.com

do a search on the part # .... you'll likely find a .pdf data sheet

73,
Carl - wa6vse
carl@ais.net

Rafal Wojtanowski <raaf@ibm.uci.agh.edu.pl> wrote in article
<5eku61$h40@galaxy.uci.agh.edu.pl>...
>
>
> I try to find some informations about LM3361. It's an oscilator and
squelch
> etc. use in homemade trancivers 144MHz (430 MHz).
> Please, help me to find some pdf's files about it (or another infos).

>

2202. Re: LM3361

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc2055$cb8a9fe0$c2c1e1ce@cstevens.usr.com>
Source record: 96905

the Motorola semi web site is:

http://www.design-net.com

Carl - wa6vse
carl@ais.net

Michael Black <blackm00@CAM.ORG> wrote in article
<Pine.GSO.3.94.970221162608.13975A-100000@Stratus.CAM.ORG>...
> The LM prefix is for National Semiconductor devices. I don't know if
> they make it. The MC3361 is the original, I'm pretty certain. It's
> from Motorola. They do have a website, though I don't happen to have
> the URL. Use Yahoo.com with "Motorola" as the search word. Or
> contact Motorola directly and ask them for the data sheet.
>
> USA:
> Motorola Literature Distribution
> PO Box 20912
> Phoenix, Arizona 85036
>
> Europe:
> Motorola Ltd.
> European Literature Center
> 88 Tanners Drive
> Blakelands
> Milton Keynes
> MK14 5BP, England
>
> (I didn't know which country ".pl" refers to)
>
> These addresses are taken from a 1990 data book, so there is always
> the possibility that one or both of them have changed.
>
> Michael VE2BVW
>
>
> On 21 Feb 1997, Rafal Wojtanowski wrote:
>
> >
> >
> > I try to find some informations about LM3361. It's an oscilator and
squelch
> > etc. use in homemade trancivers 144MHz (430 MHz).
> > Please, help me to find some pdf's files about it (or another infos).

> >
> >
>
>

2203. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <330e4225.1556660@news.airmail.net>
Source record: 96906

"Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
>can someone
>explain why the designers of those amplifiers chose to lift the grids
>above chassis ground
Might have been to get RF inverse feedback. That was a trick used in
the Collins 30L1 and 30S-1 to lower IMD cuz it was real bad back in
the bad old days.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

2204. Any way to rejuvinate Nickel metal Halide batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Bigdad <Bigdad@Rworld.com>
Message-ID: <5elhg9$1sr$2@kirin.wwa.com>
Source record: 96907

The title just about says it all....any way to bring a laptop battery back to life? The darned things are so dang expensive.

2205. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: akent@bga.com
Message-ID: <5elldc$14ec@news3.realtime.net>
Source record: 96908
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

If you want ANY licensed amateur's address and phone number, do a search for QRZ on the web. Once there, you can input the callsign, and instantly get the info you want. Beware, that sometimes weird people use others' callsigns. Please be careful not to flame an innocent bystander in the process.

Good luck, and please think before you act harshly. The net is fun, and some people just are 'that way'.

Kent - de KC5WPW

chainsaw@tfs.net (Bob) wrote:

>Could somebody please post Burt Fisher's home address and telephone
>number on these newsgroups he keeps crossposting to so we can call him
>(like maybe when I'm reading the news at 2:00 A.M.) and tell him what
>we think of his abusive drivel and/or mail him dead rodents and such?

>I read somewhere about some guy being a public pain in the ass and
>being subscribed to like 300 "bill me later" subscriptions to
>everything from porn magazines to Forbes. Surely somebody out there
>has a similarly wonderful idea about how to deal with Butt Fisher. If
>he wants to make himself a public figure, then we can treat him as
>such, you know posting details about his formerly private life, what
>kind of undergarments his wife wears, etc. I'd suggest to Butt Fisher
>that life as a private citizen is a little nicer than life as a public
>figure. I think a good argument can be made that his repeated
>controversial postings on USENET already make him a public figure.
>Thoughts?

>Burt Fisher <burtfisher@geocities.com> wrote:

>>Bob wrote:
>>
>>> Simple: He just refers them to the following newsgroup:
>>> news://alt.radio.pirate
>>> Just because this guy has NEVER been involved in SkyWarn, RACES, ARES, or built his own
>>> repeater network from the ground up, he thinks these things should be left to the
>>> broadcasters, and commercial guys only! He's obviously got the knowledge, and spent
some
>>> time doing some technical things (he's an extra), but he must now be bored.
>>
>>Do not give me that much credit. I takes few brains to pass ANY ham
>>license TODAY.

>>I was in RACES.
>>
>>
>>#================#===#
>>| Burt Fisher | Teacher of video, broadcasting and electronics |
>>| Amateur call | South Dennis, Ma. (Cape Cod) |
>>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>>#================#===#
>>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>>#===#

2206. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb22.020328.803@ke4zv.atl.ga.us>
Source record: 96909

In article <measures-ya02408000R1402970441000001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>
> Is it likely that 100 watts of drive could evaporate gold from an 8877
>grid? Each of the 96 gold-plated rectangular grid wires is 0.85 inches in
>length. Even if half of the drive power could be directed into the grid,
>that works out to 0.52 watts per grid wire. Does this seem likely to be
>enough energy to melt gold?

How can an arc welder melt 1 inch plate steel yet not melt the 1/8th inch diameter steel electrode where it clamps to the welding handpiece? The current flow is the same both places. In fact the current flow is also the same where the cheesy aluminum ground return clamp is attached to the plate steel, but it doesn't even get warm. Kirchhoff's law demands current be the same through every part of the loop.

In any current loop, power dissipation is greatest at the point of greatest resistance to current flow, IE the point of greatest I^2R. The points where electric current has to break free of a surface, or rejoin a surface, are the points of greatest resistance in the cases of the arc welder or a vacuum tube, because of the electron work function of the materials, so dissipation is greatest at element surfaces where they liberate or accept electrons. Thus the plating of such a surface will receive the bulk of the heating.

You see the same thing with boiling water. It takes 7.5 times as much energy to vaporize water as it takes to raise the liquid temperature from 0 C to 100 C. The reason is that Van der Waals forces must be overcome to liberate water vapor. For electric circuits, the corresponding factor is the electron work function of the material. That is exactly equivalent to more mundane electric resistance in regard to current flow.

Note that there is also a "superheat" factor due to acceleration of the electrons in a potential field. This adds a kinetic component to the energy delivered at the target in the same way as superheating steam adds to the pressure delivered to the turbine. This "superheat" factor can be dominant, such as in anode heating of a power tube, or it can be minor, as in the case of the AC arc welder (and I would suggest also in the case of control grid heating of electron tubes, because the accelerating potential is small between cathode and grid, and the distance over which it can act is short).

A 6 kW arc welder and a 6 kW electric resistance heater both consume the same amount of power. In the former case, the power is dissipated

in a concentrated area and melts steel. In the latter case, the same power merely generates a warm glow. You're trying to treat the grid as a resistance heater when it is more like an arc welder in that the bulk of the heating occurs at the surface boundary where the electron work function (and any "superheat") dominates over bulk resistive effects.

In other words, the electron flux in a vacuum tube is the same as the electron flux in an electric welder's arc. The only differences are that typically our amateur power level tubes have a lower electron flux, and the materials with which the flux interacts are much less massive than the large steel plates on which a welder acts. Just as the welder doesn't have to heat the entire mass of the steel plate to the melting point in order to weld, the electron flux in the tube doesn't have to heat the entire mass of a grid wire to melt the gold plating.

Assuming a 20 microinch plating of gold, there are approximately 14.4 micrograms of gold on a grid wire. How much heat do you think it takes to melt 14.4 micrograms of gold? I'd suggest a 100 watt heat flux is more than sufficient when concentrated on that plating.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
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Lawrenceville, GA 30244 | |

2207. Re: Re-Crystal a walkie talkie.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb22.021805.932@ke4zv.atl.ga.us>
Source record: 96910

In article Schembri Joseph Saviour <schemb2@uwindsor.ca> writes:
>This might sound stupid but.... Is it not possible to re-crystal a
>childs walkie talkie to a frequency in the 6m band and even add a slight
>tuning capability. If this is possible could you please Email on how to
>do this....Thanks.

You do it just as you suggest, by changing the crystal and retuning
the multiplier and amplifier stages. If you want a bit of frequency
agility, you'll make the oscillator a VXO by adding a trimmer capacitor
across the crystal. Depending on the multiplication factor, you may
be able to achieve a 50 kHz tuning span. If the oscillator uses an
overtone crystal directly on frequency, tuning range will be less,
perhaps less than 10 kHz.

Gary
--
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Lawrenceville, GA 30244 | |

2208. Re: Chassis punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5elo9n$eh8@mtinsc03.worldnet.att.net>
Source record: 96911

Newark Electronics stocks Greenlee 3/4" punches for $15. They have a
www page, but I don't have the address handy. Try search engine for
<newark> and <avenet> (which I believe now owns newark?)
Your local electrical contractor supply house may also have one.
Usually though, they carry "pipe" sizes (ie: 3/4 pipe => 1" od).
Woody

David Medley wrote:
>
> I need a 3/4" chassis punch to work on my R390-A audio mod in accoedance
> with the description in Electric Radio. Does anyone have one they would
> like to part with or can you tell me where to buy one?
> Thanks
> Dave KI6QE/7
> <davemed@worldnet.att.net>

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2209. Re: Chassis punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: dhhogan@lightside.com
Message-ID: <330fd754.5946235@netnews.lightside.com>
Source record: 96912

Dave for sizes 3/4" and under I use a set UNIBITS. They
drill holes 1/8" to 3/4" and chamfer them. The holes
look like they are punched.

MSC, 800-645-7279 abot $50.00 for a 3 bit set.

Dan Hogan WA6PBY
dhhogan@lightside.com

2210. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb22.031908.1225@ke4zv.atl.ga.us>
Source record: 96913

In article <330cd437.4883579@news.airmail.net> jfriley@airmail.net (J. Fred Riley) writes:
>gary@ke4zv.atl.ga.us (Gary Coffman) wrote:
>
>>Hold the phone. In one breath you accept a RMS plate voltage of 2651,
>>and in the next state it is 250.
>
>No, No. I was looking at the grid-to-cathode voltage necessary to
>swing the voltage down to 250 V to get the drive power. Recollect, he
>said and anode voltage of 4K swinging down to 250. And I was assuming
>an higher power output, noted below.

Ok, you *said* a plate voltage of 250. I understand what you meant now.

>>The tube's plate impedance is...4,685. For the sake of
>>illustration, rounding that to 5,000 should be perfectly fine.
>
>You're right. I calculated the impedance on the maximum power
>available within the tubes ratings, not the legal limit.

Right. We wouldn't want to design an amplifier for a power
above the legal limit now would we? :-)

>I'm not trying to be obtuse but I still don't agree. Here's my
>problem with your analysis: If the voltage on the anode, with respect
>to the chassis is 2600 VRMS and the grid-to-plate capacity is 10 pf,
>then the current is 40 Amps. I cannot view it any other way
>yet--although I'm trying. This nagged at me until I trudged down the
>hall to visit a few of the old timers, telling them of my reluctance
>to believe what was calculated. The unanimous opinion--right or
>wrong--was that the grid RF current is equal to the tank current. And
>that the tank must resonate out the reactance of the tubes internal
>capacity. If the tank resonated out the GP capacity, the circulating
>current in the grid is the tank circulating current plus the output
>current (which is fairly small here). I've tried to look at it as a
>series circuit and can't agree with that approach. I also don't like
>the fact that the operating Q appears to be 75!! That alone makes me
>think my approach might be wrong.

Well, I certainly cannot agree that the grid current is equal to the
tank current. That implies that the grid-plate capacitance is the only
capacitance in the tank circuit. (So what are those bread slicers
doing out there?) This is obviously false. The tube output capacitance,
a portion of which may be attributed to grid-plate capacitance, is in
parallel with the plate tune capacitor. Any circulating tank currents
are shared between the two capacitances in direct ratio to their
cpacitances, IE the larger capacitance hogs the current. Thus the

current in the grid-plate capacitance cannot equal tank circulating current.

Now Tom offered a bit more information. The bulk of the 10 pf Rich is using is not capacitance between the grid wires and the plate. So the grid wires don't have to carry even the portion of the tank circulating current assignable to tube output capacitance. Tom offered that the actual capacitance attributable to the grid structure is on the order of 0.1 pf. That immediately looks much better. That's an impedance of about 6633 ohms, and is shunted by the impedance of the plate tune capacitor, and by the 9.9 pf of tube output capacitance attributable to such things as capacitances between the external anode structure and the external grid ring or the chassis. So the amount of circulating tank current the grid wires have to carry is much less than the 41 amps Rich calculated.

As a first approximation, the grid wires are carrying 0.1/9.9 of the current attributable to the tube output capacitance. And that's further reduced from the total circulating tank current by the ratio of the tube output capacitance to the plate tune capacitor capacitance. So the grid wires are carrying a very small fraction of the 41 amps Rich calculated.

>Gary, if I'm wrong about my analysis I'll be happy to admit my
>mistake. But I think I'm right which, God help us all, means Rich was
>right about the RF current. Not the implications of the current, just
>the current.

Well, I must say my series circuit explanation was flawed. It looked only at currents attributable to the tube dynamic resistance. I neglected to consider the much larger tank circulating current. For that mesh, the grid-plate capacitance is in shunt, not series. Fortunately for us, the shunting capacitances are much larger than the grid-plate capacitance.

Common sense tells us that wires the gauge of the grid wires in an 8877 can't carry 41 amps. Common sense is right, it just took a bit of thrashing to find out why the wires *aren't* carrying 41 amps.

Gary
--
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Lawrenceville, GA 30244 | |

2211. Re: INMARSAT Satellites

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: wb4lnm@aol.com
Message-ID: <19970222043801.XAA21414@ladder02.news.aol.com>
Source record: 96914

There are four operational phase two Inmarsat satellites and currently two operational phase three, with one in testing. The frequencies are in L band, and yes, they are strong. However, if you are looking to monitor these, a great deal of the traffic is now digital, and you won't be able to read it.

John...
WB4LNM

2212. Re: Question on HF mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb22.035747.1436@ke4zv.atl.ga.us>
Source record: 96915
Cross-posted to: es.rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

In article <33106a42.2809794@news.lander.es> jorgegc@lander.es (Jorge) writes:
>
>Dear friends I have one question and want you to help me. I
>own a Icom 706 rig and two sticks for 20 and 40 meters. The
>antennas are Valor Pro-am 3/8" conectors and they provide me
>very good performance when used with a single magnet mount
>on the roof of my 1990 Ford Fiesta car. The problem is that
>I can not use it when moving the car because of the poor
>catch of me magnet mount. I have tried several times to
>mount the aerials in a hatchback mount, but performance and
>SWR are very bad indeed. I donnot know how to improve it or
>how to use it on the move. The aerials are almost 2 meters
>long, half helicoidal half steel stick.
>Also will be wellcome any mods, commnets, improvements or
>anything about the ICOM 706 rig, how much power can it run,
>etc.
>Sorry for my English, thanks for your help.

No problem. I've been there and done that with regard to magmounting antennas for the IC-706. You need one of the heavy duty multiple magnet mounts if you want the antenna to stay on the car in motion. I've used one with 4 magnets and it does stay on the roof. You have to bond the coax shield to the body somewhere nearby, however, because the magnount doesn't have enough capacitance to the body at HF to form an effective counterpoise connection. I used a short piece of braid over to a roof rack screw.

This may also the be bulk of your problem in trying to get the hatch mount to work. You have to have a good electrical bond to the bulk of the car body. You're probably attempting to resonate your coax without realizing it.

There is another problem with mobile in motion for other than a true rooftop mounting. That's the detuning effect of the whip's motion with respect to the body. That can make SWR vary wildly as you drive along. All I can offer in that regard is to guy the mast to prevent such whipping. (This is mostly a problem with bumper mounted antennas, but it can come into play with any body mount. A pure center of rooftop mount is least affected by wind whipping, but even it will show some detuning effect.)

Now on to the subject of the IC-706. Respect the 100 watt output limit. It is a small radio, and souping it up will run into heat dissipation problems. Most of my operation is key down digital operation, and for that I recomend reducing power to 50 watts.

Other than removing the diode to open up HF transmit, I don't know of any HF mods for this radio (and unless you want to drive a wideband transverter, there's no reason to perform that mod, this is not a CB).

There are some worthwhile VHF receiving mods for the radio. The general coverage VHF receive filter can be changed by changing two capacitor values so that you can *actually* have some sensitivity above the 2m band. (You could also cut the yellow wire, but that doesn't work nearly as well.) I don't know of any worthwhile out of band transmit mods for the radio (and would discourage use of such a mod if I knew of one since transmitting out of band is generally illegal).

The radio's preamp is mostly an IMD generator, and I recomend that you leave it off as much as possible. The noise blanker is also pretty pathetic because the noise amp is tapped off too late in the receiver's selectivity chain. That makes it more of a distortion generator rather than a noise blanker. Both of these areas need redesign. I think I know how to fix the noise blanker problem, but I haven't gotten around to doing it. The preamp circuit simply needs to be replaced by a more robust design.

Another caution. Don't operate VHF and HF antennas close to each other on the vehicle. Several people have reported blowing the TR diode in the VHF side by transmitting on HF from an antenna tightly coupled to the VHF antenna. Try to keep them at least 5 feet apart (or more if you can), or use a diplexer with adequate isolation. The problem here is that the VHF output network is a pure lowpass filter, and happily passes the HF energy into the VHF front end. That's only designed to handle 10 watts, and the 100 watt signal can pop the TR diode. (Icom suggests using a heavier diode here if you experience this problem.)

I love this little radio, and it is lots of fun to use mobile, but it isn't perfect (what is?).

Gary
--
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Lawrenceville, GA 30244 | |

2213. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <330e847d.10652340@news.airmail.net>
Source record: 96916

gary@ke4zv.atl.ga.us (Gary Coffman) wrote:
> grid current equal to the
>tank current implies that the grid-plate capacitance is the only
>capacitance in the tank circuit. (So what are those bread slicers
>doing out there?) This is obviously false.

Well, think about it this way. If there is a shunt capacitor bolted directly from anode to ground, the capacitance required to resonate the anode decreases by that amount. And if that shunt capacitor is the dominant reactance (64 Ohms) then we have to resonate it. That means the tuning network must present to the anode a shunt impedance of 4.5k resistance in parallel with +J64. Out tuning capacitor becomes a tuning inductor. If we make tuning reactance lower, say +60 then we can make a plate tuning cap work by making the total capacitve reactance to ground -60. That's the only way it'll work Remember, Gary, we've used a hypothetical here at 250 MHz where things are a bit lopsided.

>The tube output capacitance is in
>parallel with the plate tune capacitor. Any circulating tank currents
>are shared between the two capacitances in direct ratio to their
>cpacitances, IE the larger capacitance hogs the current. Thus the
>current in the grid-plate capacitance cannot equal tank circulating
>current.

IFF we have a plate tuning capacitor. But as shown above, the reactance presented to the anode to resonate it must be inductive, not capacitive.

>Now Tom offered a bit more information. The bulk of the 10 pf Rich
>is using is not capacitance between the grid wires and the plate.
> is on the order of 0.1 pf. That immediately looks much better.

It looks better but it's wrong. Remember them finding that it was the grid-to-cathode capacitance that was .1 pf, not the grid-to-anode capacitance.

>So the grid wires are carrying a very
>small fraction of the 41 amps Rich calculated.

Not if the capacity is 10 pf, which it is. Again,
> Rich was
>right about the RF current. Not the implications of the current, just
>the current.

>Common sense tells us that wires the gauge of the grid wires in
>an 8877 can't carry 41 amps.

That was the problem I had a first. But, remember, the RF current--unlike the DC grid current--causes losses only in the DC resistance of the grid structure. There are lots of wires (to get a u of 200). And, using my 5CX1500B example, you can see that a similarly rated suppressor grid can carries half that current at 100 MHz in service throught the world.

Now, is it practical to build a 3CX1500A7 amp at 250 MHz and have it work? The data sheets suggest that it is. I don't know whether anyone ever has.

All my mentors tell me my analysis is right. I trust Tom's judgement in these matters. Let's let him opine on the subject. Or Ian; he always has a good analytical approach. Or we can submit to binding arbitration. At this moment I would characterize my position on this RF current question as adamantine.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

2214. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: hwatson@erinet.com
Message-ID: <330e8da6.185950918@news.erinet.com>
Source record: 96917
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

>
>> Its called a hobby Burt! Remember!!!!!!!!!
>> Brian
>
>It is a hobby but the silly FCC calls it a service because that is what
>it is SUPPOSED to be.

Burt, this is we will AGREE! I have nothing against the "hobby"
aspect of it, BUT I really dislike people relegating it entirely to a
hobby. I am a member of the Amateur Radio Service and am proud of
that fact. Its when to many of us forget that fact that all these
dire predictions we keep seeing will occur.

2215. Re: Chassis punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Bill C <wrc@tir.com>
Message-ID: <330E9E2B.4944@tir.com>
Source record: 96918

woody white wrote:
>
> Newark Electronics stocks Greenlee 3/4" punches for $15. They have a
> www page, but I don't have the address handy. Try search engine for
> <newark> and <avenet> (which I believe now owns newark?)
> Your local electrical contractor supply house may also have one.
> Usually though, they carry "pipe" sizes (ie: 3/4 pipe => 1" od).
> _Woody_
>
> David Medley wrote:
> >
> > I need a 3/4" chassis punch to work on my R390-A audio mod in accoedance
> > with the description in Electric Radio. Does anyone have one they would
> > like to part with or can you tell me where to buy one?
> > Thanks
> > Dave KI6QE/7
> > <davemed@worldnet.att.net>
>
> --
> de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
> Work: Electron Microscopist/Microanalysist
> Balance: Ham radio "homebrewer", shade tree mechanic,
> '90 Nissan 240SX, wish still had my Mcycle too!
> http://www.geocities.com/capecanaveral/3722
> .
Would you belive...

http://www.newark.com

73,

Bill KU8H
--

Good judgement comes from experience.
Experience comes from bad judgement.

2216. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb22.054905.1965@ke4zv.atl.ga.us>
Source record: 96919

In article <measures-ya02408000R2102970809310001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>In article <330cd437.4883579@news.airmail.net>, jfriley@airmail.net (J. >Fred Riley) wrote:
>
>> gary@ke4zv.atl.ga.us (Gary Coffman) wrote:
>>
>> >Hold the phone. In one breath you accept a RMS plate voltage of 2651, >> >and in the next state it is 250.
>
>Alas, Gary seems to confuse rms voltages and peak voltages. Your chances >of winning the teddy bear are fading fast, Gary.

So, are you saying 250 volts is the peak voltage? Your chances of making sense are fading fast. (I now know what Fred was *trying* to say, but he *did* say a plate voltage of 250.) I don't have a bit of trouble distinguishing between peak and rms values. But they are related by the square root of 2 only for pure sinewaves. In the case of a tube conducting for less than 360 degrees, IE other than Class A operation, that relationship doesn't exist for currents flowing in its elements.

>> No, No. I was looking at the grid-to-cathode voltage necessary to
>...snip...
> I also don't like
>> the fact that the operating Q appears to be 75!! That alone makes me
>> think my approach might be wrong.
>>
>> I'm an eager student. I'm willing to admit to a mistake in logic
>> which it's pointed out.
> ...snip...
>According to the method whereby Eimac® calculates operating tank Q in *Care >and Feeding...*, Q is equal to 2000 ohms divided by the reactance of 10pF >at 250MHz., =2000/63.66.
> Hence, Q=31.

Eimac says (pg 35) that for a pi output network matching to 50 ohms, Q = C1*pi*f*Rl, where C1 is the plate tuning capacitor (including tube output capacitance), f is frequency in Hz, and Rl is the plate impedance. That equates to Q = Rl/Xc1 as you are using it, but you are assuming that the tube output capacitance is the total plate tuning capacitance. That's seriously poor design. So using that formula for that tube at that frequency is misleading at best. A different output network topology would be used for an 8877 in a 250 MHz amplifier so that a realistic loaded Q of 10 to 15 could be achieved. And that would yield a different formula for loaded Q.

Note too that Fred's Q of 75 is approximately right for a legal limit amp with a 4 kV plate supply and a pi output circuit with a C1 of 10 pf because Rl is 4685 ohms in that case, not 2000 as you are using. You wouldn't want to design an illegal amp would you?

All of this is moot in any event because your fundamental assumption that the capacitance between the grid wires and the anode is 10 pf is incorrect. 10 pf is *total* tube output capacitance, and the bulk of that is between the external anode and the external grid ring/chassis.

This has gotten rather far afield from a realistic *HF* amplifier. C1 will be a real physical capacitor in shunt with the tube's output capacitance, so the tube's output capacitance won't be carrying the full tank circulating current anyway. And the output loaded Q will be designed to be a much more reasonable 10 to 15 so tank circulating currents will be much lower in the first place.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

2217. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <PXUg$HAUVrDzEw8z@ifwtech.demon.co.uk>
Source record: 96920

J. Fred Riley wrote:
>
>Now, is it practical to build a 3CX1500A7 amp at 250 MHz and have it
>work? The data sheets suggest that it is. I don't know whether
>anyone ever has.
>
Yes, sure! There was a 220MHz design in the ARRL Handbook for some
years, and it can even be pushed to 432, with full legal-limit output.

>All my mentors tell me my analysis is right. I trust Tom's judgement
>in these matters. Let's let him opine on the subject. Or Ian; he
>always has a good analytical approach.

Maybe I know how to ask qusestions, but I'm a beginner with HF power
amps - which is precisely why I'm following this thread with some
interest. My personal experience starts above 30MHz.

Let me add (out of pure mischief) that a major problem with big VHF/UHF
power amplifiers is that they sometimes go bang without any warning.
This is usually blamed on *HF* parasitics!

Some aspects of this problem are reasonably well understood. It can
happen because a typical capacitively-coupled half-wave input/output
line tends towards an open-circuit at lower frequencies, so the tube is
almost completely unloaded; it also has higher gain.

If the amplifier goes roaring off into oscillation the very first time
it's switched on, or the very first time you hit an unusual combination
of operating conditions, that's fair enough. But what about the cases
where the amplifier works for tens or hundreds of hours, and then
suddenly goes bang? What's the trigger mechanism? Why did "the dog not
bark" until then?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2218. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <330ed2ee.4901349@netnews.worldnet.att.net>
Source record: 96921

On Fri, 21 Feb 1997 08:04:10 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

>R. L. Measures wrote:
>> In 3-500Z amplifiers such as the L4-B, SB-220, and TL-922, one of the 1A
>>grid to ground chokes
>
>Leaving aside the question of what happened next, please can someone
>explain why the designers of those amplifiers chose to lift the grids
>above chassis ground in order to insert the Ig meter?
>
>Is there some hidden advantage, or some hidden problem in rearranging
>the B- circuit to meter grid current with the grids nailed firmly to
>RF/DC ground? Or was it just the "follow-my-leader" effect?
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)

I can answer that first hand Ian.

That method came from Bill Orr, when he tried to copy the system used
in the Collins 30S1 linear PA that used a 4CX1000A PA.

In the 30S1, the grounded screen offered isolation of the anode to
cathode path. That gave the designer freedom to use a high impedance
from the control grid to chassis and effectively tap the control grid
UP on the drive voltage (cathode).

The 30S1's 4CX1000 tube is rated at zero watts control grid
dissipation, and the high control grid impedance did three things.

First, it allowed the drive power to be more evenly distributed to the
screen and control grid.

Second, it created more negative feedback by radising the drivin
impedance of the tube.

Third, the control grid used the ratio of cathode to grid impedance
to grid to ground impedance as a divider. Since the tube was AB1 in
normal operation, grid cathode impedance was dominated by the
capacitance from grid to cathode as one half and grid to chassis
(through a fixed small value cap) as the other half.

If the grid ever drew current, the cathode to grid impedance dropped
like a rock and grid drive was reduced! Instant protection.

The requirements for this circuit to work are the tube must have additional elements that shield the control grid and cathode from the anode (the "floating" or partially floating control gid no longer shields the anode to catode feedback path) and the tube MUST be AB1 in normal operation.

Unfortunately someone tried to apply this to class AB2 triodes, breaking both design rules.

The result is incomplete shielding and a grid that moves all over the place through the RF cycle and other drive level and tuning changes.

That circuit (which Orr calls a super cathode driven circuit) does several bad things. It makes IMD more dependent on tuning, it destabilizes the PA, and it causes gain variation with frequency and grid current. An additional side effect is it allows any anode to grid arc to bias the grid very positive (to the full anode voltage) and couple the surge to the cathode. The surge can come right out the input of the PA and damage the exciter and other components (like the zener diode) in the filament circuit.

The whole system that was wonderful in the 30S1 becomes very unwise in a triode, and foolish in a AB2 triode PA. Grids belong well grounded in triode grounded grid PA's.

In the SB-220, the circuit also sets the PA up for VLF oscillations. The grid chokes become tuned and if the proper amount of filament impedance or anode impedance is presented the 220 can break into a VLF oscillation.

The Collins 30L1 triode is also prone to this (Collins even has a published mod to "detune" the grids), as is the Drake L4B.

The oscillations are repeatable, and I demonstrated to Heathkit they were a potential problem, but at that time I was starting out and Orr was more trusted....so the flawed grid circuit remained.

So you see, the chokes do many bad things, and should be removed and the grids solidly grounded for several good very reasons. Stability and performance improve when the grids are grounded.

73 Tom

2219. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Feb22.103044.2969@ke4zv.atl.ga.us>
Source record: 96922

In article <measures-ya02408000R1902970343340001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>
> The idea that electrons originating from the cathode cause gold to
>evaporate from the grid, but that electrons originating from the anode
>don't cause gold to evaporate, is not plausible---unless there are bad-guys
>electrons and good-guys electrons.

Well, the idea of electrons originating from the anode is pretty strange in its own right, unless you're postulating truly incredible secondary emission from the anode. The cathode is the only bulk electron emitter in a properly functioning vacuum tube.

>Not everything Gary says makes sense to me, Fred. Gary does not seem to
>understand that apparent (AC) current is virtually identical to DC current
>even though no NET displacement of electrons takes place.

Even with AC circuits, it takes two wires to make a light as the old electricians say. There has to be a complete path for the AC currents just the same as there is for DC currents, unless you're postulating radiation as the mechanism for closing the circuit. The only practical difference between AC and DC current flow is that a capacitive reactance can couple AC displacement currents but not DC currents (and an inductance freely passes DC currents but opposes AC currents). That's not at issue. What is at issue is looking at the complete current mesh. Kirchhoff's laws cannot be ignored, whether AC or DC currents are used. The current in a mesh is inversely proportional to the *sum* of the resistances (impedances) around the loop. You can't just apply a potential to one end of a wire and expect current to flow. You have to have a closed current loop. Your grid current calculation ignores the other impedances in the loop, in particular the capacitances in shunt with the grid-plate capacitance.

[Fred said]
>> You have to think about grid heating differently when you're thinking
>> about RF drive power. When the grid is positive it's attracting
>> electrons (heat).
>
>The grid is pretty-much grounded, so its potential is virtually 0V. . The
>grid attracts electons when the cathode is driven negative---i.e., since
>like charges repel, electrons on a negative-potential cathode are repelled
>toward the 0V grid.

Well, because we *define* the grid as the common point in a grounded grid amplifier, it is *by definition* at zero potential. That's because potentials are measured relative to some point, and we've defined that

point to be the grid in this circuit. The potential of any point relative to *itself* is always exactly zero. "Ground" is not an absolute, it is always a matter of convention as to what we call "ground", and it only has meaning relative to some other point.

But zero is a more positive number than any negative number, so the grid is still positive in relation to the cathode. Saying electrons are *repelled* from the cathode is imprecise electrostatic talk. There would be no reason to expect the electron to be *repelled* in any particular direction, IE there would be no reason to expect the electrons to be *repelled* only toward the grid if repulsion is the mechanism.

What we actually have is a potential *field* between cathode and grid, and the electron is compelled to move through that field by the potential *difference* between the two points. We can think of this field as analogous to gravity, with the more positive terminal equating to *down* for an electron in the field. Electrons always move toward the more positive point, and that's why talk of electrons travelling from anode to grid makes no sense at all because the anode is always more positive than the grid.

[Fred said]
>>The amount of amount of heating of the grid is determined by
>> the peak grid-to-cathode voltage and the grid current (~80 Volts @ 1
>> Amp) and the amount of time over the RF cycle that the grid is
>> positive--less than 10%.
>
> The grid draws current when the cathode is negative. The cathode is
>driven negative for somewhat more than 10% of the cycle. Why wouldn't
>grid-heating be determined by RMS values instead of peak values?

It is, but RMS is only peak/1.414 for sinewaves. Since there is an electron flux from cathode to grid for only approximately 10% of a cycle, the flow is not a sinewave. Thus to get RMS you have to perform an integration of electron flux over time. Remember that the definition of RMS says RMS is that equivalent DC voltage which has equal heating value across a pure resistance as the particular AC waveform would have. In the general case for arbitrary waveshapes, integral calculus must be used to determine RMS. Only in the special case of a pure sinewave can we use the square root of 2 as the equivalence function.

>>The grid dissipation, then, is about 7 or 8
>> Watts. That takes into account the reduced gain at 250 MHz; at 25 MHz
>> the grid dissipation, because of the higher gain, drops to 6-7 Watts,
>> all the above assumption remaining true.
>>
>This seems reasonable.
> However, the point of this discourse is: Are we to believe that less
>than 0.5 amperes of DC grid current boils gold off a grid that was designed
>to carry over 40 amperes at 250MHz?

Well, *if* the grid wires were designed to carry 40 amps (they're not), then you might have a point. But since they *aren't* designed to carry 40 amps, and simple inspection and consultation with a wire gauge table would tell you that, your assumption is false.

> Boiling and evaporating gold in a vacuum requires well over 2000 deg. F.
>The engineers who designed the 8877 reportedly concluded that gold
>evaporation was most probably due to an 'oscillation condition'.

That's what *you've* reported. The engineers at Eimac seem to vehemently disagree with that report.

> The total length of the 8877's rectangular grid wires in 0.85 inches x 96
>= 81.6 inches, or 6.8 feet. The circumference of the grid wires is around
>40 thousandths. IMO, in a vacuum, it would take at least 500w to raise
>such to 2000 deg. F.
> I have opened a number of kaput 8877s. I looked at the damaged grids with
>a 50x microscope. IMO, the damage I saw was unlikely to have been caused
>by HF currents. The argument of 0.5A of grid current causing
>gold-evaporation smacks of undiluted technoblather.

Well, using your numbers, the surface area of the grid wires is about 3.24 square inches. If the gold plating is 20 microinches (a common plating depth), then we have a total of 64 millionths of a cubic inch of gold, or 3.9 millionths of a cubic centimeter. Gold masses 19.32 grams per cc, so you have about 75.35 micrograms of gold (I came up with a figure for one wire of 14.4 micrograms earlier, but I didn't have an accurate circumference figure then). The melting point of gold is 1063 C.

It takes 80.89 kj to raise the temperature of 1 kg of gold 1 degree C, or 80.9E-6 joule to raise a microgram 1 degree C, so 75.35 micrograms needs 6.1 millijoules to raise its temperature 1 degree C. And it would take 6.1E-3 * 1063 = 6.48 joules to raise 75.35 mg of gold to the melting point. A joule is a watt*sec, so if we neglect cooling losses due to conduction and radiation, it would take 6.48 watts applied for 1 second to melt *all* the gold plate on the grid wires. Of course we can't neglect conduction and radiation heat losses, so it takes somewhat more power to melt the gold, but nowhere near 500 watts.

The conduction losses are the most significant because the radiation losses for the grid are minimal thanks to the construction of the tube, IE the grid is encapsulated between the hot anode on one hand and the even hotter cathode on the other. To show any net radiative cooling, the grid has to be hotter than the things to which it is attempting to radiate the heat. The grid substrate is tungsten, which is not a particularly good heat conductor for a metal, and the heat path is along the relatively constricted and lengthy path back to the grid ring. So it doesn't take much beyond 6.5 watts to cause the gold to melt.

The heat input is all to the surface, due to electron work function and kinetic effects of electron current flow in the tube (and skin effect for RF currents induced along the grid wires), so the gold has to throw off

the heat at a rate such that the equilibrium temperature remains below
1063 C to avoid becoming molten. This is a nice thermodynamic problem,
and I'll let someone else work out the details, my CRC has already had
a workout tonight.

> I believe that the most likely explanation for the 0.5A/gold-evaporation
>argument is DENIAL of the incontrovertible fact that the 8877 is a high-Mu
>device that is quite capable of oscillating at VHF---unless its VHF voltage
>amplification can be made sufficiently low by reducing the VHF
>parallel-equivalent R load (VHF-Rp) on the 8877's anode.

The lowest possible Rp comes via a RF short between the anode and common.
The current mesh for that is from anode to plate tune capacitor to chassis
and back to the grid contact (the defined common in this circuit). Since
the HF plate tune capacitor is already a very low impedance for VHF currents,
the only place a significant resistance could be added would be in the
plate lead between anode and the plate tune capacitor. Adding resistance
to that lead does increase Rp. And that's exactly what your nichrome wire
does, at all frequencies, not just VHF. (But of course this Rp stuff is
a total misrepresentation of the purpose of a parasitic suppressor.)

> The designer of the MFJ-Ameritron AL-1500 amplifier made no attempt to
>reduce the VHF-Rp load on the 8877's anode

Actually, he did, by avoiding adding extra resistance beyond what was
necessary in the plate lead. As noted above, since the plate tune capacitor
is a very low impedance at VHF, the only significant place in the mesh to
introduce resistance is the plate lead. Using nichrome there raises Rp,
at all frequencies, over using copper or silver plated copper. You get
the lowest possible Rp by using the most highly conductive plate lead
possible.

To oscillate, a stage needs a gain of at least 1 at the frequency of
oscillation. But that isn't a sufficient condition for oscillation,
a feedback path must exist and be such that the feedback is positive
at the frequency of interest as well. The latter is what a parasitic
suppressor really does. It dampens undesired (parallel) resonances
which could allow positive feedback voltages to build above breakeven.
It has nothing to do with Rp, it is a series damper. In your own words,
it lowers VHF Q.

It does that by shunting a portion of the VHF energy through a pure
resistance while not shunting the bulk of HF energy through that
resistance and introducing an unnecessary loss. You could use a
plain resistor as a parasitic suppressor if you wished, but that
would lower efficiency at HF. Using a highly conductive inductor
to shunt HF energy around the resistance improves HF efficiency.

Winding the inductor from nichrome doesn't materially alter the
VHF damping because the shunt R in the suppressor supplies the
necessary damping, and you can adjust that shunt R to get any
value of damping you may require. But the nichrome inductor does

introduce an unnecessary extra loss element at HF where series
damping is neither needed nor wanted.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

2220. Re: Time machine?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Bob Winingham <kc5ejk@onramp.net>
Message-ID: <5elte0$bhu@newsread.onramp.net>
Source record: 96923
Cross-posted to: rec.radio.amateur.homebrew,comp.protocols.time.ntp,alt.comp.hardware.pc-homebuilt

>Does anyone know of a kit or schematics to build a radio time reciver?
>had a serial port for your PC ... Heath.....

A GPS unit from your friendly Marine boat store will work better
and cost less. ALSO The Tripmate unit comes with street Atlas and GPS
all for about $115-$130

73

2221. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2202970256370001@news.vcnet.com>
Source record: 96924

In article <1997Feb22.020328.803@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> In article <measures-ya02408000R1402970441000001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
> >
> > Is it likely that 100 watts of drive could evaporate gold from an 8877
> >grid? Each of the 96 gold-plated rectangular grid wires is 0.85 inches in
> >length. Even if half of the drive power could be directed into the grid,
> >that works out to 0.52 watts per grid wire. Does this seem likely to be
> >enough energy to melt gold?
>
> How can an arc welder melt 1 inch plate steel yet not melt the
> 1/8th inch diameter steel electrode where it clamps to the welding
> handpiece? The current flow is the same both places. In fact the
> current flow is also the same where the cheesy aluminum ground return
> clamp is attached to the plate steel, but it doesn't even get warm.
> Kirchhoff's law demands current be the same through every part of
> the loop.
>
The voltage drop across a metal-vapour arc is on the order of 15v and the voltage drop at the clamp connection to the rod is close to zero volts. Is 400a x 15v more power that 400a x virtually zero volts?

The electron-tube engineers who designed, refined and tested the 8877 were of the opinion that gold-sputtering from the 8877's grid was due to an 'oscillation condition'. Have a look at a gold-sputtered 8877 grid through a microscope, Gary. You might learn something.

--
--Rich-- ag6k, 805-386-3734

2222. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: "William A. Wetzel" <n6rky@pacbell.net>
Message-ID: <330EA9D1.56C3@pacbell.net>
Source record: 96925
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dana Myers wrote:
>
> In article <330C08EF.10BF@pacbell.net>,
> William A. Wetzel <n6rky@pacbell.net> wrote:
> >Gee wiz Dana!
> >
> >Just because you know the difference between CCITT, IEEE, IAB, etc; does
> >that mean you have an IFR and work on radios for a living????
> >
> >Somehow I really wonder about your relevence in this discussion :)
>
> Well, I admit that my profession is computer science and radio is
> primarily a pastime for me, but that doesn't lessen my ability to
> read Volume 47 of the CFR and understand the reasons for type acceptance.
> I don't need to own a service monitor and get paid to tweak radios to do
> that, do I?
>
> If you're trying to bring my credibility into question, please
> explain why.

Dana...

The reason why I did bring this up is because of the fact, that anytime a radio is modified to cover a range of frequencies other than those it was specifically designed to do in both it's receiver and transmitter chains, performance of ALL filters are degraded.

Unless extensive modifications are made to those chains, it's likely that the signal transmitted will lack the spectral purity the radios which are designed for the service would have. As for the receivers? They too would usually would suffer some performance characteristics as well.

Again - it is poor engineering practice to do this.
--
William A. Wetzel
N6RKY@PACBELL.NET
N6RKY@JUNO.COM

2223. Vacuum capacitors for HF-PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: runhan@online.no
Message-ID: <5emkeo$7ov$1@o.online.no>
Source record: 96926

syversen@online.no (Frode Syversen) wrote:

>Hello.
>I vould like to get information where i can buy variable vacuum
>capacitors for my home brew HF- amplifier
>Both PLATE and LOAD capacitors (You know aprox. value for this)
>Any information would be apreciated!
>Thanks in advance.

>please send any info to: syversen@online.no

>73 de LA9WDA Frode

Hei p deg.. Her kommer testen...
Rune

2224. Mini Molex connector spec & source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: nfn04028@naples.net
Message-ID: <856614432.17121@dejanews.com>
Source record: 96927

Does anyone know the a manufacturer's number, or better yet
the Mouser or Digikey stock number of, the female 3 conductor
Molex plug that fits the CAT socket on the back of the FT-757?

Any help will be appreciated

Marty, K1FHR

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2225. Re: Haw do I calculate a coil for 100 Mhz ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Jan Axing <janax@algonet.se>
Message-ID: <330E8F5E.6988@algonet.se>
Source record: 96928

Geert PIRENS wrote:
>
> Hello
>
> Can somone calculate for me an coil at 50 Ohm at 100 Mhz.
>
> What diameter, and haw many turns, and thikness of the wire ?

I suppose you want a coil whose reactance is 50 ohm at 100 MHz.
That will be around 80 nH of inductance. Try 5 turns of 0.7 mm
wire with 5 mm inner diameter and just over 7 mm long.

Jan, SM5GNN
Linkoping, Sweden

2226. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2202970432200001@news.vcnet.com>
Source record: 96929

In article <1997Feb22.031908.1225@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>
> Well, I certainly cannot agree that the grid current is equal to the
> tank current. That implies that the grid-plate capacitance is the only
> capacitance in the tank circuit. (So what are those bread slicers
> doing out there?) This is obviously false. The tube output capacitance,
> a portion of which may be attributed to grid-plate capacitance, is in
> parallel with the plate tune capacitor. Any circulating tank currents
> are shared between the two capacitances in direct ratio to their
> cpacitances, IE the larger capacitance hogs the current. Thus the
> current in the grid-plate capacitance cannot equal tank circulating
> current.

Gary: There is NO 'bread slicer' in a 250MHz 8877 tank circuit. The main tune-C is the anode to grid C of the 8877 itself. The resultant Q is around 30. Thus, virtually all of the tank current circulates through the anode to the grounded-grid. In such amplifiers, the tank L is typically a piece of silver-plated brass tubing that clamps around the anode.
>
> Now Tom offered a bit more information. The bulk of the 10 pf Rich
> is using is not capacitance between the grid wires and the plate.
> So the grid wires don't have to carry even the portion of the tank
> circulating current assignable to tube output capacitance. Tom offered
> that the actual capacitance attributable to the grid structure is on
> the order of 0.1 pf. That immediately looks much better.

I measured the grid to anode C in two 8877s and it was slightly more than 10pF in each. The Eimac specification sheet is accurate and Tom isn't. IMO, self-recognized "experts" are reluctant to admit to anything that might errode that which was self-bestowed.

--
--Rich-- ag6k, 805-386-3734

2227. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EF9C8.FC2@geocities.com>
Source record: 96930
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Madd DOG wrote:

> Straight A student, who gives a SHIT!!!Im supposed to be impressed?
> Damn, I will have to call her for every decision in my life..hehehehe..
> Shes a straight A student..Carefull guys, your dealing with the power of
> GOD now...Her statements will mean everything now..

She also has the guts to use her real name.
Usually the more impressive the handle the more wimpy the user.
That leaves you just where?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2228. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EF94F.60B3@geocities.com>
Source record: 96931
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Brian Carling AF4K/G3XLQ wrote:
>
> ROTFLVVL Steve !! I can't WAIT to see what this is all about!
> Will they list this "Burtie's Special Event Station" in QST
> as "Celebrating 5 years of obnoxiousness and Stupidity from Cape Cod?"

Actually iff there are sufficent numbers maybe the hams there will have
sufficent guts to call me names to my face. Is that what YOU need,
10 hams in back of you while you play tough guy?

Because even if there are 100 hams for me to face I will appear.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2229. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EF8C5.40FD@geocities.com>
Source record: 96932
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Howard Watson wrote:

> Burt, this is we will AGREE! I have nothing against the "hobby"
> aspect of it, BUT I really dislike people relegating it entirely to a
> hobby. I am a member of the Amateur Radio Service and am proud of
> that fact. Its when to many of us forget that fact that all these
> dire predictions we keep seeing will occur.

You can call it God's calling but it is an fact ENTIRELY a hobby.
It serves only the hams, rarely the public.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2230. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EFA66.AF3@geocities.com>
Source record: 96933
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Kory Hamzeh wrote:
>
> Some people could constantly mail bomb his account until his ISP cuts him
> off. Of course, he could switch to another ISP, and then the mail bombing
> might start again. However, I'm not recommending such a thing....

Some people coul;d look you up in the call book, rape your wife to see
your reaction, However, I'm not recommending such a thing....

> But..., its real easy to set up a cron jobs under unix to send it a huge
> 100k message every five minutes. If 50 people started doing that ...
> well, you get the pictures.

The sword goes two ways tough guy.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2231. Re: Vacuum capacitors for HF-PA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5emu5s$saf@mtinsc03.worldnet.att.net>
Source record: 96934

The best place to find vacuum variables is a "hamfest" - if you can...
Will save much money! Caveat Emptor! You might try Fair Radio Sales,
Lima, Ohio, USA or a comercial distrubuter like:
SURCOM ASSOCIATES INC
2215 FARADAY AVE, CARLSBAD, CA 92008-7211
Phone: 619/438-4420; Fax:
Contact: AUGUST LINK
I bet their <new> prices are high????? _Woody_

Rune Hansen wrote:
>
> syversen@online.no (Frode Syversen) wrote:
>
> >Hello.
> >I vould like to get information where i can buy variable vacuum
> >capacitors for my home brew HF- amplifier
> >Both PLATE and LOAD capacitors (You know aprox. value for this)
> >Any information would be apreciated!
> >Thanks in advance.
>
> >please send any info to: syversen@online.no
>
> >73 de LA9WDA Frode
>
> Hei pï¿½ deg.. Her kommer testen...
> Rune

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2232. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EFF34.735E@geocities.com>
Source record: 96935
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Villy Rï¿½lvï¿½g wrote:

> I am looking in to this groups for the first time.
> Is this the normal level of discussion on these groups ??
> Just want to know, before moving on to more serious groups...
> 73 de Villy (Will by the way be active from EU-062 next weekend)

Don't you think the normal level of discussion on these groups is more impressive than on air conversations?

#================#===#
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Amateur call	South Dennis, Ma. (Cape Cod)
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#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2233. The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330EFED7.20D0@geocities.com>
Source record: 96936
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
--------------------------------------------------------------------------
I may not always agree with what you say. But I will defend to the
death your right to say it.

--------------------------------------------------------------------------

The above quote clearly does not apply to Packet SYSOPS, does it?

#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2234. KnightKit "Ocean Hopper" Front Panel Replacements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <330F2CEA.68F1@erols.com>
Source record: 96937
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.shortwave,rec.antiques.radio+phone,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

For those of you out there who are in the midst of a nostalgia trip, restoring an old KnightKit "Ocean Hopper", I've found an excellent source of replacement front panels.

These panels are made of heavy gauge metal with all holes pre-drilled (correctly sized and placed). They were professionally painted and all markings silk-screened by a company that specializes in custom enamel work. The color match and finish is very close to that of a sample "Ocean Hopper".

These panels are available from Dave Ishmael, WA6VVL, noted "Ocean Hopper"
restoral guru, and author of "Vintage Anthology - Book I" and other articles
in various ham and antique radio publications. Dave had these produced to
support his own restoration projects, and was kind enough to have a few extra cranked out for the other "Ocean Hopper" affecianadoes. He only had
a limited number made and only a few of those are left.

Even if you do not have a current "Ocean Hopper" project in the works, it might be worth grabbing one+ while they are available. Both of the "Ocean Hoppers" I have found showed their age on the panels and it would have been difficult to restore back to "as new" on an individual basis.

The other possibility would be to use the front panel as the starting point
for any homebrew regen project - has holes for Main Tune, Bandspread, Antenna
Tuning and Regeneration.

Price is $20 for one, $35 for two, and $45 for three. Post Paid.

* * * UNSOLICITED TESTIMONIAL - Spelling ;-) * * *

I only know Dave by reputation in the "Ocean Hopper" community and from reading his articles. Having a fair idea of what it would cost to have one or two of these done with any quality, I ordered three from Dave. I was extremely impressed by the quality and authenticity of the panels and doubt that Allied Radio did any better back in the 50's. These will save me time and $$$$ on my two restorals! Dave K7HMP

==========
If you are interested, please contact Dave directly:

David W. Ishmael - WA6VVL
2222 Sycamore Avenue
Tsutin, CA 92780

PH: (714) 573-0901

E-MAIL: dave_ishmael@qscaudio.com
==========

2235. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330F0289.68C7@geocities.com>
Source record: 96938
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Kent Farnsworth wrote:

> Good luck, and please think before you act harshly. The net is fun,
> and some people just are 'that way'.

Your advice is wise.
I never claimed to be sane (hi hi?)

```
#===============#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#===============#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=====================================================================#
```

2236. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <330F02FF.1681@geocities.com>
Source record: 96939
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space,comp.unix.solaris,alt.activism,alt.games.doom.ii,,alt.music.celine-di.alt.tasteless.jokes

Bob wrote:
> If
> he wants to make himself a public figure, then we can treat him as
> such, you know posting details about his formerly private life, what
> kind of undergarments his wife wears, etc. I'd suggest to Butt Fisher
> that life as a private citizen is a little nicer than life as a public
> figure.

I am clearly not a public figure as spelled out in libel laws, keep that
in mind.
But if you want to make any true fact about me public, be my guest.
But it must be true and so provable by you.
The sword goes two ways dearest Bob.

AUTHOR PROFILE: chainsaw@tfs.net (Bob)

58 unique articles posted.
Number of articles posted to individual newsgroups (slightly skewed
by cross-postings):
8 alt.comp.periphs.mainboard.tyan
4 comp.sys.ibm.pc.games.flight-sim
3 rec.aviation.simulators
3 rec.models.rc.air
3 rec.radio.amateur.misc
3 rec.radio.scanner
2 alt.comp.periphs.mainboard.asus
2 alt.tasteless.jokes
2 rec.radio.amateur.dx
2 rec.radio.amateur.equipment
2 rec.radio.amateur.policy
2 rec.radio.amateur.space
2 rec.radio.swap
1 alt.activism
1 alt.alt.test
1 alt.games.doom
1 alt.games.doom.ii
1 alt.music.celine-dion
1 comp.dcom.fax
1 comp.periphs.scsi
1 comp.unix.solaris
1 misc.consumers
1 rec.music.makers.guitar.acoustic
1 rec.music.makers.guitar.tablature

1 rec.outdoors.fishing.fly
1 rec.outdoors.rv-travel
1 rec.radio.amateur.antenna
1 rec.radio.amateur.digital.misc
1 sci.geo.satellite-nav
TFSnet Inc (TFS2-DOM)

5700 Broadmoor, Suite 1014
Mission, KS 66202
USA

Domain Name: TFS.NET (WWW?)

Administrative Contact:
Lane, Walt (WL14) wlane@TFS.NET
(913) 262-4638

Technical Contact, Zone Contact:
Ricketts, Joel (JR419) jharvre@TFS.NET
(913) 262-4638 ext. 112

Billing Contact:
Lane, Walt (WL14) wlane@TFS.NET
(913) 262-4638

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2237. Re: Re-Crystal a walkie talkie.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <330F3093.70D6@erols.com>
Source record: 96940

Schembri Joseph Saviour wrote:
>
> This might sound stupid but.... Is it not possible to re-crystal a
> childs walkie talkie to a frequency in the 6m band and even add a slight
> tuning capability. If this is possible could you please Email on how to
> do this....Thanks.
==========
Not a stupid question at all, and the precedent goes
back to the conversion of earlier 11 M. kids walkie-talkies
into the 10 Meter band.

There is an article in June 1980 issue of 73 Magazine on a 6 Meter
conversion. These usually used the older types with regen receivers
and lots of room in the case. Usually just change the xtal and
repeak a coil or capacitor. The one in the article is a Radio Shack
(a/k/a Archer) Model 60-4001.

Some of the newer units may use more sophisticated circuitry with an
Integrated Circuit - may take a little thinking. The biggest challenge
is finding one that you can chase down a schematic for.

Have fun! Dave K7HMP

2238. INFO REQUESTED on Collins Xtal filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: Philip N Butterfield <phil@bugsley.demon.co.uk>
Message-ID: <U4JJ+EAtIwDzEwt2@bugsley.demon.co.uk>
Source record: 96941

Can anyone assist with the input / output impedances or a circuit
schematic using the folowing Collins Xtal Filter :-

Xtal Filter 526 7073 020
Type 455 F300

Your help will make a home brew specialist very happy.
Regards
Phil
G4AAQ

--
Philip N Butterfield

2239. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-22 00:00:00 UTC
From: kd1hz@anomaly.ideamation.com
Message-ID: <5en1qt$62c@anomaly.ideamation.com>
Source record: 96942
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dana Myers wrote:
>
> Well, I admit that my profession is computer science and radio is
> primarily a pastime for me, but that doesn't lessen my ability to
> read Volume 47 of the CFR and understand the reasons for type acceptance.
> I don't need to own a service monitor and get paid to tweak radios to do
> that, do I?

According to Carl Stevenson, unless you own an electronics repair house
and sit around all day "inventing" new radio stuff, you're not a 'real ham'.
You're just a yacker, beeper, or CBer (and multiple combinations thereof).

MD
--
-- Ted Kennedy has killed more people with his car than I have
-- with my guns.
--
-- If you don't like my opinions, that's just too damn bad.

2240. Re: Any way to rejuvinate Nickel metal Halide batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Bigdad <Bigdad@Rworld.com>
Message-ID: <5eo1a7$5uj$1@kirin.wwa.com>
Source record: 96694

steve100@dircon.co.uk (Steve) wrote:
>On 22 Feb 1997 01:18:01 GMT, Bigdad <Bigdad@Rworld.com> wrote:
>
>>The title just about says it all....any way to bring a laptop
>>battery back to life? The darned things are so dang expensive.
>>
>>
>I had some success with a microprocessor controlled charging and
>conditioning unit from METABO, manufacturer of rechargable cordless
>drills. We bought it for the workshops but by hardwiring it, it seems
>to do a nice job of ressurecting dead ni-cads.
>I understood that NMH cells did not suffer from the dreaded memory
>effect, so I wonder why the loss of performance?
>*******************************
>* steve100@dircon.co.uk *
>* *
>* M1BJR Plymouth *
>*******************************

Im really not sure what happened...the battery just refuses to
hold a charge for very long at all. Its in a IBM Thinkpad 500 and
at full charge will last only 15 minutes or so. Looks like im
gonna have to break down and get a new one

2241. Re: Wanted: large ferrite rods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5eo46v$4ad@hpscit.sc.hp.com>
Source record: 96695

In article <01bc2040$2e236a80$427fa98b@sn-glenn.jsc.nasa.gov>,
Glenn Jolly <glenn@snmail.jsc.nasa.gov> wrote:
>Looking for a source of large ferrite rods 12 inches or longer, and 3/4"
>in diameter or larger. Anybody know who still makes these? I don't want
>to cement smaller ones together...
>
>glenn@snmail.jsc.nasa.gov

Did anyone ever make them this large? I'm not aware of this size
ever being made. 8 inches is about the limit, for technology
reasons. There is no big performance penalty due to the inevitable
air (or glue:-) gap, because there is already a large air gap
between the ends. I recently made some ferrite rod antennas by
threading dozens of ferrite beads onto a plastic rod. They were
comparable to antennas made with real rods. If I wanted to make
a killer ferrite rod antenna, I would use 2 inch dia toroids with
smaller ones inserted inside them to plug the hole, and stack them
up to whatever length I needed.

Rick Karlquist
rkarlqu@scd.hp.com
rick@area.com

2242. www.hamradio-online.com: The World's Leading Amateur Radio Web Site Read in 63 Countries

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: vbook@vbook.com
Message-ID: <5eo5od$22u@kanga.accessone.com>
Source record: 96696
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital

Ham Radio Online at http://www.hamradio-online.com is the world's leading amateur radio web site, read in 63 countries around the globe.

If you have not checked us out, stop on by and enjoy. There is always something new. We probably have more Amateur Radio "content" (articles, news, propagation reports and charts, disaster communications situation updates, photos and more) than any other Amateur Radio web site in the world. Hundreds of articles in the archives.

If you've been by, check on back and see what's new. We do updates every few days, sometimes every day depending upon our time.

We run Ham Radio Online as a self-funded, no ads web site devoted to radio communications and telecommunications topics. In spite of our professional appearance, we run the web site as a hobby.

Ed (KF7VY) and Kim (N7VPL) Mitchell
email to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

2243. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: shnews@laser.net
Message-ID: <330e0b0f.1012251@news1.laser.net>
Source record: 96697
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Fri, 21 Feb 1997 10:32:23 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

I still don't know how anyone can "teach" broadcasting.

sean hall/W1SWH

2244. Re: REQ : Circuit FTPs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5eodeb$db7@mtinsc03.worldnet.att.net>
Source record: 96698

While not extremely simple, I have my homebrew 6M transverter (so-so photo and schematic file) posted on my www page. Visit and see if it gives you any ideas...
Schematics for my homebrew 426 Mhz AM ATV transmitter are there as well.

73, _Woody_

Daniel Ankers wrote:
>
> Where can I get a circuit diagram for a simple 6m SSB transceiver?
> I have been looking for FTP sites but cannot find any.
> 73 de 2E1DFM.

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2245. Re: REQ : Circuit FTPs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5eodfi$db7@mtinsc03.worldnet.att.net>
Source record: 96699

While not extremely simple, I have my homebrew 6M transverter (so-so
photo and schematic file) posted on my www page. Visit and see if it
gives you any ideas...
Schematics for my homebrew 426 Mhz AM ATV transmitter are there as well.

73, _Woody_

http://www.geocities.com/capecanaveral/3722

Daniel Ankers wrote:
>
> Where can I get a circuit diagram for a simple 6m SSB transceiver?
> I have been looking for FTP sites but cannot find any.
> 73 de 2E1DFM.

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2246. NMH Batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: d.NOrdquest@juno.COM
Message-ID: <19970222.231147.4455.0.d.nordquest@juno.com>
Source record: 96700

These batteries are supposed to be good for about half the cycles of nicads and have about 25% more power. Before concluding they're exhausted, though, you might want to run them down till the computer shuts off a couple of times. My Compaq docs suggest that the charging may not be complete (or the battery monitor function may not work properly?) if there have been a number of shallow discharge/charge cycles. Anyway, if anyone finds a better way to charge them, I hope they'll post it. Apparently, keeping the heat down during charging is particularly important for these cells.
Dave KE9ED

2247. Re: Time machine?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Bob Winingham <kc5ejk@onramp.net>
Message-ID: <5eois9$t02@newsread.onramp.net>
Source record: 96701
Cross-posted to: rec.radio.amateur.homebrew,comp.protocols.time.ntp

>I was looking for a project. Thanks hal

As long as you wern't looking for FUNDING :-)

Then check out the TAC totally accurate clock project
at www.tapr.org

73

2248. RS 631 specs wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Lars Sinder <Lars.sinder@mbox200.swipnet.se>
Message-ID: <01bc2164$46b5d860$3268f482@win95.swipnet.se>
Source record: 96702

I am looking for data of teh tube RS 631 manufactured by the Telefunken and
AEG companies.
Lars SM5BHF

2249. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2302970142090001@news.vcnet.com>
Source record: 96703

In article <330f204f.1166162@news.airmail.net>, jfriley@airmail.net (J. Fred Riley) wrote:

> "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:
>
> > My personal experience starts above 30MHz.
>
> OK, you're the guy we need to answer the question: "What's the RF
> current in the grid?" Can we get this question on "Brain of Britain?"
>
> >what about the cases
> >where the amplifier works for tens or hundreds of hours, and then
> >suddenly goes bang? What's the trigger mechanism?
>
> That is the whole reason for this thread starting.
> Rich thinks it's cosmic rays when it goes bang during idling condx,
> parasitics if it goes bang when its operating..
> Tom, Joe, and others (including my very own self) believe
> defective--or damaged--tubes are at fault.
>

If internal gas were responsible for the big bang,, Fred, why does the vacuum in grid-to-filament shorted 3-500Zs often appear to be normal during a subsequent check with 8kV applied from anode to grid?

Are defective tubes making amplifiers go bang?
In shorted tubes where the filament helices are not welded to the grid, we have been able to centrifuge the shorted tubes (with the 5v filament operated at about 5.8v) and remove the short. Typically, it takes 40 to 60 seconds at 10g - 11g to straighten the filament. Tubes that we repaired by this method appear to function normally in RF linear amplifier service. We guarantee our work provided that the original vhf parasitic "suppressor" ---that allowed the tube to oscillate in the first place, which resulted in the filament helices being bent---is replaced with a lower VHF-Rp parasitic suppressor design to reduce VHF voltage amplification.

--
--Rich-- ag6k, 805-386-3734

2250. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2302970215020001@news.vcnet.com>
Source record: 96704

In article <330f7b54.2957840@netnews.worldnet.att.net>,
w8jitom@postoffice.worldnet.att.net (Tom Rauch) wrote:
...snip...
> The letter you have was about an 8875, was it not? Foote actually
> thanked you for your letter about parasitics, and said the 8875's were
> overheated, apparently the result of an oscillation condition.
>
> If you'd like a copy of the letter I can send you one.
>
You appear to be confusing Mr. Foote's letter with the telephone
conversation I had with Mr. Foote. The subheading "A brief history of AG6K
and parasitics: " in my *Rebuttal* might lessen your apparent confusion.
If you no longer have the copy ot the Rebuttal I mailed to you, the
Rebuttal is available on my Web site at:
http://www.vcnet.com/measures

--
--Rich-- ag6k, 805-386-3734

2251. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <331041E9.7B08@geocities.com>
Source record: 96705
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Bob wrote:
>
> To all who have seen Burt Fisher's relentless attacks in various newsgroups:
> Don't feel alone. He got a new Packard Bell for christmas and discovered that he could
> try to force his views on more people than if he just stuck to the classroom full of
> ninth graders he's trying to teach broadcasting. I wonder if he still needs help getting
> rid of that bus mouse he doesn't really have?

Actually the 9th graders do not need to hear my views. They have open
minds.
They are far more alive than most hams or ASDers.
I do not have a Packard Bell.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2252. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <TMUX5DALIAEzEwW4@ifwtech.demon.co.uk>
Source record: 96706

R. L. Measures wrote:
>The electron-tube engineers who designed, refined and tested the 8877 were
>of the opinion that gold-sputtering from the 8877's grid was due to an
>'oscillation condition'.

No true. The record of this thread and Rich's own web site shows that
one Eimac employee, Mr Foote, was of that opinion. Current Eimac
employees are of the opposite opinion regarding the 8877.

>Have a look at a gold-sputtered 8877 grid through
>a microscope, Gary. You might learn something.

He would learn that something boiled the gold. He could learn nothing
about the reason why.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2253. Re: 2C39 Amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <TMRXpGAfJAEzEw2Y@ifwtech.demon.co.uk>
Source record: 96707

Gary Coffman wrote:
>>I read a lot of 2C39 references, but never pay too much
>>attention. But now it's my time: I'm looking for some
>>cavity schemes to one or two 2C39, 1/4 or 1/2 WL. Will
>>be applied at 902/928 and 1296MHz.
>
>There are a number of such designs in The ARRL UHF/Microwave
>Projects Manual, including the famous one by Chip Angle. All
>the gory mechanical details are shown in drawings and pictures.

Expect about 150W output, not 250 "as advertised".

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2254. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <331067f9.2004652@netnews.worldnet.att.net>
Source record: 96708

On Sun, 23 Feb 1997 02:15:02 -0800, measures@mail.vcnet.com (R. L. Measures) wrote:

>You appear to be confusing Mr. Foote's letter with the telephone
>conversation I had with Mr. Foote. The subheading "A brief history of AG6K
>and parasitics: " in my *Rebuttal* might lessen your apparent confusion.
>If you no longer have the copy ot the Rebuttal I mailed to you, the

Rich,

Mistakes are often made when verbal conversations are repeated.

For example you confused comments Marvin Born made about a 3CX3000 with a AL-1500 even though Mr. Born swears he was very plain about it. You also stated all or most BC transmitters have marked meters and variacs for the filaments, and that wasn't true. You even misquoted my comments about the surge resistance.

After all those second hand information errors (and many more), the likelyhood your recollection is correct and that you are accurately repeating a conversation from the 80's seems farfetched.

If lowering Rp increases stability, as you claim, the lowest Rp suppressor is a short wide low resistance connection. You never did answer the question "are you telling us removing the suppressor and replacing it with a short will result in the most stable design?".

73 Tom

2255. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <PZfAMVAmRFEzEwk4@ifwtech.demon.co.uk>
Source record: 96709

R. L. Measures wrote (in reply to me and then Fred):

>> >what about the cases
>> >where the amplifier works for tens or hundreds of hours, and then
>> >suddenly goes bang? What's the trigger mechanism?
>>
>> That is the whole reason for this thread starting.
>> Rich thinks it's cosmic rays when it goes bang during idling condx,
>> parasitics if it goes bang when its operating..
>> Tom, Joe, and others (including my very own self) believe
>> defective--or damaged--tubes are at fault.
>>
>If internal gas were responsible for the big bang,, Fred, why does the
>vacuum in grid-to-filament shorted 3-500Zs often appear to be normal during
>a subsequent check with 8kV applied from anode to grid?

Since bangs can happen with or without grid-filament shorts, let's treat
those as a separate issue.

One reason why the vacuum can return to normal after a gas release could
be because, by the time you come to test it, the release has been
cleaned up again by 'getter' action.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2256. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: cj@hth.com
Message-ID: <33105ed8.6220248@news.buller.se>
Source record: 96710
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is going to be posted to the following
mailing lists and news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics.misc
rec.radio.amateur.homebrew

You can also find the latest version on the following URL...

WWW site:

http://www.hth.com/losa.htm

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

[--- cut ---]
```

```
=========================================================================
- L.O.S.A Contribution Form -
=========================================================================
New Contribution [ ] Update [ ]
-------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=========================================================================

[--- cut ---]

/Christer

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

2257. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5epn0u$hob@news1.mnsinc.com>
Source record: 96711
Cross-posted to: alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Bob <pmw5@cornell.edu> whistled a happy tune like:

|>To all who have seen Burt Fisher's relentless attacks in various
newsgroups:
|>Don't feel alone. He got a new Packard Bell for christmas and discovered
that he could
|>try to force his views on more people than if he just stuck to the
classroom full of
|>ninth graders he's trying to teach broadcasting. I wonder if he still
needs help getting
|>rid of that bus mouse he doesn't really have?

|>AUTHOR PROFILE: Burt Fisher <burtfisher@geocities.com>

|> 177 unique articles posted.
|> Number of articles posted to individual newsgroups (skewed by
cross-postings):
|> 69 rec.radio.amateur.misc
|> 51 alt.support.divorce
|> 35 rec.radio.amateur.digital.misc
|> 4 ne.weather
|> 2 comp.sys.ibm.pc.hardware.cd-rom
|> 2 comp.sys.ibm.pc.misc
|> 2 misc.invest.stocks
|> 2 ne.forsale
|> 1 alt.child-support
|> 1 alt.support.diet
|> 1 alt.test
|> 1 comp.sys.ibm.pc.hardware.storage
|> 1 misc.foresale.computers
|> 1 rec.radio.amateur.boatanchors
|> 1 rec.radio.amateur.dx
|> 1 rec.radio.amateur.equipment
|> 1 rec.radio.amateur.policy

Could someone perhaps post his address and phone number here too?
I am sure that a lot of readers would enjoy having them!

2258. Tektronix 603

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970223153900.KAA16801@ladder02.news.aol.com>
Source record: 96712

WTB either original or xerox copy of a service manual for this piece of equipment. (I wonder whatever happens to all those manuals that lost their master.)

W4ZCB

2259. Re: DTMF decoder ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: kj4uo@aol.com
Message-ID: <19970223155200.KAA18750@ladder02.news.aol.com>
Source record: 96713

Try:

http://home.aol.com/pdrunen

for a nice one that connects into the computer. He has other links to
other DTMF products.

73's

2260. I need nicad charger engineering help-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.d7a3907c1c171c989698@news.infoave.net>
Source record: 96714

I read somewhere that using pulsating DC will help to break the formation of crystals inside nicads, which is the primary reason they go bad (the crystals cause internal shorts). If one was to build a battery charger with minimal filtering- thus developing pulsating DC, would you need to consider the peak-to-peak DC voltage, RMS (if there is such a thing with pulsating DC), or average voltage, in calculating charging voltage?
Thanks for any "mentoring", Web- KR4WM

2261. Old diode radio drawings.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Joar Hetland <joarh@netpower.no>
Message-ID: <01bc21a5$eb6de6e0$6d1813c2@louise.netpower.no>
Source record: 96715

Would anyone please send me a drawing of how to make an old diode radio?
Nothing to complicated, just an "easy to undertand" drawing.
Thanks.
joarh@netpower.no

2262. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7a1368ad210bd49897d7@news.planet.net>
Source record: 96716
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <330FB8C5.2A3B@geocities.com>, burtfisher@geocities.com says...
> Tommorow is Sunday let us have a go at it.
> I can go on almost ANY band.
> Why don't you cite ANY time a ham has accepted my challenge, they always
> have an excuse, (my rig is packed away, the antenna is down, or just no
> reply).
>

Better yet BURT.. you choose. Post it here, post it on the NE DX cluster, time and place, I will be there and I am sure many others will be there. If fact, e-mail me a code word so that any Burt wanna-bes how get on the frequency first will be exposed as liars and fabricators

> I already told a local ham of your offer. If I am invited I will come.
> The local hams despise me more than you do but they have zero guts.
>

Excellent, BTW can I set up on your front lawn??? Operating from a car seems a bit difficult/ Very do able, but it would be so much nicer to spread out on a table with electrical power.

> You know I do not hide, you can see AND hear me on my WWW page, can you
> say the same for any others around here?

Never been there. Have read about having to download files to access certain things...a BIG NONO in my book

>
>
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

2263. Re-engineering Henry amp from FM--->ATV HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.d7a3cca10e0d2989699@news.infoave.net>
Source record: 96717

I have a Henry UHF "brick" amplifier, model C40D02 (the 2 may be a 3, hard to see). It's a 1-5 watts in for 40 out amp. It uses one transistor to develop 15 watts, which drives a second transistor to develop 40 watts. It's tuned to 468.xxx. Now the question:

I called Henry, and asked how difficult it would be to re-tune the amp and use it on ATV at 439MHz. I was told that I probably would not have access to the proper equipment to retune it, and I concede to that. He further told me that it would only cost $30 (hard for me to believe they'd do it that cheap!). However, in discussing the problem with our local QRP group, the question arose that it may need biasing to put it in class AB or something like that. So at this point, I'm wondering if the person I spoke with at Henry was really an engineer, or a "customer service" person. Can anyone tell me exactly what would need to be done to convert a UHF amp from FM-commercial-mobile-voice-468MHz to Amateur-ATV-420-to-440 (6MHz wide signal) service? I really only need the basics, but if it gets technical, that's fine too. I just don't know a whole lot about television signals. I have a basic understanding of how to bias/tune amplifiers, but don't know how to apply that knowledge to ATV.

One other question- what would be involved in providing a switching circuit for low 15 watts/ high 40 watts? I've heard that adjustments to the transmitter need to be made each time you switch power levels.

Thanks & 73, Web- KR4WM
(A new ATV'er using a PC Electronics TC70-1)

2264. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <331079b1.6541507@netnews.worldnet.att.net>
Source record: 96718

On Sun, 23 Feb 1997 14:29:58 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

>Since bangs can happen with or without grid-filament shorts, let's treat
>those as a separate issue.
>
>One reason why the vacuum can return to normal after a gas release could
>be because, by the time you come to test it, the release has been
>cleaned up again by 'getter' action.

I've seen that time and time again. I have a 3-500Z on the shelf that
is OK if it's run every week, but will arc if it sits for a month or
two.

If I test it with filament power from a cold start after storage, it
flashes over at 3 or 4 kV. If I let it cook with low anode voltage but
some anode color for a few minutes, it is OK.

Any amplifier I plug it into has "intermittent VHF
parasistics"..... hi,

73 Tom

2265. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2302971009440001@news.vcnet.com>
Source record: 96719

In article <331067f9.2004652@netnews.worldnet.att.net>,
w8jitom@postoffice.worldnet.att.net (Tom Rauch) wrote:

snip...

> If lowering Rp increases stability, as you claim, the lowest Rp
> suppressor is a short wide low resistance connection. You never did
> answer the question "are you telling us removing the suppressor and
> replacing it with a short will result in the most stable design?".
>
Good point, Tom. Thanks for the reminder.

The problem is that the Ls/Rs suppressor is NOT connected between the
anode and chassis-ground. Rs/Ls IS connected to the DC blocking
capacitor, Cb, which is in series with the tune capacitor, C1.. IF Cb and
C1 had no internal VHF resonances, then using a low value of Rs might
result in a reduction of VHF voltage amplification. However, C1 and Cb
have internal resonances.
As I recall, when you replaced Rs with a short, the amplifier exhibited
signs of vhf instability. I have had the same experience. Presumably,
this is why the AL-1500 has a reputation for 8877-consumption. Obviously,
some resistance is needed in Rs to counter the effects of the
aforementioned resonaces. Explaining why mathematically is problematic.
Multiple resonances add a degree of complexity that thoroughly thwarts
circuit-analysis. However, from my experiences, an Rs of 25 ohms to 100
ohms appears to yield a satisfactory result in less than 3kW amplifiers.
For tubes like the 811A, I lean toward 100 ohms for Rs. For more
formidable bottles, fewer ohms seems to do the job. Our
parasitic-oscillation suppressor retrofit kit for the 8877 uses an Rs of 33
ohms.

IMO, a reasonable rule of thumb is to design a suppressor so that roughly
equal amounts of vhf current pass through Ls and Rs at the anode-resonant
frequency.** To further reduce VHF voltage amplification, it is probably a
good idea to replace all of the silver (and Cu) straps in the
anode-resonant circuit with something a bit more resistive. I prefer to
replace silver strap with two, unequal-length parallel Ni-Cr-Fe wires
spaced about the same width as the strap. This treatment is often
necessary in order to stabilize the TL-922 and the Henry 3K-A.

** However, Ls must not contain so much inductance that the voltage drop
across it at 29MHz causes Rs to be destroyed by excess dissipation. OTOH,
if Rs runs cool at 29MHz, it is unlikely that there will be much
suppressing going on at vhf. [for further information, see the March,1989
issue of QST magazine]

--
--Rich-- ag6k, 805-386-3734

2266. FS: Kenwood YK-455C-1 500Hz Mech.Filter for Ts140/680

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <331089b8.1893812@news.interbusiness.it>
Source record: 96720
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 80 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

2267. WTS 7609 (4X150D) (have some unused and need some 4CX300A)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <3310442B.3C28@atl.org>
Source record: 96721
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have some unused 7609 = 4x150D (26.5V fil)
and need some 4cx300As.

Also have an unused 814.

-bob

2268. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <3310a3b9.4484601@news.ma.ultranet.com>
Source record: 96722
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Fri, 21 Feb 1997 16:25:28 -0800, Kory Hamzeh <kory@avatar.com>
wrote:

>
>
>On Fri, 21 Feb 1997, Steve - KF2TI wrote:
>
>> In article <Pine.LNX.3.95.970220172221.10495B-100000@dmapub.dma.org>,
>> peerenbf@dma.org says...
>> > If you come to Dayton this year look me up. The
>> > Consolidated Electronics Booth as I work for them and get stuck there for
>> > the three days.
>>
>> Unfortunately or fortunately (depending on your point of view), the man
>> who challenges others intestinal fortitude wouldn't have the guts to face
>> the very group(s) of people he so easily insults. It's far easier to
>> insult from a distance (however, that will change towards the end of
>> March..more on that as time progresses..and it will be something GREAT!!.
>> a hint...a special event station from a certain town on Cape Cod
>> celebrating the ham who everyone loves to dislike)
>>
>>
>
>Some people could constantly mail bomb his account until his ISP cuts him
>off. Of course, he could switch to another ISP, and then the mail bombing
>might start again. However, I'm not recommending such a thing....
>
>But..., its real easy to set up a cron jobs under unix to send it a huge
>100k message every five minutes. If 50 people started doing that ...
>well, you get the pictures.
>
>Kory
>AC6RN
>

The true spirit of Amateur Radio shows itsef.

****
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
****

.

2269. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: onbelay@ma.ultranet.com
Message-ID: <3310a405.4560478@news.ma.ultranet.com>
Source record: 96723
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Sat, 22 Feb 1997 22:58:57 -0500, The Bakers <mbaker@monmouth.com>
wrote:

>Steve - KF2TI (Landing, NJ) wrote:
>>
>> (however, that will change towards the end of
>> March..more on that as time progresses..and it will be something GREAT!!.
>> a hint...a special event station from a certain town on Cape Cod
>> celebrating the ham who everyone loves to dislike)
>>
>What a great idea! Will you operate on the beachfront road in
>Hyannisport down by the actual Kennedy compound? Will Senator Kennedy
>stop by in person to chat with everyone?
>

Depends on how much booze is there.

>Oh, you mean "ham" as in Amateur Radio?
>
>Never mind........

```
**************************************************************
* onbelay@ma.ultranet.com *
* *
* Mark Schneider, WI1W http://www.ultranet.com/~onbelay *
* Manchester, NH *
**************************************************************
```
.

2270. Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5eq7pk$fua@abyss.West.Sun.COM>
Source record: 96724
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <330EA9D1.56C3@pacbell.net>,
William A. Wetzel <n6rky@pacbell.net> wrote:
>Dana Myers wrote:
>>
>> In article <330C08EF.10BF@pacbell.net>,
>> William A. Wetzel <n6rky@pacbell.net> wrote:
>> >Gee wiz Dana!
>> >
>> >Just because you know the difference between CCITT, IEEE, IAB, etc; does
>> >that mean you have an IFR and work on radios for a living????
>> >
>> >Somehow I really wonder about your relevence in this discussion :)
>>
>> Well, I admit that my profession is computer science and radio is
>> primarily a pastime for me, but that doesn't lessen my ability to
>> read Volume 47 of the CFR and understand the reasons for type acceptance.
>> I don't need to own a service monitor and get paid to tweak radios to do
>> that, do I?
>>
>> If you're trying to bring my credibility into question, please
>> explain why.
>
>Dana...
>
>The reason why I did bring this up is because of the fact, that anytime a
>radio is modified to cover a range of frequencies other than those it was
>specifically designed to do in both it's receiver and transmitter chains,
>performance of ALL filters are degraded.

Let's rewind a little here. Someone said "I want to use my ham radio
in the land mobile/marine service". You responded with:

> It is not impossible to do it... But it is not good engineering practice.
> Amateur Radio equipment is not type accepted for marine use for a reason;
> they are not as clean on the output as the type accepted ones are.

I followed up with a comment that reason that amateur gear is not type
accepted for marine service has to do with how operating frequency
is selected.

What is wrong about this statement? Why are you "questioning my
relevance" in this discussion?

>Unless extensive modifications are made to those chains, it's likely that
>the signal transmitted will lack the spectral purity the radios which are

>designed for the service would have. As for the receivers? They too would
>usually would suffer some performance characteristics as well.
>
>Again - it is poor engineering practice to do this.

Perhaps, and then again perhaps not. First of all, the transmitters
I've looked at tend to use bandpass and lowpass filters; a radio intended
for use at 148MHz will probably have reduced output above 150MHz. It
is conceivable that the carrier level would drop more rapidly than
the harmonic levels, resulting in a degraded harmonic suppression
when measured relative to the carrier. However, with the drop in
the carrier level, it is more than likely the harmonic output
would be at a lower absolute level than if the radio were being
operated in the 2m band it is designed for, which suggests the
potential for interference is not degraded.

It is well known that many amateur transceivers suffer poor receiver
performance outside the amateur bands. However, there's nothing
in 47 CFR that require type acceptance for marine band receiver.

Don't overlook the fact that some amateur radios *are* designed for
wideband use, and are then configured for a particular country. Looking
at the service manuals for several radios I've seen just this case - my
TR-2600A actually has extra circuitry to insure operation from 140-160
MHz, and this is enabled in export to certain countries. The IC-2000H
is similar, as well as many others

So, while some radios are indeed not good performers outside the
amateur band, others are. The potential for interference that
type acceptance attempts to address is interference caused by
improper selection of operating frequency and mode, not dirty
emissions or poor receiver performance. Technical standards
for emission purity exist regardless of type acceptance standards.

If I am in error, please feel free to show me exactly where.

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

2271. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310B19B.68B3@geocities.com>
Source record: 96725
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Brian Carling AF4K/G3XLQ wrote:
>
> Could someone perhaps post his address and phone number here too?
> I am sure that a lot of readers would enjoy having them!

Why don't you do it?
It is not hard.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2272. Why I am the way I am.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310B1E9.7BF1@geocities.com>
Source record: 96726
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

I am the way I am because as a teen I was an active ham radio operator. I used "the mike" to not face real people thus missing my teen years the way real people experience it. It is not ham radio's fault of course, the fault is entirely mine. However I am not that person now and I despise in others what I despised in myself. I am much like a reformed smoker (they tend to be fanatics against smoking). When I hear hams on the air blabbing on about nothing, doing nothing, being nothing, kissing each others butts so much their lips turn brown I want to anything other than be like them. Further I was a gutless wimp up to 18 years of age (fit
in well with ham radio), I would cower with the slightest threat but I learned that fear is far worse than being beat up and rarely would have anyone beat me anyway. So today if you want to threaten me the odds are high (especially if you are a ham) that nothing will ever be carried out. And if threatened I always tell the person to carry out the threat even if my acts that caused the threat were wrong because once you threaten me that closes the door as to the legitimacy of your cause.

To those folks in the ASD support group much of the above applies. Most of you are uncaring men whose spouses finally wised up (hams make great uncaring spouses). In the end I am a far deeper and caring person than 90% of you. And to those that PERSONALLY insult me and/or use profanity, those acts say so far more about you than I. If you read my mail carefully you will rarely see me personally insult anyone and rarely will I use profanity. I argue ON THE MERITS. When you see someone attack the person it means their cause is without foundation.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2273. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310B4E8.2BF5@geocities.com>
Source record: 96727
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:
>
> Excellent, BTW can I set up on your front lawn??? Operating from a car
> seems a bit difficult/ Very do able, but it would be so much nicer to
> spread out on a table with electrical power.

I will try on the hour near 7.2 MHZ until 9 PM today, Sunday.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2274. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310B581.4BB8@geocities.com>
Source record: 96728
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Bruce Beford wrote:
>
> Not so long as the FCC holds them responsible for message content
> transmitted through their systems. Besides, I don't mind you speaking
> your opinions, but not over my radios.

Cut the bull about the FCC, none of my messages are illegal.
If you operate a PBBS to serve all amateurs who the hell are you to
decide what THEY should read.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2275. General Radio Connectors FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: George Keller <gakeller@worldnet.att.net>
Message-ID: <3310BC9F.29A2@worldnet.att.net>
Source record: 96729

I have 36 General Radio adapters/connectors for sale. The assortment include a variety of connections plus termination's, pads, etc. All in good condition.

Will sell all 36 for $55 including shipping.

George W3SAP
gakeller@worldnet.att.ne

2276. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Thomas Gasta <tomgasta@worldnet.att.net>
Message-ID: <5eqeff$bt2@mtinsc05.worldnet.att.net>
Source record: 96730
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I wonder why, whenever anyone gets into this big type acceptance issue of using "Amateur on Commercial Freqs", nobody ever asks why so many of those damn Commercial radios that everyone has on the ham band is never mentioned. They are not type accepted for Amateur use either. Spectral purity, out of a commercial Maxon-Regency-Uniden, not very likely. The real issue, people using $300 keyboard programmable radios for their plumbing business rather than going down to the Local Moto shop and buying a $800 GP300, thats it, plain and simple, and is probably the biggest part of the "Type Acceptance" equation.

One of you is right, it is simply the keyboard programmability that keeps the amateur radio out of the commercial band, as far as type acceptance is concerned. A Moto JT1000 has a UHF bandwidth of 403-470, as does most Yaesu FT50s, filtering, or lack there of is virtually identical, like in zilch. But the JT supposedly takes a rocket scientist (i.e. 2way tech with a key) in order to "keyboard" program the thing, while the Yaesu takes someone who can read. Type acceptance of the Icom U/H-16 portables (commercial) was temporarily suspended when FCC found that anybody could actually keyboard program the radio, and reinstated when Icom made the access to the keyboard more difficult for the end user. Yet, this very radio was sold in amateur radio service as a Icom 02AT and O4AT, and check a schematic and parts list, they are identical in every way except the software, which allowed easy keyboard entry. Harmonics, intermods, and selectivities, had absolutely nothing to do with the type acceptance issue, only the ease of frequency moving, and of course, the commercial U-16 sold for several hundred dollars more that the 04AT.

So basically, when the FCC knocks at your door, then and only then does it really matter. And if you actually have a license for the frequency(s) you are using the "unaccepted radio" on, the penalty will be worth the savings.

Some fun reading, check out the NOIs and NPRMs over the last several years regarding type acceptance issues, and take carefull note of who it is that is petitioning the Commission for most of the changes (stricter) changes, and you will find a lot of Schaumburg and Lynchburg addresses.

2277. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7a8c13fbc480049897d8@news.planet.net>
Source record: 96731
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com says...

> If you operate a PBBS to serve all amateurs who the hell are you to
> decide what THEY should read.

Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets read. *I* take the input of the people who utilize MY equipment, *I* decide what content is acceptable or not. Not YOU or the FCC

That's who the hell *I* am. *I* and the others on my PBBS consider your posts inappropriate to anything related to amateur radio, hence, no posts.

I firmly believe you have every right to show the fool that you may or may not really be. HOWEVER, I DO NOT repeat, DO NOT have to give the platform to prove it. That's for others to do.

If you're suggesting that I have to allow you to access my property (equipment, etc.) then you are barking up the wrong tree.

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

2278. Re: HELP: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: avatar <avatar@frii.com>
Message-ID: <3310DEEE.601@frii.com>
Source record: 96732
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

dave eckhardt wrote:
>
>
> I can't resist this one. Capacitors are no mystery. The BASIC
> equation for ANY capacitor (including varactors) is:
>
>
> (dielectric constant of vacuum)*(area of plates)
> Capacitance (fd) = ____
>
> plate spacing
>
> dielectric constant of vacuum = 8.85e-12 fd/m
> area of plates in square meters
> plate spacing in meters
>
> If you want, do the appropriate unit comversions (I personally like
> metric). In case you forgot, the area of a circle is
> 2
> A = pie*r .
>
> Then multiply by the number of plates. You shouldn't miss the actual
> maximum capacitance by more than 5 %.

In addition to the physics described above, the number in the model number usually is the maximum value of the variable in pF. You can calculate the voltage rating from the plated spacing and the dielectric constant.

W0MAY

2279. 7.208 Sunday hourly

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310C3A7.7389@geocities.com>
Source record: 96733
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Until 9 PM
Join me
#================#=======================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=======================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2280. SAV7 and SAV17

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: 100742.2660@compuserve.com
Message-ID: <5eqggg$s3$1@arl-news-svc-2.compuserve.com>
Source record: 96734

Dear om,

The modules use to be available from
RF Parts
435 South Pasific Street
San Marcos
CA 92069

FAX 619 744 1943

Best regards and good luck de

OZ1DX

Preben

2281. Re: 624 Kits List of PC Boards and Kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: ESPI35E@prodigy.com
Message-ID: <5eqgkj$16gi@usenetz1.news.prodigy.com>
Source record: 96735

Please also include me in your email listing.

Thanks.

ESPI35E@Prodigy.com
or
laner@espn.com

2282. Re: Chassis punches

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: ESPI35E@prodigy.com
Message-ID: <5eqgu1$16gi@usenetz1.news.prodigy.com>
Source record: 96736

Instead of spending way too much money on Greenlee punches, Check out the Unibits available at Sears. I use them all the time. One starts at quite small (<1/8") and goes up to 1/2", the next up starts at 1/4" and goes up to 1" in 1/16th increments. Great as long as you have clearance behind the hole. It's as clean as the chassis punch and'll cost you LOTS less.

2283. Re: Need to find tech info source VARIAN TWT/Klystron

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: ESPI35E@prodigy.com
Message-ID: <5eqhbq$16gi@usenetz1.news.prodigy.com>
Source record: 96737

Just so's ya know.....

Varian isn't Varian anymore.

They've been bought out and the new name is CPI
Communications Power Industries (or something like that).

2284. j-pole or 5/8 wave antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Bill and Tonya Tuman <tuman@netexpress.net>
Message-ID: <01bc21e4$5353eb40$8d4041ce@tuman.netexpress.net>
Source record: 96738

Anyone have a good design for portable as well as fixed j-pole antennas for 2m and 70cm?? Also a 5/8 wave dual band. (coil calculations, radiator length, radial length etc.)

2285. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3310DD29.742D@geocities.com>
Source record: 96739
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:

I HEARD YOU on 7208 but you were VERY weak, you called many times but
you
did not hear me. How about 75m? give time and freq

> Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets
> read. *I* take the input of the people who utilize MY equipment, *I*
> decide what content is acceptable or not. Not YOU or the FCC

It is your right but it is NOT right.

> That's who the hell *I* am. *I* and the others on my PBBS consider your
> posts inappropriate to anything related to amateur radio, hence, no
> posts.

So they are not required to read them. Do you think that those that
agree with me will risk
being locked out by you if they tell you they agree?

> If you're suggesting that I have to allow you to access my property
> (equipment, etc.) then you are barking up the wrong tree.

You are using public frequencies you have a moral right to allow all
comers.
Next Maybe you will deny access based on color?

#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2286. Re: 7.208 Sunday hourly

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7aaf004d3600579897da@news.planet.net>
Source record: 96740
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <3310C3A7.7389@geocities.com>, burtfisher@geocities.com says...
> Until 9 PM
> Join me

At 7pm EST 20 over noise level, plus SW brdcst station at 7.204

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

2287. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2302971703000001@news.vcnet.com>
Source record: 96741

In article <331067f9.2004652@netnews.worldnet.att.net>,
w8jitom@postoffice.worldnet.att.net (Tom Rauch) wrote:

snip...

> If lowering Rp increases stability, as you claim, the lowest Rp
> suppressor is a short wide low resistance connection. You never did
> answer the question "are you telling us removing the suppressor and
> replacing it with a short will result in the most stable design?".
>
Good point, Tom. Thanks for the reminder.

The problem is that the Ls/Rs suppressor is NOT connected between the anode and chassis-ground. Rs/Ls IS connected from the anode to the DC blocking capacitor, Cb, which is in series with the tune capacitor, C1, which is in series with part of the chassis which in series the grid to anode capacitance.. IF Cb and C1 had no internal VHF resonances, then using a low value of Rs might result in a reduction of VHF voltage amplification. However, C1 and Cb have internal resonances. IMO, the suppressor's resistance helps to mitigate the influence of these resonances--probably more so at frequencies near the resonances than at the resonant frequencies themselves.
As I recall, when you replaced Ls and Rs with a short, Tom, the amplifier reportedly sustained a VHF oscillation. I have had the same experience. Presumably, this is why the AL-1500 has a reputation for 8877-consumption. Apparently, some Rs is needed in the anode resonant circuit to achieve VHF stability. Explaining why is problematic beause the multiplicity of resonances thwarts circuit-analysis. However, from my experiences, an Rs of 25 ohms to 100 ohms appears to yield a satisfactory result in less than 3kW amplifiers. For tubes like the 811A, I lean toward 100 ohms for Rs. For more formidable bottles, fewer ohms seems to do the job. Our suppressor retrofit kit for the 8877 uses an Rs of 33 ohms.

IMO, a reasonable rule of thumb is to design a suppressor so that roughly equal amounts of vhf current pass through Ls and Rs at the anode-resonant frequency.** To further reduce VHF voltage amplification, I believe it's a good idea to replace all of the silver (and Cu) straps in the anode-resonant circuit with something a bit more resistive. I replace high Q conductors in the anode circuit with two, unequal-length parallel Ni-Cr-Fe wires spaced about the same width as the factory-original strap. This treatment is often necessary in order to stabilize some TL-922s and Henry 3K-As.

** However, Ls must not contain so much inductance that the voltage drop across it at 29MHz causes Rs to be destroyed by excess dissipation. OTOH, if Rs runs cool at 29MHz, it is unlikely that there will be much

suppressing going on at vhf. [for more information, see the March, 1989 issue of QST magazine.]

--
--Rich-- ag6k, 805-386-3734

2288. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7ab426227e3a1d9897db@news.planet.net>
Source record: 96742
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In article <3310DD29.742D@geocities.com>, burtfisher@geocities.com
says...
> Steve - KF2TI (Landing, NJ) wrote:
>
> I HEARD YOU on 7208 but you were VERY weak, you called many times but
> you
> did not hear me. How about 75m? give time and freq

First things first 75 very crowded right now (7:55 EST) but will try
3.875 at 9:00 EST

Now for the rest
>
>
> > Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets
> > read. *I* take the input of the people who utilize MY equipment, *I*
> > decide what content is acceptable or not. Not YOU or the FCC
>
> It is your right but it is NOT right.

And you are entitled to believe that.

>
>
> > That's who the hell *I* am. *I* and the others on my PBBS consider your
> > posts inappropriate to anything related to amateur radio, hence, no
> > posts.
>
> So they are not required to read them. Do you think that those that
> agree with me will risk
> being locked out by you if they tell you they agree?

In all honesty, Burt, you are the only one I've ever "locked out". And
quite frankly, I have found very few if any locally who will agree with
anything you have to say concerning amateur radio

I also reserve the right to preview all for sale messages for content. I
allow only amateur and amateur related materials to be posted. Cars,
guns, recipes all get round filed.

>
> > If you're suggesting that I have to allow you to access my property
> > (equipment, etc.) then you are barking up the wrong tree.
>

> Next Maybe you will deny access based on color?

Funny, I have yet to see a radio that can determine a person's color
based on a callsign. Is this something new?? How can I tell a person's
color based on his posting to my PBBS?? Enlighten us Burt
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

--
Steve KF2TI
ARRL LIFE Member
You can't make a difference if you don't belong

2289. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2302971723390001@news.vcnet.com>
Source record: 96793

In article <331079b1.6541507@netnews.worldnet.att.net>,
w8jitom@postoffice.worldnet.att.net (Tom Rauch) wrote:

> On Sun, 23 Feb 1997 14:29:58 +0000, "Ian White, G3SEK"
> <G3SEK@ifwtech.demon.co.uk> wrote:
>
snip...
> >One reason why the vacuum can return to normal after a gas release could
> >be because, by the time you come to test it, the release has been
> >cleaned up again by 'getter' action.

The 3-500Zs that usually are sent to us have a grid to filament short.
Does it seem plausible that shorted tubes are being operated by their
owners in an amplifier to activate the getter?

> I've seen that time and time again. I have a 3-500Z on the shelf that
> is OK if it's run every week, but will arc if it sits for a month or
> two.

We see very few gassy tubes. We check all incoming 3-500Zs for gas at
slightly over 8kV.

...snip...

--
--Rich-- ag6k, 805-386-3734

2290. Re: Any way to rejuvinate Nickel metal Halide batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: "'Grif' w. keith griffith" <kgriffit@wolfenet.com>
Message-ID: <3310BA0C.594@wolfenet.com>
Source record: 96794

Bigdad wrote:
> >I understood that NMH cells did not suffer from the dreaded memory
> >effect, so I wonder why the loss of performance?
> >*******************************
> >* steve100@dircon.co.uk *
> >* *
> >* M1BJR Plymouth *
> >*******************************
>
> Im really not sure what happened...the battery just refuses to
> hold a charge for very long at all. Its in a IBM Thinkpad 500 and
> at full charge will last only 15 minutes or so. Looks like im
> gonna have to break down and get a new one

Are you really sure the battery is going dead in 15 min, or is it the battery charge monitoring software telling you it's dead? My (Crummy) KeyNote pentium laptop will loose track of how much time has been on discharge sometimes (not voltage) and tell you it's gotta shut down, the only fix is turn off all the powersaving features and just force it to really run the battery down which in my case, is a known software/bios issue. running the sucker down is the only way to really reset the counter.

Well,,, that's not true, just to keep the flames at bay, it calculates the amout of charge time, and deducts run time from it. If you swap batteries, or change the 2nd battery for the floppy, the battery may be at say 75% charge, it only is on charge for 25%, so the charge monitor starts fussing at 75% cause it expects it to be flat. Doesn't seem to be much of an improvement over the old nicad problems.

I understand NMH cells are much more sensitive to overcharge/gassing/seperator damage than nicads.
Anyway,,, good luck

'Grif' N7IVS

2291. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: Ed Price <edprice@pacbell.net>
Message-ID: <3310F33A.3C92@pacbell.net>
Source record: 96795
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Peter Gottlieb wrote:
>
> Tom Sharples <sharples@hooked.net> wrote in article
> <330BDBA3.22D6@hooked.net>...
> > This sort of thing is one of the reasons that all equipment now sold in
> > Europe has to be CE compliant- meaning that it not only must not emit
> > spurious signals (similar to FCC type B), but also must not be
> > *susceptible* to external RF fields, static charges, and so forth. In
> > this respect the Europeans are ahead of us.
>
> The 10 V/m and even 100 V/m susceptability requirements are essentially
> meaningless. The field from a close HT easily exceeds this.
>
> 10,000 V/m would assure protection for safety-critical equipment such as
> life support, 1000 V/m
> for mission-critical equipment such as cash registers, and maybe 250 V/m
> for other stuff would
> be much more realistic.
>
> ...Peter

This thread is morphing from jamming to immunity, but....

Peter, you talk of realism. From my personal experience, most USA grade consumer electronics will crap out at about 5 Volts/meter. (This may now be starting to get better, as manufacturers design to meet EN standards and use the same design for USA.)

You say an HT "easily" exceeds 100 V/M for near field. Could you run me some numbers as to how strong the near field strength really is for, say, a 5 watt HT? (We are talking about an HT at 2 meters, with 5 watts into a ducky, right? Or maybe a cell phone at 1 watt at 900MHz.)

Now, let's move into your recommendations for immunity. Sure, we all would like our Gameboy to stand 10kV/M, but I think your eyeballs (and other balls) would pop like a bean in a micro oven at much lower levels. Ten thousand volts per meter electric field strength! No doubt over a frequency range of 10 KHz to 18 GHz. Have you any idea of what you are asking?

Can you tell me of any facility in the world that can generate even 1000 volts per meter over this range? If you wish to set such a standard, then you must expect that manufacturers world wide will be expected to actually TEST to that standard. ("Designed to meet" doesn't cut it in the world of RF immunity.) Do you realize the cost of all this testing?

(Mortgage the house and invest in RF amplifier companies!)

Finally, while I respect the capitalistic jingle of a cash register, I find your description of this instrument as "mission critical" to be absurd. "Mission critical" has an urgency which transcends "do you want fries, too" "Mission critical", to an engineer, means someones life is on the line; think night carrier landings or a shuttle launch or your anti-lock brakes or a premie incubator.

One thousand volts per meter a safe level for a cash register? So, just who will be standing at that register in that 1000 V/M field. Certainly not me. I have had the personal experience of 200 V/M whole body exposure. (If you must know, it's kinda pleasant at first, like a warm mellow feeling in your bones.) I can assure you that nobody would just stand there, looking goofy while they cooked. I can't say which way, or how fast, but run they would.

And now, 250 V/M for "all the other stuff". What can I say, other than "Read the above paragraph again!"

I'll close by listing my personal suggestions for consumer grade electronics. I freely admit that I am making a lot of sweeping decisions, but hey, it's MY list.

10 KHz to 500 KHz 2 V/M
.5 MHz to 1.7 MHz 10 V/M
1.7 MHz to 88 MHz 5 V/M
88 MHz to 175 MHz 20 V/M
175 MHz to 425 MHz 10 V/M
425 MHz to 500 MHz 20 V/M
500 MHz to 900 MHz 10 V/M
900 MHz to 2 GHz 20 V/M
2 GHz to 12 GHz 10 V/M
And further thought must be given to the bands used by vehicular doppler radar and the new wave of home communication and PCS stuff.

Comments / great thoughts / warm air invited!

2292. Maybe next time

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7ac1d120e5cc0f9897dd@news.planet.net>
Source record: 96796
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

[This followup was posted to rec.radio.amateur.misc and a copy was sent
to the cited author.]

In article <3310DD29.742D@geocities.com>, burtfisher@geocities.com
says...
> Steve - KF2TI (Landing, NJ) wrote:
>
> I HEARD YOU on 7208 but you were VERY weak, you called many times but
> you
> did not hear me. How about 75m? give time and freq

Tried again on 75 at 9pm EST, no luck, to much noise. Maybe next week

--
Steve KF2TI
What one individual only dreams of doing can
be accomplished by many individuals collectively

Robert Kennedy

2293. Re: LM3361

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: EBSystem <ebsystem@warwick.net>
Message-ID: <33113DB6.32A5@warwick.net>
Source record: 96797

Rafal Wojtanowski wrote:
>
> I try to find some informations about LM3361. It's an oscilator and squelch
> etc. use in homemade trancivers 144MHz (430 MHz).
> Please, help me to find some pdf's files about it (or another infos).

If you go on the web and enter the website of National Semiconductor, you should be able to find the appropriate spec/data sheets you are looking for. If you can't get them electronically, it'll tell you how to get them via postal mail. I am not sure of the URL, but it is probably along the lines of www.nationalsemiconductor.com. Try using webcrawler or another search engine to find it.

2294. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: "William A. Wetzel" <n6rky@pacbell.net>
Message-ID: <3311386D.23E0@pacbell.net>
Source record: 96798
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Jeffrey Herman wrote:

> P.S. I'd say it's about time to petition manufacturers to design
> amateur-only radios; the major benefit would be better performance.

Jeffrey's points are sound advice. I doubt the manufacturers will adopt a policy such as this since too many CBers or hams (seems the same now) are always looking to expand the frequency coverage of their radios, even for the flimsiest excuse. For those who are not professional RF engineers and techs: It is poor engineering practice to do this. And as Jeffrey pointed out in his message, price is no justification to do it. If you want to it as an experiment to learn - then do it. But remember that performance may not meet industry standards.

--
William A. Wetzel
N6RKY@PACBELL.NET
N6RKY@JUNO.COM

2295. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5epu24$ed9@news.Hawaii.Edu>
Source record: 96799
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Carl R. Stevenson <carl@ais.net> wrote:

>Carl - wa6vse
>carl@ais.net
(tech+ for 20+ years)

>p.s. I've decided to start "signing" selected postings with PGP to prevent
>the
>forgeries and alterations thereto that various pro-coders have created in
>the
>past

You mean the "(tech+ for 20+ years)" (see above) that I place *after*
your sig? That's no forgery or alteration, Carl. If I place a ">" prior
to it, then it certainly would be an alteration.

I append it due to your strange attempt to associate code ops with folks
who don't know how their radios operate, yet you claiming to be a state-
of-the-art engineer still hold an entry-level license after two decades.
I'm not the only counter-example (code op and builder) to prove your
claim false; most of the guys on the QRP list are also in that same
catagory.

You still haven't answered my long-standing question: What radios do
you operate on the air that you've built yourself? No fair scolding
the amateur community for not building if you yourself don't build.

Speaking of altering posts, why is it you alter my headers? You
constantly delete the "Followup-To: rec.radio.amateur.policy"
line I add to my header. Bad boy.

Jeff KH2PZ

2296. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5epuh6$em1@news.Hawaii.Edu>
Source record: 96800
Cross-posted to: alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

```
>AUTHOR PROFILE: Burt Fisher <burtfisher@geocities.com>
>
>177 unique articles posted.
>Number of articles posted to individual newsgroups (skewed by cross-postings):
> 69 rec.radio.amateur.misc
> 51 alt.support.divorce
> 35 rec.radio.amateur.digital.misc
> 4 ne.weather

Oh geez, now Burp's flaming the weather, too?
```

2297. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <33251448.40798592@news.cyberhighway.net>
Source record: 96801
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

kc5egg@ix.netcom.com(Gerald Schmitt) wrote:

>In <330EFED7.20D0@geocities.com> Burt Fisher <burtfisher@geocities.com>
>writes:
>>
>>--
>--
>> I may not always agree with what you say. But I will defend to the
>> death your right to say it.
>>
>>--
>--
>>
>>The above quote clearly does not apply to Packet SYSOPS, does it?
>
>The right of free speech comes as a bundle with the responsibility of
>free speech. Since you demonstrate little responsibility yourself it
>would appear that packet sysops are forced to take responsibility. The

The BBS for which I'm a co-sysop has been on the air for about 8
years, and in all that time we have never locked one legitimate ham
out of the BBS for any reason. We've handled dozens of Burt's
rantings, as have all the upstream SysOps, obviously. Burt loves to
tar hams with a broad brush, but he gets more on himself than he does
on others.

--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

2298. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-23 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <3322f013.31528165@news.cyberhighway.net>
Source record: 96802
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:

>Michael and Jayne Goad wrote:
>
>> I am not sure what your motivation is in backing the little leo's, but I
>> suspect it is financial. What we are talking about here goes way beyond
>> the almighty dollar in my book. I am here to let you and all who read
>> this that we will fight this to the end.
>
>Your suspicions are wrong.
>Fight all you want, it is ATYPICAL of a ham to fight for ANYTHING.

Burt, you're making a fool of yourself. I've fought other hams, the
Forest Service, the BLM, and the FCC. Won most of the battles, BTW.
And I have some fightin' ham friends who've done a bit of fighting for
the hobby, too. Why don't you go back to your lame web page with its
"naked chic (sic)" and your brag picture of you and Slick Willie, and
quit cluttering up these newsgroups with your trolling?
--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

2299. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3311F564.71D@geocities.com>
Source record: 96743
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:
>
> Could somebody please post Burt Fisher's home address and telephone
> number on these newsgroups he keeps crossposting to so we can call him
> (like maybe when I'm reading the news at 2:00 A.M.) and tell him what
> we think of his abusive drivel and/or mail him dead rodents and such?
>

Burton E. Fisher, K1OIK
389 Old Bass River Rd
South Dennis, MA 02660

(508) 385-6962

2300. ALC Circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: pff@bfs.uwm.edu
Message-ID: <pff.31.0126FCF0@bfs.uwm.edu>
Source record: 96744

Hi,
I've put together an ALC circuit to help protect my PA. It is composed of four small capacitors a couple of resistors and a diode. RF is sampled and fed between two series capacitor(22 and 47 pf respectively). this is then fed thru a diode into a couple of series resisitors with the ALC out at then end of the series. At the point where the capacitive voltage diveder is used to sample the rf two resitors in series follow the point just after the diode connection. At the end of the series resistors is a positive 15 volt supply. What I cannot analyize is where is the negative voltage coming from? This network puts out 0 to -6 volts with 100 weatts drive. I do not think this is enough to turn my exciter down. How can I up this voltage? Thanks.

2301. Ten Tec Corsair II manual wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <3311f820.55089@news5.inter.NL.net>
Source record: 96745

I'm looking for the manual and service manual of the Ten Tec Corsair II.
I have also the power supply with speaker. Who can help with that ?
I pay every costs ofcourse.
73 de Bart PA3GGM.

2302. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2402971231400001@news.vcnet.com>
Source record: 96746

In article <3311d285.9488578@netnews.worldnet.att.net>,
w8jitom@postoffice.worldnet.att.net (Tom Rauch) wrote:

> On Mon, 24 Feb 1997 05:41:38 -0800, measures@mail.vcnet.com (R. L.
> Measures) wrote:
> >>
> >Tom--- You and Dick Erhorn (ETO) have consistently blamed 8877 failures on
> >Eimac. This sounds like not invented here (NIH)
>
> Rich, you memory is very short, and you seem to have no desire to
> learn anything.
>...snip...
>
> You confuse things by looking at small parts of large issues.
>
Bzzzzzzzzzzzzzzzzzzttttt

--
--Rich-- ag6k, 805-386-3734

2303. WTB: Ten-Tec 1209 Transverter.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Mike Havener <mhavener@peinc.com>
Message-ID: <01bc2295$34b85b60$e5deb7ce@mhavener>
Source record: 96747
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I'm interested in aquiring a Ten-Tec 1209 2m-6m transverter, either completed or kit. I would also be interested in the opinions of those of you who have used one. I've always wanted to try 6m, and thought this would be a good way to give it a try with out laying out a lot of cash.

Mike Havener / KE6FJT
mhavener@ni.net

2304. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: smd@ma.ultranet.com
Message-ID: <5esvu4ggp2@decius.ultra.net>
Source record: 96748
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Kory Hamzeh <kory@avatar.com> wrote:

>Some people could constantly mail bomb his account until his ISP cuts him
>off. Of course, he could switch to another ISP, and then the mail bombing
>might start again. However, I'm not recommending such a thing....

>But..., its real easy to set up a cron jobs under unix to send it a huge
>100k message every five minutes. If 50 people started doing that ...
>well, you get the pictures.

Arrrg, you only discredit hams with this stuff. Your making Burt's
argument. Unfortunatly, A lot of Hams do.

Steve

2305. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <33120913.295C@geocities.com>
Source record: 96749
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:
>...
> > ----------
> > I may not always agree with what you say. But I will defend to the
> > death your right to say it.
> >
> > ----------
> >
> > The above quote clearly does not apply to Packet SYSOPS, does it?
>
> Actually it does. I myself agree 100% with the above. HOWEVER, there is
> nothing that compels me to provide you with the soapbox by which you may
> practice it.

How can you defend to the death something you will cause to lockout
someone.
You are a hoot.
Let us meet on the air!!

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2306. Re: Type acceptance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: philk5pc@connect.net
Message-ID: <5et46u$nv5@dallas1.connect.net>
Source record: 96750
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5es7ql$s4i@lehi.kuentos.guam.net>, kh2d@kuentos.guam.net (Jim Kehler) says:
>
.....snip....
>
>Correct me if the rules have changed, but I was under the impression
>that no radios had to be type accepted for the Amateur bands......
>
>Remember that guy, what's his name, Home Brew ?
>
You can brew it and use it, but you can't sell it in quantity without type acceptance. The rules have not changed. Many manufacturers go ahead and advertize new equipment with the footnote "pending FCC type acceptance." Haven't you seen this in QST and CQ? Commercial equipment is type accepted for use in all services and does not require additional FCC blessing for ham use. Part of the type acceptance requirement for H.F. amplifiers is they cannot operate above 15 meters. Another one limits the maximum plate dissipation in the final tube(s) of amateur amps. Another one that comes to mind is that wire you have to cut to make your new transceiver transmit out of ham bands....

(((73)))
Phil, K5PC

2307. Re: What's an FBOM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5et5oc$90e@news1.mnsinc.com>
Source record: 96751
Cross-posted to: alt.radio.scanner,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

n9vjg@aol.com SPAMMED 25 newsgroups at once and whistled a happy tune like:

|>Are you reading this? Great! That means it wasn't written it for
|>nothing. Not to worry, you won't be wasting your time.

|>Amateur Radio is a hobby

No KIDDING?? WOW! We didn't KNOW that!

Really though, this FBOM thing SOUNDS hilarious!
I think it will be great for Burt Fisher to be a COLUMNIST in it!

May I suggest you ask him to consider it??

He would make Wayne Green look TAME!

2308. 88 mHy TOROID Application

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: "Tom V. Pfaffenbach" <tvpfaffe@mail.delcoelect.com>
Message-ID: <33119FD2.5F04@mail.delcoelect.com>
Source record: 96752

Hi Folks;

I wonder if anyone knows what the original application was for all of the surplus 88mHy toroids that seem to abound forever in flyer sheets, junk boxes, and handbook designs? They are very useful for all kinds of peaking, notching and band pass filter construction. They all seem to be constructed in similar fashion. Two separate windings of 22mHy each on opposite halves of a 5/16 inch square cross section powdered iron core about an inch in diameter, wound almost full with approximately #24 magnet wire. I suspect the original application was for telephone networking since so many seem to have been produced, but I have never seen one in a phone, unless they are potted into the old input matching network box. Does anyone have the answer?

73 de K9JDU

2309. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: bbowers@townsqr.com
Message-ID: <5etdef$l00@tofu.alt.net>
Source record: 96753
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thomas Gasta <tomgasta@worldnet.att.net> wrote:

>Commercially manufactured amateur radio equipment (i.e. produced for
>resale) does in fact carry type acceptance. Take a look at the back of
>most radios, for instance my FT40 (yaesu), and it has the FCC ID (type
>acceptance) K66FT-40R and even a canadian type 511 101 525A. If you don't

Actually, those are type certification numbers, on the reciever.

They are NOT type acceptance numbers.

2310. Re: 88 mHy TOROID Application

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Charles Wenzel <wenzel@wenzel.com>
Message-ID: <331279C7.AF7@wenzel.com>
Source record: 96754

Tom V. Pfaffenbach wrote:
>
> Hi Folks;
>
> I wonder if anyone knows what the original application was for all of
> the surplus 88mHy toroids that seem to abound forever in flyer sheets,
> junk boxes, and handbook designs? (snip)

I thought they were for the oscillators in early touch-tone phones.

2311. nixie tubes: TUNG-SOL DIGIVAC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Greg Walcott <gwalcott@pacbell.net>
Message-ID: <331258F0.64A@pacbell.net>
Source record: 96755
Cross-posted to: rec.radio.ameteur,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I got a couple of display tubes at a swap meet and I want to make a project with them but I haven't found any information yet. I am not sure these actually qualify as nixies. As I understand it nixies have an element for each of the ten decimal digits and the elements are
stacked vertically one in front of the other. Also I think nixie may imply they are neon.

What I have is a segmented display like an LED/LCD. There are seven elements forming the digit
'8' which seem to have a white phosphorescent coating; each one of these goes to a pin. Two other pins are connected to pair of thin wires (filamentary cathodes?, cold cathodes?) strung
vertically in front of the display segments and wired in paralell (one pin goes to the top of
both wires and one pin goes to the bottom). They are packaged in a miniature 9-pin tube. There is a version with a decimal point that has a tenth pin placed directly between pins 1 and
9 in a straight line, not following the circle made by the other pins. I hope I can find a socket for this one.

So anyway I am not sure if these are called nixie or not. I would like to find out more about
them especially what voltage to run across the filaments and to the plates. Also if any are available surplus anywhere I would love to have a few more. The ones I have are made by TUNG-SOL and labeled "DIGIVAC". Most of the markings have rubbed off so I can't read a part #.

2312. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.264.00ED468B@azstarnet.com>
Source record: 96756

The Tar Baby continued...

As most of you will recall, in an effort to clear up some of the misinformation put forth by a regular contributor to this forum, I agreed to perform some "scientific" measurements of parasitic suppressor materials.

While I don't claim my methods to be any more than normal laboratory practice, they were (and are) given a great deal of weight by this individual who's measurements by comparison are most unscientific.

Apparently, because I attempted to treat this individual with a degree of courtesy, he assumed that I was taking his side in this issue. NOTHING COULD BE FURTHER FROM THE CASE.

Furthermore, the individual in question had the gall to post the results of MY measurements on HIS home page, in an attempt to further the illusion that the data support his position.

When this became apparent to me, I wrote the following: (Identity of receipient purposely deleted):

Dear XXXX,

As you should recall, I agreed to make measurements of sample materials supplied by you and Mr. YYYYY to help "clear the air" on some of the issues of parasitic suppressor performance.

I did this from the perspective of one ham trying to help out his fellow hams with a sticky technical problem. It was clear in my mind that this was a strictly "amateur" activity, performed as a service to other amateurs, for which no remuneration was expected or required.

As you are also aware, I took the time to create a home page wherein I posted the results of the measurements so all interested parties could access them. Included with the data was the following declaration:

"This material is copyright 1997 by W. D. Stewart, Jr.
The material maybe be freely distributed for *non-commercial*
use if proper credit is given." (Emphasis added)

Since the publication of this material you have made a number of references to it in usenet postings, in an attempt to bolster your position in the discussion. I have no problem with your references to the material, other than what I perceive in some cases to be inferences

that I support your technical position.

I do have a problem however, with uses of the material
on your home page, which is clearly of a commercial nature.
It is my position that the incorporation of this information
is a violation of the spirit and intent of my original objective.
Furthermore, it could be inferred that I am somehow a party to
your business activities, which we both know is not the case.

Therefore, I am asking that you remove all references to
the material in question from your home page and any other
publications which are commercial in nature and that you
let me know when it has been done. Likewise, I have removed
the information from my home page.

Regards,

Wes Stewart, N7WS

In response to this, Mr. XXXX asked me to supply my telephone number to him.

I responded as follows:

I have an unlisted number and would prefer to not give it out.
Furthermore, I honestly don't know what more there is to discuss.

I have made a simple request; remove all references to me
from your home page and other literature. What is so difficult
about this?

If you need supporting data for your claims for commercial purposes,
then I suggest that you make the measurements or pay someone else
to do it for you.

Sincerely,

W. D. Stewart

In response, Mr. XXXX sent me a heart-wrenching tale about the
poor nursing school student that he hires to process the orders for his
products.

Unfortunately, the references remain on his page in clear violation of
copyright laws.

Beware dem tar babies ya'll

N7WS

2313. Test.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Oleg Kravets <olegdx@compusmart.ab.ca>
Message-ID: <331264CA.7381@compusmart.ab.ca>
Source record: 96757

It is just a test. 73.

2314. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <3310f797.24400477@news.cyberhighway.net>
Source record: 96758
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

adell@planet.net (Steve - KF2TI (Landing, NJ)) wrote:

>In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com
>says...
>
>> If you operate a PBBS to serve all amateurs who the hell are you to
>> decide what THEY should read.
>
>Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets
>read. *I* take the input of the people who utilize MY equipment, *I*
>decide what content is acceptable or not. Not YOU or the FCC
>
>That's who the hell *I* am. *I* and the others on my PBBS consider your
>posts inappropriate to anything related to amateur radio, hence, no
>posts.
>
>I firmly believe you have every right to show the fool that you may or
>may not really be. HOWEVER, I DO NOT repeat, DO NOT have to give the
>platform to prove it. That's for others to do.
>
>If you're suggesting that I have to allow you to access my property
>(equipment, etc.) then you are barking up the wrong tree.

You are technically correct, but ethically wrong wet. If you set up
to provide a public service as a BBS, you have a moral obligation to
forward all legal mail, or at least not to limit forwarding based on
personal considerations such as who is saying what. SysOps who censor
mail are a big problem on the ham BBS network, and responsible SysOps
should and will route around them.

If you're not part of an open network, you're just cluttering up
valuable space on the bands, and are giving jerks like Burt more
ammunition.
--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

2315. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: "William A. Wetzel" <n6rky@pacbell.net>
Message-ID: <33125A37.524F@pacbell.net>
Source record: 96759
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dana...

The more I read your material trying to "worm-out" of the hole you placed yourself into, the more it is becoming apparent that you are not very apt in engineering or RF work at all. It is useless at this point to continue a debate with you - since you are always right in everything you do, even when you are wrong. It's no wonder why hams have no access to much of the commercial radio sites. Think about it...
--
William A. Wetzel
N6RKY@PACBELL.NET
N6RKY@JUNO.COM

2316. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2402972054150001@news.vcnet.com>
Source record: 96760
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

In article <01bc21ed$738b3540$f20f2399@desktop>, "Peter Gottlieb"
<peter_gottlieb@msn.com> wrote:

> CRONIN <jdc3538@osfmail.isc.rit.edu> wrote in article
> <5ecocf$9ha@news.isc.rit.edu>...
> >
> > I'm tinkering with a radio for packet use that has a relay for T/R
> > switching. The relay has a diode across it to keep the transistor that
> > runs it from getting fried. So far so good. Every now and then
> > there is mention of how this increases relay switching time, obviously
> > a bad thing for packet.
>
> In simple terms, a magnetic field holds the relay in, and the diode
> prevents
> the field from collapsing as fast by turning the voltage created by the
> collapsing
> magnetic field back into a magnetic field for some milliseconds.
snip...

A reverse diode across the coil is important since it protects the coil
from the otherwise large counter EMF across the coil during break. (I
measured 450v peak across a 24v relay coil during break.) However, such a
diode increases the break-time.
By placing a resistor in series with the diode, the break-time can be
decreased and the counter EMF held to a reasonable amount. As a rule of
thumb, the series R should be 2 to 3 times the coil R. More R =s faster
break-time, but with the trade-off of more counter EMF volts.

The make-time of a DC relay can be decreased by connecting the coil in
series with a resistor that has 3 to 5 times the resistance of the coil.
Naturally, this arrangement increases the voltage needed to operate the
relay. For example, a relay has a 240 ohm coil rated at 24v. A 720 ohm
resistor is connected in series with the coil. In order to produce 24v
across the coil, 96v must be applied to the series coil/resistor. This
circuit is recommended by Jennings, the company that manufacturers
vacuum-relays.
Here's how it works: Relay coils have inductance. For instance, the
Jennings RJ-1A's 26v coil has about 0.3H. It takes time to overcome the
inductance and build up a flow of current before a relay can close. The
circuit described temporarily provides more coil voltage at make, thereby
shorting the time it takes for current to build up in the coil. I
measured a make-time decrease of roughly 65% with the circuit described.

--
--Rich-- ag6k, 805-386-3734

2317. Kokusae Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: "Raj Singh, VE6RAJ" <singhraj@cadvision.com>
Message-ID: <33128981.4507@cadvision.com>
Source record: 96761

Hi:
Does anyone have any information on Kokusae. Apparently they were a
third party manufacturer of crystal filters for transceivers. Are they
still in business? Any idea who carries their stuff?
Thanks
Raj VE6RAJ

2318. Re: 88 mHy TOROID Application

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <3312820C.2F79@calweb.com>
Source record: 96762

Tom V. Pfaffenbach wrote:
>
> Hi Folks;
>
> I wonder if anyone knows what the original application was for all of
> the surplus 88mHy toroids that seem to abound forever in flyer sheets,
> junk boxes, and handbook designs? They are very useful for all kinds of
> peaking, notching and band pass filter construction. They all seem to be
> constructed in similar fashion. Two separate windings of 22mHy each on
> opposite halves of a 5/16 inch square cross section powdered iron core
> about an inch in diameter, wound almost full with approximately #24
> magnet wire. I suspect the original application was for telephone
> networking since so many seem to have been produced, but I have never
> seen one in a phone, unless they are potted into the old input matching
> network box. Does anyone have the answer?
>
> 73 de K9JDU
Hi Tom,

They were used as loading coils on phone lines to counteract the
capacitive reactance of long metallic lines. they would be mounted in
pole mounted enclosures or in splice case assemblies and were usually
found in little tin or metal assemblies with a half dozen or so in an
assembly which was stapled together. Hams used them for years to make
RTTY tone filters for TUs and such and many audio filters were
fabricated using these units 88/22 or 44/11 Mhz units. Still a real
nice little of magnetics for a lot of projects and probably still
available in some surplus venues.
Might look into some of the Late Irv Hoff's articles on RTTY and I
belive Vic Poors articles on TTY filters for more in depth coverage of
these rascals. Both fellow wrote for QST and Ham Radio magazines. I
believe Vic Poor is still around, Irv passed away a couple years ago.
Irv was a prolific author of RTTY articles and a sometimes pain in the
buttocks on the air if your signal was not 100 percent on shift and bias
free. But tis life I guess

Hope this helps..

Bob, KE6F

2319. Re: WTB: Ten-Tec 1209 Transverter.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Royal Moore <royald@earthlink.net>
Message-ID: <331278DD.3B5E@earthlink.net>
Source record: 96763
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Mike Havener wrote:
>
> I'm interested in aquiring a Ten-Tec 1209 2m-6m transverter, either
> completed or kit. I would also be interested in the opinions of those of
> you who have used one. I've always wanted to try 6m, and thought this
> would be a good way to give it a try with out laying out a lot of cash.
>
> Mike Havener / KE6FJT
> mhavener@ni.net
Mike, I do not have one for sale but I have recently built one and I am
very pleased with the results. It is exactly as advertised. The only
thing I need now is an amplifier to boost the 8 watts to something a
little closer to 300 watts to compete with the big boys, QRP is not such
a great idea on six meters. Go ahead and get one to "wet" your feet,
you can`t go wrong in my opinion. 73 KB7WTO Spokane, WA

2320. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Tom Sharples <sharples@hooked.net>
Message-ID: <331283C2.76B3@hooked.net>
Source record: 96764

Believe me, they're working on it just as hard as they can. I just found out that the new standards for ESD immunity (to replace the current IEC 800's) will have the effect of TRIPLING the amount of time it takes to test each IT device, from 4 hours to 12 hours. This at rates of $250 per hour. While the lab tech draws sparks from the ground plane under the DUT's cabinet (at a glacier-like pace), you get to stand around with your thumb where it's 98.6.
This is what happens when bureauocrats are given free rein to take a basically good idea to its illogical extreme, in the process turning it into a ridiculous money-wasting farce.

2321. Single chip SW radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: maroof@triton.kaifnet.com
Message-ID: <3311ba74.1555066@news.kaifnet.com>
Source record: 96765
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Hi,
I feel sad to learn that the Plessey SL6xx series radio
chipset has been given the death sentence!

I'm looking for single chip (or chipset) radio receivers (short wave),
preferably from Europian & Japanese manufacturers
(Philips/ST/Sanyo/Toshiba...), simple & easy to construct (suitable
for hobykits). I looked in NS & Philips product line & found out that
most are becomimg obsolete.
Thanks for reading.

Maroof

2322. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5esmql$c4f@hplms2.hpl.hp.com>
Source record: 96766
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <3309831B.6F2A@pacbell.net>,
William A. Wetzel <n6rky@pacbell.net> wrote:
>
>It is not impossible to do it... But it is not good engineering practice.
>Amateur Radio equipment is not type accepted for marine use for a reason;
>they are not as clean on the output as the type accepted ones are.

This is what the urban legend is,... but I just don't believe it. Type acceptance has alot more to do with who will be using the radio rather than its performance.
Remember; ham operators have to take a test (and presumably know something) and are individually licensed. Business radios users are not licensed, the business is. Marine radio licenses are similar. One of the criteria for type acceptance of business radios is that they not be easily field progammable. Remember, the users are unlicensed and often untrained.

Just my $0.02.

2323. Re: -- == What drugs are you taking??? == --

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5esn1d$cgq@hplms2.hpl.hp.com>
Source record: 96767
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <330EA9D1.56C3@pacbell.net>,
William A. Wetzel <n6rky@pacbell.net> wrote:
>>
>
>The reason why I did bring this up is because of the fact, that anytime a
>radio is modified to cover a range of frequencies other than those it was
>specifically designed to do in both it's receiver and transmitter chains,
>performance of ALL filters are degraded.
>

You're assuming that these radios were not designed to cover large
frequency ranges. How do you know?
Perhaps they were, specifically to cover many product lines, then software
(or hardware) restricted to the range under which its sold.

2324. Re: Re-engineering Henry amp from FM--->ATV HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <3310e184.3395292@netnews.worldnet.att.net>
Source record: 96803

On Sun, 23 Feb 1997 11:39:28 -0500, kr4wm@sccoast.net (Webster D.
Williams) wrote:
>a "customer service" person. Can anyone tell me exactly what would need
>to be done to convert a UHF amp from FM-commercial-mobile-voice-468MHz to
>Amateur-ATV-420-to-440 (6MHz wide signal) service? I really only need the
>basics, but if it gets technical, that's fine too. I just don't know a
>whole lot about television signals. I have a basic understanding of how
>to bias/tune amplifiers, but don't know how to apply that knowledge to
>ATV.

The bias system is critical, as is proper loading of each stage. The
efficiency will be very low except during signal peaks.

The PA will absolutely require a very good stiff bias system and
proper loading for signal peaks.

>One other question- what would be involved in providing a switching
>circuit for low 15 watts/ high 40 watts? I've heard that adjustments
>to the transmitter need to be made each time you switch power levels.

If the PA is linear, all you need to do is switch in a pad in front of
the linear, or in an early stsge. If the PA and all stages are linear
no other adjustements are required or advisable.

73 Tom

2325. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <3310e2d6.3733244@netnews.worldnet.att.net>
Source record: 96804

On Sun, 23 Feb 1997 10:09:44 -0800, measures@mail.vcnet.com (R. L. Measures) wrote:

>Good point, Tom. Thanks for the reminder.
>
> The problem is that the Ls/Rs suppressor is NOT connected between the
>anode and chassis-ground. Rs/Ls IS connected to the DC blocking
>capacitor, Cb, which is in series with the tune capacitor, C1.. IF Cb and
>C1 had no internal VHF resonances, then using a low value of Rs might
>result in a reduction of VHF voltage amplification. However, C1 and Cb
>have internal resonances.

But your own earlier statement was the nichrome suppressor your friend installed in the AL80 had a lower Rp than the stock suppressor, and less VHF gain. Are you now changing your tune?

Nice job on slandering the 1500, but the reason the 1500 has the reputation of using 8877's is much less sinister, The 1500 was released for production right when Eimac was having trouble with heat dams in the 8877. Neither ETO nor Ameritron, nor varrious medical companies had much sucess with tube life for a long period of time.

The only person who profited from this was a fellow in California selling fixes for pathological problems.

73 Tom

2326. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc21ed$738b3540$f20f2399@desktop>
Source record: 96805
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

CRONIN <jdc3538@osfmail.isc.rit.edu> wrote in article
<5ecocf$9ha@news.isc.rit.edu>...
>
> I'm tinkering with a radio for packet use that has a relay for T/R
> switching. The relay has a diode across it to keep the transistor that
> runs it from getting fried. So far so good. Every now and then
> there is mention of how this increases relay switching time, obviously
> a bad thing for packet.

In simple terms, a magnetic field holds the relay in, and the diode
prevents
the field from collapsing as fast by turning the voltage created by the
collapsing
magnetic field back into a magnetic field for some milliseconds.

Another reply suggested a zener diode - this works, and can be used to
"tune"
the release time by selecting different voltage diodes. Note, you will
need both
a zener and a regular diode in series to do this.

If you want the fastest release time let the voltage go really high by
using a
power mosfet to drive the coil. Most power mosfets have a decent breakdown
voltage rating and many are spec'ed for certain breakdown energies. Don't
use any diode across the relay coil, just let the voltage go up to the
mosfet's
breakdown (which could be well over 100 V).

I have seen the IRF613, anong others, work very well in this application.
Most
any power mosfet will likely do. Just because the thingy breaks down
doesn't
mean it gets hurt... Try it!

...Peter

2327. Need help constructing a transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: bryant13@aol.com
Message-ID: <19970224023900.VAA05008@ladder02.news.aol.com>
Source record: 96806

I am a high school student who is attempting to construct a ham radio transceiver as an honors project for my Electronics class. I have built relitively few electronic kits in the past, but I feel pretty confident that I could get most things working with effort. I plan to construct a transceiver for the 2 meter band. And I am mostly planning to use voice and packet radio. I am looking for either a kit or good schematics. I would like to know if it is advisable for me to try to build a transciver from schematics, and if so, where are the best places to obtain schematics. I am also interested in any reccomendations people have as to what kits are inexpensive but of resonably good quality. I am willing to spend up to $200, but I would like to keep costs lower than that if possible. I would especially like to hear about any experiences that people have had with commercial kits. I would like a challenge, but I also want to have a resonable chance of success.

2328. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5er1if$320@dfw-ixnews3.ix.netcom.com>
Source record: 96807
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In <MPG.d7a8c13fbc480049897d8@news.planet.net> adell@planet.net (Steve
- KF2TI (Landing, NJ)) writes:
>
>In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com
>says...
>
>> If you operate a PBBS to serve all amateurs who the hell are you to
>> decide what THEY should read.
>
>Exactly..*I* am the owner/operator of the PBBS and *I* decide what
gets
>read. *I* take the input of the people who utilize MY equipment, *I*
>decide what content is acceptable or not. Not YOU or the FCC
>
>That's who the hell *I* am. *I* and the others on my PBBS consider
your
>posts inappropriate to anything related to amateur radio, hence, no
>posts.
>
>I firmly believe you have every right to show the fool that you may or

>may not really be. HOWEVER, I DO NOT repeat, DO NOT have to give the
>platform to prove it. That's for others to do.
>
>If you're suggesting that I have to allow you to access my property
>(equipment, etc.) then you are barking up the wrong tree.
>
>--
>Steve KF2TI
>ARRL LIFE Member
>You can't make a difference if you don't belong
>

Gosh Steve,

Note the date and time; I agree totally with you on this issue.

73 Jerry

2329. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5er1aq$17h@dfw-ixnews6.ix.netcom.com>
Source record: 96808
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In <3310B581.4BB8@geocities.com> Burt Fisher <burtfisher@geocities.com>
writes:
>
>Bruce Beford wrote:
>>
>> Not so long as the FCC holds them responsible for message content
>> transmitted through their systems. Besides, I don't mind you
speaking
>> your opinions, but not over my radios.
>
>Cut the bull about the FCC, none of my messages are illegal.
>If you operate a PBBS to serve all amateurs who the hell are you to
>decide what THEY should read.

He my friend is the guy who owns the PBBS. The 18th century equivalent
was the printing press. Perhaps as an educator you remember the famous
quote, "Freedom of the press is for he who owns a press." Mr. Beford
owns the press and takes the responsibility, he get to decide what
passes his node. You don't like it tough.

Jerry
>
>#===============#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#===============#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

2330. Re: Voltage regulator (7808) question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5er6cj$1o2@cletus.bright.net>
Source record: 96809

They make a 7808 with 1.5 a rating its built on a to-220 frame. I use them at work all the time. Norm N8RGR

2331. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: w8pu@aol.com
Message-ID: <19970224061001.BAA07950@ladder02.news.aol.com>
Source record: 96810

```
test
```

2332. What's an FBOM?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: n9vjg@aol.com
Message-ID: <331136dc.3611932@news.imaxx.net>
Source record: 96811

Are you reading this? Great! That means it wasn't written it for nothing. Not to worry, you won't be wasting your time.

Amateur Radio is a hobby and like all hobbies, it needs to be fun and rewarding. We at FBOM Magazine may not be able to straighten out your 40
meter beam after a hurricane or stop commercial satellites from squatting
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FBOM Magazine is the new generation of radio hobby publications, focusing
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*
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* If you have America Online, visit the FBOM Magazine folder
* in the Ham Radio Forum message boards, under "Manufacturers,
* Dealers & Vendors."
*

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*

(FBOM Magazine c1997)

2333. Re: Why I am the way I am.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Ron Curry <recurry@insighttec.com>
Message-ID: <01bc221e$e19605c0$5ba19ecd@expressp5.insighttec.com>
Source record: 96812
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Bravo Burt....
--
Ron Curry
KE6WED
recurry@insighttec.com
recurry@inside.intel.com

Burt Fisher <burtfisher@geocities.com> wrote in article
<3310B1E9.7BF1@geocities.com>...
> I am the way I am because as a teen I was an active ham radio operator.
> I used "the mike" to not face real people thus missing my teen years the
> way real people experience it. It is not ham radio's fault of course,
> the fault is entirely mine. However I am not that person now and I
> despise in others what I despised in myself. I am much like a reformed
> smoker (they tend to be fanatics against smoking). When I hear hams on
> the air blabbing on about nothing, doing nothing, being nothing, kissing
> each others butts so much their lips turn brown I want to anything other
> than be like them. Further I was a gutless wimp up to 18 years of age
> (fit
> in well with ham radio), I would cower with the slightest threat but I
> learned that fear is far worse than being beat up and rarely would have
> anyone beat me anyway. So today if you want to threaten me the odds are
> high (especially if you are a ham) that nothing will ever be carried
> out. And if threatened I always tell the person to carry out the threat
> even if my acts that caused the threat were wrong because once you
> threaten me that closes the door as to the legitimacy of your cause.
>
> To those folks in the ASD support group much of the above applies. Most
> of you are uncaring men whose spouses finally wised up (hams make great
> uncaring spouses). In the end I am a far deeper and caring person than
> 90% of you. And to those that PERSONALLY insult me and/or use profanity,
> those acts say so far more about you than I. If you read my mail
> carefully you will rarely see me personally insult anyone and rarely
> will I use profanity. I argue ON THE MERITS. When you see someone attack
> the person it means their cause is without foundation.
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#

>

2334. Re: Re-engineering Henry amp from FM--->ATV HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5er5nt$1o2@cletus.bright.net>
Source record: 96813

First the amp, if its for FM is operating class c, to make it linear (AB) you need to foward bias the amp stages. This can be done by raising the base above ground by .7 volts. This can be done with 1 diode drop and a resistor divider (10 to 100 ohms). I have done this with a Henry 100 watt on UHF. For ATV the amp must be very linear--a foward bias of 50 to 100 ma should be fine.

Re-tuning is another matter. Most Henry amps I have seen use the transistor position on the strip line to determine the frequency so retuneing requires you to remove tha replace the transistor on the PC board. Most Henery UHF amps have about a 10 megacycle bandwidth.
It might be better to let them do it for $30 if you can not measure the resonant point on the PC board.

De Norm N8RGR

2335. Re: FS: isolation transformers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5er6l0$1o2@cletus.bright.net>
Source record: 96814

Who is the manufacturer? de Norm N8RGR

2336. WTB Icom Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: "Raj Singh, VE6RAJ" <singhraj@cadvision.com>
Message-ID: <331159ED.249C@cadvision.com>
Source record: 96815

Hi
I am looking for Icom 500 Hz CW filters FL-45 and FL-52A.
Thanks
Raj VE6RAJ

2337. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5ermq2joe1@nadine.teleport.com>
Source record: 96816
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Please, guys, can't you keep this stuff to rec.radio.amateur.misc? Isn't one newsgroup enough for this sort of childish squabbling without splattering it around to the homebrew and space newsgroups too?

Roy Lewallen, W7EL

2338. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <33117499.2E1D@geocities.com>
Source record: 96817
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Steve - KF2TI (Landing, NJ) wrote:

> First things first 75 very crowded right now (7:55 EST) but will try
> 3.875 at 9:00 EST

Did not get this message until 6 AM Monday.

> In all honesty, Burt, you are the only one I've ever "locked out". And
> quite frankly, I have found very few if any locally who will agree with
> anything you have to say concerning amateur radio

Of course no one else will dare risk losing access for displeasing King
Steve.
I have been locked out of several PBBSes and the few that allow me in
get a lot of pressure to take me off but they are real men, they do not
like what I say but they believe in free speech.

> I also reserve the right to preview all for sale messages for content. I
> allow only amateur and amateur related materials to be posted. Cars,
> guns, recipes all get round filed.

You are doing what is legally required in most cases.

> > Next Maybe you will deny access based on color?
>
> Funny, I have yet to see a radio that can determine a person's color
> based on a callsign. Is this something new?? How can I tell a person's
> color based on his posting to my PBBS?? Enlighten us Burt

Most of those that access your PBBS are local and you can see them
easily.
Are you available evenings on air?

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2339. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <331174E1.292F@geocities.com>
Source record: 96818
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Gerald Schmitt wrote:
>
> He my friend is the guy who owns the PBBS. The 18th century equivalent
> was the printing press. Perhaps as an educator you remember the famous
> quote, "Freedom of the press is for he who owns a press." Mr. Beford
> owns the press and takes the responsibility, he get to decide what
> passes his node. You don't like it tough.

That some how makes it morally right?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2340. Need Icom 2AT service manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: s-wiriy@students.uiuc.edu
Message-ID: <5erte7$gig@vixen.cso.uiuc.edu>
Source record: 96819

I'm looking for a mannual for Icom IC 2AT 2-m transciver.
thanks you for any information.

2341. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: "Anthony R. Gold" <tgold@microvst.demon.co.uk>
Message-ID: <856782633snz@microvst.demon.co.uk>
Source record: 96820
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5eqeff$bt2@mtinsc05.worldnet.att.net>
tomgasta@worldnet.att.net "Thomas Gasta" writes:

> I wonder why, whenever anyone gets into this big type acceptance issue of
> using "Amateur on Commercial Freqs", nobody ever asks why so many of those
> damn Commercial radios that everyone has on the ham band is never
> mentioned. They are not type accepted for Amateur use either.

That's not very surprising. If you were a licensed amateur you would
(or should) know that there is no type acceptance protocol for
amateur transmitters, only for external rf amplifiers. Testing on
knowlege of these regulations is a part of the licensing procedure.

There are technical specifications for bandwidth and spurious
emissions, but these are the responsibility only of the control
operator. There is no requirement for any testing, registration or
labeling by a manufacturer or importer, aside from compliance with
Part 15, when applicable.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com
tgold@microvst.demon.co.uk
packet: g3skr@n0ary.#nocal.ca.usa.na

2342. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7b426261b0d6609897de@news.planet.net>
Source record: 96821
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <330EFED7.20D0@geocities.com>, burtfisher@geocities.com says...

> ---
> I may not always agree with what you say. But I will defend to the
> death your right to say it.
>
> ---
>
> The above quote clearly does not apply to Packet SYSOPS, does it?

Actually it does. I myself agree 100% with the above. HOWEVER, there is nothing that compels me to provide you with the soapbox by which you may practice it.

--
Steve KF2TI
What one individual only dreams of doing can
be accomplished by many individuals collectively

Robert Kennedy

2343. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: adell@planet.net
Message-ID: <MPG.d7b43511a66becd9897df@news.planet.net>
Source record: 96822
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

[This followup was posted to rec.radio.amateur.misc and a copy was sent
to the cited author.]

In article <5er1if$320@dfw-ixnews3.ix.netcom.com>, kc5egg@ix.netcom.com
says...
> In <MPG.d7a8c13fbc480049897d8@news.planet.net> adell@planet.net (Steve
> - KF2TI (Landing, NJ)) writes:
> >
> >In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com
> >says...

--snip-->
> Gosh Steve,
>
> Note the date and time; I agree totally with you on this issue.
>
> 73 Jerry
>
>

--
Steve KF2TI
What one individual only dreams of doing can
be accomplished by many individuals collectively

Robert Kennedy

Hey Jerry, just finished reading yours as well. Either there is hope for
all of us or the universe as we know it will end just about now

2344. R U on type accepted drugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: w9fs@juno.COM
Message-ID: <19970224.072021.9710.0.W9FS@juno.com>
Source record: 96823

It amazes me, I will have to say the amateur populist seems to be less informed than 40 years ago when I got started as a novice. I inspired me to go on and get my commercial license 1st Phone. But even as a Ham I learned what type acceptance is.

When a manufacturer builds a radio to sell in the US market, that radio must pass certain tests. The tests are much more rigid for commercial two way than for amateur, because in a effort to increase the technical abilities of a population and hopefully advance technology as a whole, the acceptance testing for amateur equipment was and still is not so tight that you can't sit down and homebrew a radio. Most all hams I've seen don't have the lab equipment that Motorola and GE/Ericson have. (That was Thomas Gasta reference to Shaumburg and Lynchburg).

If you hear a Motorola (Radius) GP300 or GM300 on the Amateur frequency you should know that radio had to meet a standard (TEST for acceptance) a much more rigid test, right at the amateur band then do the current amateur products on the market. Some Motorola products are spec'ed from 146-167MHZ (I may be off on the high frequency) While the amateur products have specifications for the transmitter for perhaps just a little outside the amateur band so it will cover mars.

Meeting those specifications really cost money which is then reflected in the cost of the radio.

Just had to open my mouth, that is the way it was and is, but things are changing all the time, may wake up tomorrow and everything be different
>------------------------------
>
>Date: 23 Feb 1997 21:57:03 GMT
>From: Thomas Gasta <tomgasta@worldnet.att.net>
>Subject: Type acceptance (was Re: -- == What drugs are you taking???
>== --)
>
>I wonder why, whenever anyone gets into this big type acceptance issue
of
>using "Amateur on Commercial Freqs", nobody ever asks why so many of
those
>damn Commercial radios that everyone has on the ham band is never
>mentioned. They are not type accepted for Amateur use either. Spectral
>purity, out of a commercial Maxon-Regency-Uniden, not very likely. The
>
>real issue, people using $300 keyboard programmable radios for their
>plumbing business rather than going down to the Local Moto shop and
buying

>a $800 GP300, thats it, plain and simple, and is probably the biggest
part
>of the "Type Acceptance" equation.

You can buy a new GP300 for less than $500.00

>One of you is right, it is simply the keyboard programmability that
keeps
>the amateur radio out of the commercial band, as far as type acceptance
is
>concerned. A Moto JT1000 has a UHF bandwidth of 403-470, as does most
>Yaesu FT50s, filtering, or lack there of is virtually identical, like in

>zilch. But the JT supposedly takes a rocket scientist (i.e. 2way tech
with
>a key) in order to "keyboard" program the thing, while the Yaesu takes
>someone who can read. Type acceptance of the Icom U/H-16 portables
>(commercial) was temporarily suspended when FCC found that anybody could

>actually keyboard program the radio, and reinstated when Icom made the
>access to the keyboard more difficult for the end user. Yet, this very
>radio was sold in amateur radio service as a Icom 02AT and O4AT, and
check
>a schematic and parts list, they are identical in every way except the

One is type accepted for commercial use, one is not!

>software, which allowed easy keyboard entry. Harmonics, intermods, and
>selectivities, had absolutely nothing to do with the type acceptance
>issue, only the ease of frequency moving, and of course, the commercial
>U-16 sold for several hundred dollars more that the 04AT.
>
>So basically, when the FCC knocks at your door, then and only then does
it
>really matter. And if you actually have a license for the frequency(s)
you
>are using the "unaccepted radio" on, the penalty will be worth the
savings.
>
>Some fun reading, check out the NOIs and NPRMs over the last several
years
>regarding type acceptance issues, and take carefull note of who it is
that
>is petitioning the Commission for most of the changes (stricter)
changes,
>and you will find a lot of Schaumburg and Lynchburg addresses.
>
This may be true, but this is their bread and butter, and they employ
thousands of people, like myself, they like to eat, provide for thier
families. I would rather help families here in the USA than overseas. In
1960 we had several companies here in the US that manufactured (Good)
amateur equipment, look what has happen! Oh well that is another story,

another topic

73

Jerry W. Daugherty W9FS, ex K9PFV, W4RXU, W9FTI, DL5GI.
VHF-UHF Nut. May all your blessings outweigh your needs.

2345. Re: Re-engineering Henry amp from FM--->ATV HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <3311a97f.3661227@netnews.worldnet.att.net>
Source record: 96824

On 24 Feb 1997 04:34:05 GMT, norman <norsan@bright.net> wrote:

>First the amp, if its for FM is operating class c, to make it linear (AB)
>you need to foward bias the amp stages. This can be done by raising the
>base above ground by .7 volts. This can be done with 1 diode drop and a
>resistor divider (10 to 100 ohms). I have done this with a Henry 100
>watt on UHF. For ATV the amp must be very linear--a foward bias of 50 to
>100 ma should be fine.

One common reason most high power (over 20 watt) solid state amps go
into gain compression so quickly is because bias circuits like that
are used.

Bias current through the lower leg of the bias divider (that is the
diode) must be many times the peak base current at full RF drive.
If this guideline is not followed, bias goes away as drive (and base
current) is increased and the PA moves into class C !!

An active bias circuit using a transistor connected as a current
source is almost always required for good linearity unless a FET is
used in the PA.

73 Tom

2346. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2402970435150001@news.vcnet.com>
Source record: 96825

In article <3310e2d6.3733244@netnews.worldnet.att.net>,
w8jitom@postoffice.worldnet.att.net (Tom Rauch) wrote:

> On Sun, 23 Feb 1997 10:09:44 -0800, measures@mail.vcnet.com (R. L.
> Measures) wrote:
>
...snip...

> Nice job on slandering the 1500, but the reason the 1500 has the
> reputation of using 8877's is much less sinister, The 1500 was
> released for production right when Eimac was having trouble with heat
> dams in the 8877. Neither ETO nor Ameritron, nor varrious medical
> companies had much sucess with tube life for a long period of time.
>
Tom--- You and Dick Erhorn (ETO) have consistently blame 8877 failures on Eimac. This sounds to me a lot like not invented here (NIH) syndrome---i.e., it's always the other guy's fault. In a letter, Dick told me that he was sure that the 8877s that failed in his products failed from a manufacturing defect because Eimac replaced kaput 8877s, no questions asked. When General Electric reportedly got an earfull of Dick's excuse for failures, they cancelled his contract to build RF power amplifiers.for General Electric MRI machines

You reported that replacing Rs/Ls with a short in a 3-500Z amplifier resulted in a VHF oscillation. The 8877 has more VHF amplification ability than does a 3-500Z. It doesn't take a genius to realize that the 8877 probably needs a Rs/Ls VHF suppressor in HF service.
In the AL-1500, instead of an Rs/Ls, there is an inane short. At this point in the debate, I am hardly surprized that you hexa-stonewalled my question on whether or not the AL-1500 uses a VHF suppressor.

Denial of reality
Is a terrible malady.

--
--Rich-- ag6k, 805-386-3734

2347. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Thomas Gasta <tomgasta@worldnet.att.net>
Message-ID: <5es5m2$o5r@mtinsc03.worldnet.att.net>
Source record: 96826
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Commercially manufactured amateur radio equipment (i.e. produced for resale) does in fact carry type acceptance. Take a look at the back of most radios, for instance my FT40 (yaesu), and it has the FCC ID (type acceptance) K66FT-40R and even a canadian type 511 101 525A. If you don't think the FCC regulates the commercial amateur equipment line, suggest a trip to Japan. You would love to have some of the "Amateur" equipment readily available in that country that is not imported to the US because they cannot be "type accepted". Now days, there are so many reasons for failing type acceptance that many radios never make it here. They may not have anything to do with "spectral purity", but the type is required. Home made stuff, no type needed, "yet"!

2348. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Thomas Gasta <tomgasta@worldnet.att.net>
Message-ID: <5es61i$o5r@mtinsc03.worldnet.att.net>
Source record: 96827
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

By the way, there is a perfect example for you that all the "type acceptance" crazies have for months discussed.

MOTOROLA, thats right, the big M, has manufactured a radio(s) that are Amateur Only called the AP50 and CP50. These are the same as their popular SP50 commercial radio, except they are keyboard programmable in the Amateur Bands. They are not available in the US (in theory) because they are NOT FCC TYPE ACCEPTED for amateur radio. Why, who knows, keyboard programmability into the commercial segment as well. Maybe, or maybe Motorola didn't wan't their own radios coming back to compete with their commercial endeavors, the real reason for type acceptance nowadays.

2349. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2402970541380001@news.vcnet.com>
Source record: 96828

In article <3310e2d6.3733244@netnews.worldnet.att.net>,
w8jitom@postoffice.worldnet.att.net (Tom Rauch) wrote:

> On Sun, 23 Feb 1997 10:09:44 -0800, measures@mail.vcnet.com (R. L.
> Measures) wrote:

>
...snip...

> Nice job on slandering the 1500, but the reason the 1500 has the
> reputation of using 8877's is much less sinister, The 1500 was
> released for production right when Eimac was having trouble with heat
> dams in the 8877. Neither ETO nor Ameritron, nor varrious medical
> companies had much sucess with tube life for a long period of time.
>
Tom--- You and Dick Erhorn (ETO) have consistently blamed 8877 failures on
Eimac. This sounds like not invented here (NIH)
syndrome---i.e., it's always the other guy's fault. In a letter, Dick told
me that he was sure that the 8877s which failed in his products failed from
manufacturing defects because Eimac replaces kaput in-warranty 8877s, no
questions
asked. When General Electric got an earfull of Dick's excuse
for failures, they reportedly cancelled his contract to build RF power
amplifiers.for
General Electric MRI machines

You reported that replacing Rs/Ls with a short in a 3-500Z amplifier
resulted in a VHF oscillation. The 8877 has more VHF amplification ability
than does a 3-500Z. It doesn't take a genius to realize that the 8877
probably needs a Rs/Ls VHF suppressor in HF service.
In the AL-1500, instead of an Rs/Ls, there is an inane short. At this
point in the debate, I am only mildly surprized that you hexa-stonewalled my
question on whether or not the AL-1500 uses a VHF suppressor.

Denial of reality
Is a sinister malady.

--
--Rich-- ag6k, 805-386-3734

2350. Re: Type acceptance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5es7ql$s4i@lehi.kuentos.guam.net>
Source record: 96829
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thomas Gasta <tomgasta@worldnet.att.net> wrote:

>I wonder why, whenever anyone gets into this big type acceptance issue of
>using "Amateur on Commercial Freqs", nobody ever asks why so many of those
>damn Commercial radios that everyone has on the ham band is never
>mentioned. They are not type accepted for Amateur use either.

Correct me if the rules have changed, but I was under the impression
that no radios had to be type accepted for the Amateur bands......

Remember that guy, what's his name, Home Brew ?

73, Jim KH2D

2351. New Ham Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: KaLiMaN <kaliman@multipro.com>
Message-ID: <01bc225f$2a8184e0$33b178cf@multipro.com.kaliman>
Source record: 96830

Ham, Scanners, Short-wave, SAREX, MIR, Satellite Tracking, etc.

http://users.multipro.com/kaliman/index.htm

2352. Re: Type acceptance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Thomas Gasta <tomgasta@worldnet.att.net>
Message-ID: <5esa33$953@mtinsc03.worldnet.att.net>
Source record: 96831
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Yes, amateurs can make their own radio without type acceptance, but they cannot manufacture, in quantity, radios for sale or lease. I have heard a lot of people correcting my seemingly wrong statement. I would simply direct them to both Part 2.800 of the FCC rules and to the back of their very own commercially manufactured radios, and on the back, you will find an FCC ID number (the type acceptance). Type acceptance for Part 97 operations only, and on the back of their Motowhiz, another FCC ID for Part 90 operations.

2353. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Thomas Gasta <tomgasta@worldnet.att.net>
Message-ID: <5esbnr$eml@mtinsc05.worldnet.att.net>
Source record: 96832
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

As a licensed amateur, and one who can read and understand the english language, I would direct you to Part 2.800 and specifically to Part 2.1005 of the FCC rules, and if that doesn't work, take a look at the back of your kensucom radio, see that little FCC ID, know what that is, thats right, it is the type acceptance ID for that amateur radio. If you would like to read parts 2.981, 983, 991, 993, 997, 999, 1001, and 1003, you will see just how much trouble Icsuwood had to go through to be able to sell you that radio frequency device, and if you want to build one for your own use, Part 97 allows that, just don't build them for resale without going through the same trouble. Like anyone with such a poor understanding of "ALL THE RULES" could ever build anything!

2354. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <3311d285.9488578@netnews.worldnet.att.net>
Source record: 96833

On Mon, 24 Feb 1997 05:41:38 -0800, measures@mail.vcnet.com (R. L.
Measures) wrote:
>>
>Tom--- You and Dick Erhorn (ETO) have consistently blamed 8877 failures on
>Eimac. This sounds like not invented here (NIH)

Rich, you memory is very short, and you seem to have no desire to
learn anything.

Other people have posted the same thing about 8877's here on this
thread, and if you call Eimca (woops, if someone ELSE calls Eimac)
they will confirm what I am saying.

It is an absolute and well known fact the 8877 went through production
problems in the 80's. I understand it does noit fit your agenda, but
never the less.... it is true.

>You reported that replacing Rs/Ls with a short in a 3-500Z amplifier
>resulted in a VHF oscillation. The 8877 has more VHF amplification ability
>than does a 3-500Z. It doesn't take a genius to realize that the 8877
>probably needs a Rs/Ls VHF suppressor in HF service.

You confuse things by looking at small parts of large issues.

The 8877 has a high self neutralizing frequency. The excellent low
impedance grid connection reduces the requirements for a suppressor.
Tubes like the 833A, 811A, 572B, 4-1000, and 3CX1200A7 require large
and sometimes special suppressors. VHF capable tubes do not.

Pull a 3-500Z suppressor and put it in a 811A amplifier and the amp
will osillate.

The suppressor inductance in the AL-811 amplifier is about 500 nH, in
the AL-80B about 80 nH.

If the 8877 was as unstable as you clkaim at VHF, it would never work
in an unneutralized VHF strip line amplifier. Why is a strip line amp
with a strip line Q in the double or triple digits stable, and a HF
amplifier with less VHF not???

Your arguements make no sense.

>Denial of reality
>Is a sinister malady.

From the mouth of babes, eh?

73 Tom

2355. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: tgold@microvst.demon.co.uk
Message-ID: <856799635snz@microvst.demon.co.uk>
Source record: 96834
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5esbnr$eml@mtinsc05.worldnet.att.net>
tomgasta@worldnet.att.net "Thomas Gasta" writes:

> As a licensed amateur, and one who can read and understand the english
> language, I would direct you to Part 2.800 and specifically to Part 2.1005
> of the FCC rules, and if that doesn't work, take a look at the back of
> your kensucom radio, see that little FCC ID, know what that is, thats
> right, it is the type acceptance ID for that amateur radio.

I accept your words without question. However I repeat my previous
allegation that radio amateurs are *not* required to use any type
accepted radios, and specfically I continue to insist that the
Motorola sets deigned for other services are perfectly legal for use
in the amateur service, contrary to what had been stated previously
in this thread.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com
tgold@microvst.demon.co.uk
packet: g3skr@n0ary.#nocal.ca.usa.na

2356. MMIC's noisy ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: hduff@ica.net
Message-ID: <3311bb5c.0@lightning.ica.net>
Source record: 96835

I want to mix 2 VCO's and amplify the desired output to around 0 to +5 dbm.
Right now I am using a level-7 mixer with the L.O. VCO input at 0 dbm and the RF VCO input at about -20 dbm. The output of the mixer is about -26 dbm. I have a LPF to pass the lower mixing component. The signal at this point is relatively clean. I'm trying to amplifiy the signal to about +3 dbm using 2 MAR-1's. I am experiencing a substantially raised noise floor when I use the MMIC amplifier stage. The MMICs are decoupled using a cap and choke on the supply lines.

Should I be able to cascade a couple of MMICs and come out with a clean signal ?

Pse reply via email: hduff@ica.net

2357. 4CX250 ampl. scematic diagram needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Luca de Biase <lucadb@tn.village.it>
Message-ID: <01bc225c$a91fcb20$1977b8c2@lucadb>
Source record: 96836

Hi all,
I need schematic diagram for a 2 mtr. amplifier with one or two 4CX250, can anyone help me?
Thanks Luca IW1QD
E-mail : lucadb@tn.village.it

2358. Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <3311C8B8.648@apollo.wes.army.mil>
Source record: 96837
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I have the following tubes for sale. Make an offer and remember to add
for postage/UPS.

NEW IN BOX

2-6L6G
1-6L6GA
1-931A
1-12AU7A
1-5GW6
1-5651
2-1G3GT 1B3GT
1-6GW6
1-1B3GT
1-807
1 USED 6X4 IN BOX
1 USED 6EA8 IN BOX

50.00 FOR ALL SHIPPED.

Butch Magee, KF5DE
601-373-4325 after 5 pm cst
1-800-LAB-6-WES ext.4012

2359. WTD : 10Ghz transverter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: rmander@mbox.4net.it
Message-ID: <5esjp3$186@server-b.cs.interbusiness.it>
Source record: 96838

Hello all,
as we're in sight of P3D launch, I would like to prepare my setup for
microwave use.I wonder if someone can help me find a 10Ghz transverter
source that may provide an off-the-shelf one or in kit but tuneable
with inexpansive instrumentation.
Thanks in advance
IK4JQW , Roberto

2360. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5esjbr$1dh@abyss.West.Sun.COM>
Source record: 96839
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5esbnr$eml@mtinsc05.worldnet.att.net>,
Thomas Gasta <tomgasta@worldnet.att.net> wrote:
>As a licensed amateur, and one who can read and understand the english
>language, I would direct you to Part 2.800 and specifically to Part 2.1005
>of the FCC rules, and if that doesn't work, take a look at the back of
>your kensucom radio, see that little FCC ID, know what that is, thats
>right, it is the type acceptance ID for that amateur radio. If you would
>like to read parts 2.981, 983, 991, 993, 997, 999, 1001, and 1003, you
>will see just how much trouble Icsuwood had to go through to be able to
>sell you that radio frequency device, and if you want to build one for
>your own use, Part 97 allows that, just don't build them for resale
>without going through the same trouble. Like anyone with such a poor
>understanding of "ALL THE RULES" could ever build anything!

Are you perhaps confusing the different levels of Part 15 certification
with 'type acceptance"? "Type acceptance" is something very specific,
and only applied to external power amplifiers below 144MHz in the
amateur service. However, receivers are subject to some level of
Part 15 standards, and, in some cases, receivers must be formally
certified, and in others, not.

But, you knew all this and just wanted to flame anyway, right?

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

2361. Want to buy a Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: mstriani@www.cidef.COM.AR
Message-ID: <c=US%a=_%p=CIDEF_ARGENTINA_%l=MAIL-CIDEF-970224170033Z-93@www.cidef.com.ar>
Source record: 96840

```
This message is in MIME format. Since your mail reader does not understand
this format, some or all of this message may not be legible.

------ =_NextPart_000_01BC226B.4D863F60
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi:
I want to buy a ham Radio, preferent bi-band I've got in mind the
Kenwood TM-733a but I live in Argentina, and here It is very expensive,
so I want to know how much it will cost in the U.S. and how much do
I'll have to pay of taxes and shipment. If someone has the way to do
this please send me an e-mail to mstriani@www.cidef.com.ar
Thanks in advance
Mariano Striani.

Mariano A. Striani ;-)
mstriani@www.cidef.com.ar

------ =_NextPart_000_01BC226B.4D863F60
Content-Type: application/ms-tnef
Content-Transfer-Encoding: base64

<encoded_portion_removed>
Tw==

------ =_NextPart_000_01BC226B.4D863F60--
```

2362. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: Kory Hamzeh <kory@avatar.com>
Message-ID: <Pine.BSI.3.91.970224101140.15483B-100000@avatar.avatar.com>
Source record: 96841
Cross-posted to: rec.radio.amateur.digital.misc,,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

On Sat, 22 Feb 1997, Burt Fisher wrote:

> Kory Hamzeh wrote:
> >
> > > > But..., its real easy to set up a cron jobs under unix to send it a huge
> > > > 100k message every five minutes. If 50 people started doing that ...
> > > > well, you get the pictures.
> > >
> > > The sword goes two ways tough guy.
> > >
> >
> > Most certainly does....
>
> Shall I visit?
>
> AC6RN HAMZEH, KOUROSH LIC ISU
> 12-JAN-1996
> EXTRA 6217 MELBA AVE LIC EXP
> 10-JUL-2005
> DOB 6-FEB-1965 WOODLAND HILLS CA 91367 LST UPD
> 12-JAN-1996
> (PREVIOUSLY KE6VWO, GENERAL)
>
> Hamzeh, Kourosh K 6217 Melba Ave, Woodland Hills, CA
> 91367-1520
> Phone: (818)884-7503

Go for, chicken heart, let's see if you have any guts or if you're like
all the hams which you despise.

2363. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-24 00:00:00 UTC
From: kb7et@pipeline.com
Message-ID: <5esp1c$3d1@camel4.mindspring.com>
Source record: 96842
Cross-posted to: alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote:

>>AUTHOR PROFILE: Burt Fisher <burtfisher@geocities.com>
>>
>>177 unique articles posted.
>>Number of articles posted to individual newsgroups (skewed by cross-postings):
>> 69 rec.radio.amateur.misc
>> 51 alt.support.divorce
>> 35 rec.radio.amateur.digital.misc
>> 4 ne.weather

>Oh geez, now Burp's flaming the weather, too?

Seems a shame to waste all that creative energy, when he
could be adding something constructive.

2364. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CAD8.7288@geocities.com>
Source record: 96644
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Glen Quarnstrom wrote:

> You are technically correct, but ethically wrong wet. If you set up
> to provide a public service as a BBS, you have a moral obligation to
> forward all legal mail, or at least not to limit forwarding based on
> personal considerations such as who is saying what. SysOps who censor
> mail are a big problem on the ham BBS network, and responsible SysOps
> should and will route around them.
>
> If you're not part of an open network, you're just cluttering up
> valuable space on the bands, and are giving jerks like Burt more
> ammunition.

Very well said, all of it, even where you called me a jerk.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2365. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CF4F.32E2@geocities.com>
Source record: 96645
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

John Jordan wrote:
>
> You call yourself a teacher? A mentor entrusted to help shape the
> minds of our young children? Heaven forbid, a roll model? By your
> posts you have proven that you are incredibly opinionated, not above
> using foul language in an open forum of mutual learning that is easily
> accesable by curious young minds, you point your "holier-than-thou"
> finger at Amateur Radio Operators and seem to have no problem speaking
> ill-will of this group of human beings.

You are welcome as is anyone to contact my students (dormouse1@juno.com
or my daughter at aurora24@rocketmail.com) and ask them for your self.
Foul language? I used ass, report me. You no doubt have seen the vile
profanity used against me? When compared to the public at large I am
indeed an ass but when compared to hams I am far superior than MOST.

Can you tell me just what
> exactly it is that makes you a better person than any of these people
> you speak so poorly of?

I do not call my wife THE WIFE or my daughter a harmonic.
I have a life, I care about other people, I have guts to name just a
few.

I also pride myself on being a volunteer
> interpreter for the deaf, a volunteer for the American Legion, an
> advocate for the rights of Veterans and the disabled, among other
> similar interests. I literally volunteer more of my time than I work
> for a wage, I may be poor but if pride were gold I'm a very rich man..
> Can you say that, Burt?

All of the above makes you a better man than I. Notice I deleted what
you "do" for ham radio.

I too am an American
> and am entitled to my opinions and my opinion is that you are a bigot
> and have no business in the teaching profession if you are incapable
> of treating other human beings as the equals that they are. In the
> mean time, I'll be praying for your students..

No need to pray for them, ask them if they need your prayers.
Hams are not equals, all others are or are superior than I.
Just how am I bigot?

No one here has the intellect to deal with my students OR THE GUTS.

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2366. K1OIK on the air

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CFC3.34D5@geocities.com>
Source record: 96646
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
On the hour at 4 PM and 5 PM I will appear on 7208 or thereabouts
Tuesday.
From 6 PM on the hour until 9 PM I will be on 391o or thereabouts.
Meet me

#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2367. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2502970408130001@news.vcnet.com>
Source record: 96647

In article <n7ws.264.00ED468B@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) wrote:

> The Tar Baby continued...
>
>
> As most of you will recall, in an effort to clear up some of the
> misinformation put forth by a regular contributor to this forum, I
> agreed to perform some "scientific" measurements of parasitic suppressor
> materials.
>
ï¿½ TRANSLATION: My original intention was to make measurements that would help my 'amplifier expert' pal in the Peach State (GA) torpedo his unexpert opponent in the Land of Fruits and Nuts (CA).

> While I don't claim my methods to be any more than normal laboratory
practice,
> they were (and are) given a great deal of weight by this individual who's
> measurements by comparison are most unscientific.

ï¿½ Wes has me on this one. My original measurements (1988) were made on a Boonton 50MHz-max Q meter. Since the frequency of most parasites are in the 90MHz to 160MHz range, the Boonton's 50MHz measurements are undoubtedly worthless in a debate, even though they seemingly provide a few clues.

> Apparently, because I attempted to treat this individual with a degree of
> courtesy, he assumed that I was taking his side in this issue. NOTHING COULD
> BE FURTHER FROM THE CASE.

ï¿½ Yea, verily. Whatever led Wes to this inane conclusion will very probably remain a mystery.

> Furthermore, the individual in question had the gall to post the results
of MY
> measurements on HIS home page, in an attempt to further the illusion that the
> data support his position.
>
ï¿½ TRANSLATION: Instead of helping my amplifier-expert pal in Georgia torpedo the unexpert in the Land of Fruits and Nuts, as intended, MY MEASUREMENTS were UNFAIRLY used to torpedo my pal. Naturally, I was aghast. What is even more appaling is that the part of MY measurements that launched the torpedo are now available on the Web for amateur's around the world to see.

> When this became apparent to me, I wrote the following: (Identity of
> receipient purposely deleted):

>
> Dear XXXX,

> As you should recall, I agreed to make measurements of sample
> materials supplied by you and Mr. YYYYY to help "clear the air"
> on some of the issues of parasitic suppressor performance.
>
> I did this from the perspective of one ham trying to help out
> his fellow hams with a sticky technical problem. It was clear
> in my mind that this was a strictly "amateur" activity,
> performed as a service to other amateurs, for which no
> remuneration was expected or required.

ï¿½ Apparently, Wes presumed that Mr. YYYYY (Charles Thomas Rauch, Jr., W8JI) received no remuneration from his employment by MFJ/Ameritron, ---yeah, right---. Apparently, Wes also presumed that my VHF suppressor retrofit kit business was a profit-making enterprise from which I received remuneration. Reid Brandon also presumed that I was making money selling suppressors. ---chortle--- I have never made money selling retrofit kits. When I was 14, Dan, W6BOK, the fellow who got me interested in amateur radio and gave me my FCC novice test, told me that amateur radio operators shouldn't profit from other amateur radio operators. So I pay my helper, Karina, whatever it takes for me not to profit from selling suppressor retrofit kits. In 1996, she made $1120 working a couple of hours for me each week. Shortly after the 9/94 QST critique of my Jan. 1994 QST article, sales plummeted and her income from working for me decreased by 2/3. Nice going, Reid, Fred and Tom.

> As you are also aware, I took the time to create a home page
> wherein I posted the results of the measurements so all
> interested parties could access them. Included with the data
> was the following declaration:
>
> "This material is copyright 1997 by W. D. Stewart, Jr.
> The material maybe be freely distributed for *non-commercial*
> use if proper credit is given." (Emphasis added)
>
> Since the publication of this material you have made a
> number of references to it in usenet postings,
> in an attempt to bolster your position in the discussion.
> I have no problem with your references to the material,
> other than what I perceive in some cases to be inferences
> that I support your technical position.
>
> I do have a problem however, with uses of the material
> on your home page, which is clearly of a commercial nature.
> It is my position that the incorporation of this information
> is a violation of the spirit and intent of my original objective.
> Furthermore, it could be inferred that I am somehow a party to
> your business activities, which we both know is not the case.
>

> Therefore, I am asking that you remove all references to
> the material in question from your home page and any other
> publications which are commercial in nature and that you
> let me know when it has been done. Likewise, I have removed
> the information from my home page.

ï¿½ This should take a little of the pressure off of Mr. YYYYY, Wes.

> Regards,
>
> Wes Stewart, N7WS
>
> In response to this, Mr. XXXX asked me to supply my telephone number to him.
>
> I responded as follows:
>
> I have an unlisted number and would prefer to not give it out.
> Furthermore, I honestly don't know what more there is to discuss.
ï¿½ Honestly? I'm guessing that, as was the case with Mr. Joseph Miklos, Wes was warned off of talking to me by Mr. Rauch. Grown men who, when the need arises, can't hang up the phone on their own? ....Nahh. .... Tell us it ain't so, Joe.

> I have made a simple request; remove all references to me
> from your home page and other literature. What is so difficult
> about this?
ï¿½ I'll get to that, Wes. ... :)

> If you need supporting data for your claims for commercial purposes,
> then I suggest that you make the measurements or pay someone else
> to do it for you.
>
> Sincerely,
>
> W. D. Stewart
> ....snip........
>
> Unfortunately, the references remain on his page in clear violation of
> copyright laws.
>
> Beware dem tar babies ya'll

ï¿½ U. S. Copyright Law provides for 'fair-use' quotes of excerpts from copyrighted materials---provided that credit is given to the copyright holder. It would be a violation of U. S. Copyright Law NOT to give Mr. Wesley D. Stewart, Jr. credit for a fair-use quote of any part of his copyrighted materials.

.....It sorta of looks like ol' Wes done went and picked up da tar baby.
.....

Perhaps the moral to the story is:
ï¿½ When someone recognizes himself as an 'expert' or a 'prophet', or a 'psychic', or whatever *sounds* great, NOT checking-out what he says could be a big mistake. In such cases, lest one become "one", one should probably keep in mind the words of Phineas Taylor Barnum in regards to "one" being born every minute. Amen to that, brother Barnum.
ï¿½ Real amplifier experts are likely to be familiar with AC Circuit-Analysis, Ohm's Law, algebraic expression, and scientific notation. . Most of the people I know who appear to be knowledgeable about what takes place in RF power amplifiers also have a minimal understanding of differential calculus and thermodynamics.
ï¿½ One way to tell a real and an ersatz amplifier expert apart is that one rejects AC Circuit-Analysis, as needed, whenever it casts doubt on his proclimations---and the other one does not
ï¿½ Aiding and abetting prevarication isn't likely to win public admiration.

73s, ya'll
"XXXX"
.a.k.a.:

--
--Rich-- ag6k, 805-386-3734

2368. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2502970419040001@news.vcnet.com>
Source record: 96648
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

In article <01bc21ed$738b3540$f20f2399@desktop>, "Peter Gottlieb"
<peter_gottlieb@msn.com> wrote:

> CRONIN <jdc3538@osfmail.isc.rit.edu> wrote in article
> <5ecocf$9ha@news.isc.rit.edu>...
> >
> > I'm tinkering with a radio for packet use that has a relay for T/R
> > switching. The relay has a diode across it to keep the transistor that
> > runs it from getting fried. So far so good. Every now and then
> > there is mention of how this increases relay switching time, obviously
> > a bad thing for packet.
>
> In simple terms, a magnetic field holds the relay in, and the diode
> prevents
> the field from collapsing as fast by turning the voltage created by the
> collapsing
> magnetic field back into a magnetic field for some milliseconds.
snip...

A reverse diode across the coil is important since it protects the coil from the otherwise large counter EMF across the coil during break. (I measured 450v peak across a 24v relay coil during break.) However, such a diode increases the break-time. By placing a resistor in series with the diode, the break-time can be cheaply decreased and the counter EMF held to a reasonable amount. As a rule of thumb, the series R should be 2 to 3 times the coil R. More R =s faster break-time, but with the trade-off of more counter EMF volts.

The make-time of a DC relay can be decreased by connecting the coil in series with a resistor that has 3 to 5 times the resistance of the coil. Naturally, this arrangement increases the voltage needed to operate the relay. For example, a relay has a 240 ohm coil rated at 24v. A 720 ohm resistor is connected in series with the coil. In order to produce 24v across the coil, 96v must be applied to the series coil/resistor. This circuit is recommended by Jennings, the company that manufacturers vacuum-relays.
Here's how it works: Relay coils have inductance. For instance, the Jennings RJ-1A's 26v coil has about 0.3H. It takes time to overcome the inductance and build up a flow of current before a relay can close. The circuit described temporarily provides more coil voltage at make, thereby shorting the time it takes for current to build up in the coil. I measured a make-time decrease of roughly 65% with the circuit described.

--
--Rich-- ag6k, 805-386-3734

2369. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: rwhitacre@lucent.com
Message-ID: <3312e0b4.85913815@nntpa.cb.lucent.com>
Source record: 96649
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

What does this have to do with equipment? Take your stupid argument
elsewhere

On Sat, 22 Feb 1997 09:12:39 -0500, Burt Fisher
<burtfisher@geocities.com> wrote:

>--
> I may not always agree with what you say. But I will defend to the
> death your right to say it.
>
>--
>
>The above quote clearly does not apply to Packet SYSOPS, does it?
>
>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

2370. Re: CELL PHONE----> ham band....anybody have any luck with these?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5eup37$192$1@news3.microserve.net>
Source record: 96650

>Yes , I am going about it by using a cordless phone from Sony the
>SPP-ER101 the radio transmit and reciever full duplex. The transmit
>is only -7 db. This can be put into a cell phones brick to up the
>transmit power. The Service manual only cost $12.00 and $4.00
>shipping. The phone you can find for about $ 120 and you get two full
>duplex transceiver that are in the ham band. Transmit between
>902-927.600 Mhz. Very easy uP interface 3 wire. I am working on
>making some link for a repeater.

Wow, that's great!! By cordless phone, you mean a hand held phone as opposed to a bag phone? Where in the world did you get a manual for it? What about changing the frequency? It's almost an 80 Mhz shift isn't it? Is that a very popular band? I've never even heard of anybody working the 900 to 928 band. (probably because there is no equipment for it)

Thanks for the reply
73 de N3SPD
Tyler

2371. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <33130654.3163035@netnews.worldnet.att.net>
Source record: 96651

On Mon, 24 Feb 1997 19:55:52 LOCAL, n7ws@azstarnet.com (Wes Stewart)
wrote:

>As most of you will recall, in an effort to clear up some of the
>misinformation put forth by a regular contributor to this forum, I
>agreed to perform some "scientific" measurements of parasitic suppressor
>materials.

>Apparently, because I attempted to treat this individual with a degree of
>courtesy, he assumed that I was taking his side in this issue. NOTHING COULD
>BE FURTHER FROM THE CASE.
>
>Furthermore, the individual in question had the gall to post the results of MY
>measurements on HIS home page, in an attempt to further the illusion that the
>data support his position.

>In response, Mr. XXXX sent me a heart-wrenching tale about the
>poor nursing school student that he hires to process the orders for his
>products.
>
>Unfortunately, the references remain on his page in clear violation of
>copyright laws.

>Beware dem tar babies ya'll
>
>N7WS

I'm sorry your data was misused Wes. I'm sure everyone is grateful you
took the time to make and post you measurements.

That's why this thread goes nowhere. It's impossible to have a
non-personal technical debate or reach a resolution with someone who
has no ethics or integrity.

73 Tom

2372. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <33130fed.5620917@netnews.worldnet.att.net>
Source record: 96652
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

On Mon, 24 Feb 1997 20:54:15 -0800, measures@mail.vcnet.com (R. L. Measures) wrote:

>A reverse diode across the coil is important since it protects the coil
>from the otherwise large counter EMF across the coil during break. (I
>measured 450v peak across a 24v relay coil during break.) However, such a
>diode increases the break-time.
> By placing a resistor in series with the diode, the break-time can be
>decreased and the counter EMF held to a reasonable amount. As a rule of
>thumb, the series R should be 2 to 3 times the coil R. More R =s faster
>break-time, but with the trade-off of more counter EMF volts.
>

The use of the high voltage FET or bipolar transistor keying buffer is a better solution, and is quite acceptable from an engineering standpoint.

I think the other person suggesting that was more on target.

73 Tom

2373. Help with attenuator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: pff@bfs.uwm.edu
Message-ID: <pff.32.001A8B09@bfs.uwm.edu>
Source record: 96653

Hi All,
I have built an attenuator to reduce the power outof my hf rig from 100 watts to 6 watts. The problem is I don't think it is working corrctly. I used a series of four pi circuits to accomplish the reduction. If I connect my rf out at a stage other then the last stage of the attenuator the output is lower then out of the last pi circuit. How can this be? Can anyone tell me the corrct way to build an high power attenuator? Any help will be greatly appreciated. Thanks. P.S. I do not have any sheilding around any of the circuit. It almost seem thatthe attenuator I built isn't working at all.

2374. Re: Cohn filters, a question of W0IYH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3313187A.345F@crpl.cedar-rapids.lib.ia.us>
Source record: 96654

Lawrence Stoskopf wrote:
>
>
> Sabin discussed Cohn filters in QST July 1970

Correct.

> I think there was a
> similar filter used by Squires in an early, high dynamic RX using the
> 7360 tube as a mixer.

That I am not aware of (don't think so).

>
> There was some discussion in TT about the Cohn filters being very lossy
> if not tuned correctly and this is addressed to some extent in the past
> TT discussions.

I am not aware of this. A Chebyshev filter, improperly tuned, would have the same problem. The min-loss filter is just a little better than the Chebyshev. The idea of the Cohn (min-loss) is that for a given insertion loss it has the best skirt selectivity. The tradeoff is that the passband is not "flat". It needs to be properly terminated at both ends. At the output end, instead of a lossy resistor, a "dynamic" load, such as the input impedance of a grounded gate FET, or the input of a diode quad mixer, would be best.

The book "Single-Sideband Systems and Circuits" by Sabin and Schoenike, Second Edition, McGraw-Hill 1995 has a chapter on preselectors that discusses the Cohn "min-loss" filter design in detail.

>
> RF Design had a article comparing reed (I think) relay switching vs.
> saturated transistor switching and found the relays much inferior.
>

I have used relays with great success. But they have to be high quality.

>
>
> Suppose I add the minimum-loss bandpass filter from the Jan TT, 4
> sections, 4 dB loss on 160 with 66 KHz BW. This loss is about what I
> normally add. I'm apparently not bothered by the BC band signals and it
> certainly does not help much for contests as the whole contest band is
> essentially within this passband. What do I gain by adding this filter?

Probably not much if you are not having any problems.

> Sabin (or was it Squires) used an
> impedance inverting circuit to present a reasonable load to an active
> mixer in the desired passband, but which thru the inverter presented a
> low impedance to the mixer (as the filter impedance rose out of the
> passband) lowering the gain outside of the passband (Av = gm * RL).

Sabin, QST, July 1970.

You
> can't do this with a ring mixer as the reflected power circulates back
> thru the mixer causing all kinds of grief. (This approach must present
> all kinds of interesting situations to the filter which is normally
> designed to work with some fixed driving and load impedances.)

True for passive mixers, but a useful technique for FET mixers.
> I keep reading about the high RF levels in
> Europe,

Europe is a high level environment. Studies confirm.

Bill W0IYH

2375. Re: Need help constructing a transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: gsparks@ix.netcom.com
Message-ID: <5euv87$bfj@dfw-ixnews9.ix.netcom.com>
Source record: 96655

In <19970224023900.VAA05008@ladder02.news.aol.com> bryant13@aol.com (BryanT13) writes:
>
>I am a high school student who is attempting to construct a ham radio
>transceiver as an honors project for my Electronics class. I have built
>relitively few electronic kits in the past, but I feel pretty confident
>that I could get most things working with effort. I plan to construct a
>transceiver for the 2 meter band. And I am mostly planning to use voice
>and packet radio. I am looking for either a kit or good schematics. I
>would like to know if it is advisable for me to try to build a transciver
>from schematics, and if so, where are the best places to obtain
>schematics. I am also interested in any reccomendations people have as to
>what kits are inexpensive but of resonably good quality. I am willing to
>spend up to $200, but I would like to keep costs lower than that if
>possible. I would especially like to hear about any experiences that
>people have had with commercial kits. I would like a challenge, but I
>also want to have a resonable chance of success.

Ramsey has a kit for I think around $100 but if I remember correctly you have to pick the frequency with a diode matrix or something that allows only a few frequencies to be used at a time. This rig is designed for packet where this is not a problem. I have heard mixed results in the actual construction and use, from, great to never again, but I don't know of anyone who didn't in the end get it working acceptably. I think the case and voice option are extra.

On the other end of the spectrum is the Ten-Tec kit, I think around $200, but is a full function rig when finished. I have heard nothing but rave reviews about the documentation and ease of construction and technical support.

Good Luck,

Glenn Sparks KI5GY

2376. SB-230 mod desired: QSK and 160m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: kovar@zeus.ia.net
Message-ID: <5ev0rd$rm9@hera.ia.net>
Source record: 96656

My SB-230 is so quiet EXCEPT the relay clunk.

Any ideas to convert to vacuumm relay and possible QSK?

Secound how about a possible 160 mod? I know space is limited!

I thought someone may have a powder core solution to switch in?

Thanks,
Jack Kovar
```` K0VAR
````

2377. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <33132D37.2B41@idecc.com>
Source record: 96657
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Bob wrote:
> Surely somebody out there has a similarly wonderful idea about how to deal
> with Butt Fisher.

I am guilty of this myself but, the only way to end it is to STOP
responding to his posts. He will go away if no one acknowleges him.

> If he wants to make himself a public figure, then we can treat him as
> such, you know posting details about his formerly private life, what
> kind of undergarments his wife wears, etc.

Bad idea, he has the right to post lets just stop responding.

> Thoughts?

Yes, let's start a club and join each other in solidarity to NOT respond
to Burt Fisher ANYMORE.

I Tim Hynde pledge to never respond to Burt Fisher in a PUBLIC forum
again.
Any takers? I'll be number one, e-mail me your call for an official
"Stop Burt Fisher" club I.D number.

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

2378. Logarithmic speech processor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33133111.12BB@crpl.cedar-rapids.lib.ia.us>
Source record: 96658

The Winter 1997 issue of Commnications Quarterly has my article regarding a Logarithmic Audio Speech Processor.

It uses an Analog Devices AD633JN four quadrant multiplier chip.

This chip is available fron Newark Electronics. They have 1750 of them in stock for $6.50 in small quantities. There is a $25 minimum charge requirement that can be filled with other parts for the processor, for example a microphone connector and some regulator and opamp chips and resistors and capacitors, etc.

An 800 number to call is 800-463-9275 for the phone number of the nearest Nerwark office where you can place an order.

Bill W0IYH

2379. building a 1.3GHz-SSB-tx

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: kaiserk@SunEL1.ba-Loerrach.de
Message-ID: <856889665.20904@dejanews.com>
Source record: 96659

I&#65533;m planning to build a tx, trx or transverter for the 1.2-1.3GHz-band, using SSB-modulation. Do you know of any plans, schematics or other information covering this subject, or commercially made kits? Is it difficult to tune the output frequency across the whole band from 1240GHz to 1300GHz? Most of the plans and kits I know (designed for FM-ATV or packet) cover only a part of this range. Should a transverter have an IF in the 2m- or 10m-band? I would be grateful for all useful hints.

73 de
Klaus Kaiser, DB3TK

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2380. Re: nixie tubes: TUNG-SOL DIGIVAC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierE6647w.1A3@netcom.com>
Source record: 96660
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In article <331258F0.64A@pacbell.net>,
Greg Walcott <gwalcott@pacbell.net> wrote:
>I got a couple of display tubes at a swap meet and I want to make a
>project with them but I haven't found any information yet. I am not
>sure these actually qualify as nixies. As I understand it nixies have
>an element for each of the ten decimal digits and the elements are
>stacked vertically one in front of the other. Also I think nixie may
>imply they are neon.
>
>What I have is a segmented display like an LED/LCD. There are seven
>elements forming the digit '8' which seem to have a white phosphorescent
>coating; each one of these goes to a pin. Two other pins are connected
>to pair of thin wires (filamentary cathodes?, cold cathodes?) strung
>vertically in front of the display segments and wired in paralell (one
>pin goes to the top of both wires and one pin goes to the bottom). They
>are packaged in a miniature 9-pin tube. There is a version with a
>decimal point that has a tenth pin placed directly between pins 1 and 9
>in a straight line, not following the circle made by the other pins. I
>hope I can find a socket for this one.
>
> _
> |_|
> |_|.
>
>So anyway I am not sure if these are called nixie or not. I would like
>to find out more about them especially what voltage to run across the
>filaments and to the plates. Also if any are available surplus anywhere
>I would love to have a few more. The ones I have are made by TUNG-SOL
>and labeled "DIGIVAC". Most of the markings have rubbed off so I can't
>read a part #.

These are vacuum fluorescent displays. The filament is the directly heated cathode. The plates, coated with phosphor, glowed when they are at a positive voltage. This type doesn't have a control grid that other versions have. That type of display is still used, although usually customized and multiplexed, for example, your VCR clock or Stereo's VU meters.

Looking at some old Fairchild and TI ap. notes, they used a 25 to 30 volt plate supply with a 10 kohm resistor. You grounded the plate to turn it off. Another example uses 60 volts where the display driver runs 8 displays, time multiplexed. These are general notes, so I'm not sure of the filament supply, but one schematic uses 1.6 volts.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

2381. WTB: VFO Siltronics or Pal

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Rafael Hernandez <wp4leq@prtc.net>
Message-ID: <01bc2308$b099a0e0$324492cc@ankara.prtc.net>
Source record: 96661

Anyone interested post it here or email me.
Let me know model and what you want for it.
73's
Rafa

2382. Goodness, wasn't this a technical discussion? (was Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5ev5hg$guk@abyss.West.Sun.COM>
Source record: 96662
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <33125A37.524F@pacbell.net>,
William A. Wetzel <n6rky@pacbell.net> wrote:
>Dana...
>
>The more I read your material trying to "worm-out" of the hole you placed
>yourself into, the more it is becoming apparent that you are not very apt
>in engineering or RF work at all. It is useless at this point to continue
>a debate with you - since you are always right in everything you do, even
>when you are wrong. It's no wonder why hams have no access to much of the
>commercial radio sites. Think about it...

This personal attack is completely without merit and distressingly
out of place. If this is how you respond to challenge in a
technical discussion, then there is indeed no point to further
discussion with you. I am not always right, and I always wish
to learn, which is why I previously wrote:

So, while some radios are indeed not good performers outside the
amateur band, others are. The potential for interference that
type acceptance attempts to address is interference caused by
improper selection of operating frequency and mode, not dirty
emissions or poor receiver performance. Technical standards
for emission purity exist regardless of type acceptance standards.

If I am in error, please feel free to show me exactly where.

I'm not sure what "hole" I am supposed to be in - I'm not trying
to worm my way out of anything. I *was* trying to have a pleasant
discussion of technical facts - and you may note that I indeed
agreed with you, that *some* of the US amateur radio gear is not
designed for broadband operation. However, I have most certainly
seen US amateur radios that *are* designed for broadband operation,
and I don't think this puts me in any kind of hole.

Now, Mr. Wetzel, if you can turn off the "I'm right and you're stupid
and arrogant" flame mode long enough, please *show me exactly where I
am in error*. I must have made some serious errors indeed to lead you
to declare me an inept engineer, and I would like the chance to
address these errors. If you do not respond to this note, it will
be interpreted as a tacit admission that you are not capable of
carrying on a technical discussion without resorting to personal
attacks.

As for radio amateurs in commercial sites, the site owners I know tend to frown on radio amateurs primarily because of two things:

* Amateurs tend to act like they're entitled to a special discount on site rental.

* Amateurs tend to come tinker at the radio site, often bringing friends, and disrupt the equipment of the paying customers.

Now, maybe I'm wrong, but these are just my observations.

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

2383. Re: CELL PHONE----> ham band....anybody have any luck with these?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5ev81e$4dt$1@news3.microserve.net>
Source record: 96663

> This is a non-cell phone. This is a phone that you hook up at home
>to a land line. It can transmit unmoded (if that is a word?) about
>3000'. Just with real antennas beams about 2 mile point to point.
>You can call 1-800-488-SONY just ask for service manual SPP-ER101 it
>will take two week to get it. This phone cost 119 as Sears. The
>shift is 27 Mhz on the cordless phone. It has some filter at the
>fround end that can be replaced. You can still used the brick out of
>you cell phone to amp the signed with not mod to the brick.
>
>Just thing for 119+12+4 you have a two complete receiver/exciter.
>This is a cheap as it comes.

ahhhhhhh....I see said the blind man.... They are already in the ham band.
What about channel selection? They have something like 25 channels don't
they? I was kind of thinking of using the cell phones I have now and
converting them to that band, but it's been REALLY tough to get anything even
close to a service manual on them.
Thanks for the info..
TYler

2384. Re: 88 mHy TOROID Application

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: haynes@cats.ucsc.edu
Message-ID: <5ev9ap$i5f@darkstar.ucsc.edu>
Source record: 96664

In article <33119FD2.5F04@mail.delcoelect.com>,
Tom V. Pfaffenbach <tvpfaffe@mail.delcoelect.com> wrote:
>Hi Folks;
>
>I wonder if anyone knows what the original application was for all of
>the surplus 88mHy toroids that seem to abound forever in flyer sheets,
...

they are loading coils for telephone lines. You don't see them in telephones because they aren't put in telephones - they go in cables. Sometimes you'll see in an old overhead cable there is a "tank" spliced in; that's a loading coil case. In more modern construction they are just cased in with a splice.

What this is all about is that if you have the equation for attenuation of a wire line you find that attenuation can be reduced by adding inductance to the line. This was first discovered by Michael Pupin, who got a patent on it about a century ago. So loading coils are/were used on longer lines, not on short local lines. The 88 mHy coils are used in what's called "H55" loading, where H is for 88 mHy and 55 is 5500 feet separation between coils. There are other schemes involving other amounts of inductance and different spacing. While loading coils decrease attenuation at voice frequencies they cause a line to have a more or less sharp upper cutoff frequency. So for higher frequency performance you need to have less inductance closer together. I believe H55 was the most popular loading.

These days loading is not used much because there are things like T-1 carrier that drive a twisted pair at 1.5 megabits/sec; and it's cheaper to get gain electronically.

2385. 300 Mhz band?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: OSTERTAGK@SNYCORVA.CORTLAND.EDU
Message-ID: <01IFU1WJ1YGY00A608@SNYCORVA.CORTLAND.EDU>
Source record: 96665

I just saw a short blurb in PC Magazine that says the FCC has set aside the "300Mhz frequency band" to be used for free access for schools, libraries, and businesses for wireless computing. It mentions the development of so-called Unlicensed National Information Infrastructure (U-NII) devices.

Could someone point me to any details?

Thanks,

Keith, N3KXZ

2386. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: orion@capital.net**
Message-ID: <33133395.24715739@news.capital.net>
Source record: 96666
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Tue, 25 Feb 1997 10:19:35 -0800, tim_hynde <tim_hynde@idecc.com>
wrote:

>Bob wrote:
>> Surely somebody out there has a similarly wonderful idea about how to deal
>> with Burt Fisher.
>
>I am guilty of this myself but, the only way to end it is to STOP
>responding to his posts. He will go away if no one acknowleges him.

^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

This is the ONLY tried and true way to deal with people like Burt
who's sole interest in public forums is trolling for flames. This is
how they get their kicks. The hotter the responses, the better they
like it.

--
73,
Butch N2YMJ
To send mail, delete
the two stars at the
end of my address.

2387. Want to buy a Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: mstriani@www.cidef.COM.AR
Message-ID: <c=US%a=_%p=CIDEF_ARGENTINA_%l=MAIL-CIDEF-970225150510Z-206@www.cidef.com.ar>
Source record: 96667

```
This message is in MIME format. Since your mail reader does not understand
this format, some or all of this message may not be legible.

------ =_NextPart_000_01BC2322.A26A0A90
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hi:
I want to buy a ham Radio, preferent bi-band I've got in mind the
Kenwood TM-733a but I live in Argentina, and here It is very expensive,
so I want to know how much it will cost in the U.S. and how much do
I'll have to pay of taxes and shipment. If someone has the way to do
this please send me an e-mail to mstriani@www.cidef.com.ar
Thanks in advance
Mariano Striani.

------ =_NextPart_000_01BC2322.A26A0A90
Content-Type: application/ms-tnef
Content-Transfer-Encoding: base64

<encoded_portion_removed>
Y2lkZWYuY29tLmFyPgAAAENX

------ =_NextPart_000_01BC2322.A26A0A90--
```

2388. Leo jams cell phone guts into tipsy amplifier rendering unaceptable SPAM (c) 1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <3312EEA3.143A@atl.org>
Source record: 96668

Cats demand legislation!

Why not ferrite bead damping in amps?

Where are RF DSP homebrewers?

Statistical bunching?

Trade 4 each 7906 tetrodes (unused) 2 for one
for 4cx300A tetrodes (unused).

-bob
wb4mnf in Atlanta GA

2389. Re: Leo jams cell phone guts into tipsy amplifier rendering unacceptable SPAM (c) 1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <3312F1AF.72F0@atl.org>
Source record: 96669

BOB DUCKWORTH wrote:

7906 lesdyxically instead of 7609

2390. Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: hmiller@fix.net
Message-ID: <33132a6e.3708181@news.fix.net>
Source record: 96670

Hello, this is Harry Miller KB6CGG in sunny California. I have some manuals for sale as follows:

Drake MN2700 original $5 mailed

Drake TR-3 original $10 mailed

Copy of conversion instructions for the BC348
$3 mailed

Anyone interested email me hmiller@fix.net

Tnx es 73 Harry KB6CGG

2391. Book wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: pete@adinet.COM.UY
Message-ID: <1.5.4.16.19970202001625.1f27296a@adinet.com.uy>
Source record: 96671

I want the book: Single Sideband for the Radio Amateur - ARRL
Nestor
email: pete@adinet.com.uy

2392. HEY! How about we knock off all the insults and arguments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5evj5g$t6t@sf18.dseg.ti.com>
Source record: 96672
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

Okay, folks, enough is enough. PLEASE, let's end all of this petty arguing, griping, insulting, and personal attacks on each other. As I recall, these newsgroups are for discussing EQUIPMENT, and not for discussing our opinions of each other and so forth.

I know that we all have the right, and ability, to just ignore the arguments, etc, and read the worthwhile posts, but it's annoying to have to wade through the muck to find the relevent posts.

PLEASE... if you have a problem with someone, and you feel some kind of need to insult them or argue with them, do it via private e-mail. Don't clog up the newsgroups. Let the rest of us enjoy them!

Thanks! (and if you feel you must flame me, do it privately!)

-- Dean K5DH

2393. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <EvuiRBAifzEzEwHO@ifwtech.demon.co.uk>
Source record: 96673

R. L. Measures wrote:
>> As most of you will recall, in an effort to clear up some of the
>> misinformation put forth by a regular contributor to this forum, I
>> agreed to perform some "scientific" measurements of parasitic suppressor
>> materials.
>>
>ï¿½ TRANSLATION: My original intention was to make measurements that would
>help my 'amplifier expert' pal in the Peach State (GA) torpedo his
>unexpert opponent in the Land of Fruits and Nuts (CA).

Rich, you just shot yourself.

Everyone else can see that Wes did everything he could to be fair and
objective - and what he gets from you is this "TRANSLATION".

If that's how you treat would-be helpers, you're on your own, mister.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2394. Re: I need nicad charger engineering help-

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5evkk1$8q0@hplms2.hpl.hp.com>
Source record: 96674

In article <MPG.d7a3907c1c171c989698@news.infoave.net>,
Webster D. Williams <kr4wm@sccoast.net> wrote:
>I read somewhere that using pulsating DC will help to break the formation
>of crystals inside nicads, which is the primary reason they go bad (the
>crystals cause internal shorts).

The primary reason nicads go bad is from chronic overcharging. The solution
is to throw them out. Funky charging scemes won't fix them.

2395. Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: rharris@cris.com
Message-ID: <rharris-2502971631140001@user-37kb3tc.dialup.mindspring.com>
Source record: 96675

Can anyone tell me who makes amateur, shortwave and/or UHF/VHF radio kits
and how to get in touch with them?

I'm just getting started in amateur radio and am thinking about building
the following:

CW transmitter or transceiver
Amateur transceiver
Shortwave receiver
Morse code practice kit

Thanks,
Robert

2396. audio blaster component

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Publicsafety <publicsafety@earthlink.net>
Message-ID: <01bc235c$b592ee40$71122399@safety>
Source record: 96676

A few years ago there was a resistor looking component called a audio
blaster
It was used to raise the audio in scanners, walkie talkies etc.
Does anyone know where I can locate any? publicsafety@earthlink.net

2397. Can Heathkits be Found Anywhere?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: rharris@cris.com
Message-ID: <rharris-2502971658200001@user-37kb3tc.dialup.mindspring.com>
Source record: 96677

I assume Heathkit is out of business. I use to see the various Heathkit radio kits when I was a kid.

Is anyone else making the old Heathkit amateur/shortwave/radio kits?

Thanks,
Robert

2398. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <33136121.2684@geocities.com>
Source record: 96678
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

tim_hynde wrote:

> I am guilty of this myself but, the only way to end it is to STOP
> responding to his posts. He will go away if no one acknowleges him.

Like you did?

> Bad idea, he has the right to post lets just stop responding.

Like you did?

> Yes, let's start a club and join each other in solidarity to NOT respond
> to Burt Fisher ANYMORE.

Like you did.

> I Tim Hynde pledge to never respond to Burt Fisher in a PUBLIC forum
> again.

Like you did?

>

```
#================#=====================================================#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=====================================================#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#=========================================================================#
```

2399. Re: 88 mHy TOROID Application

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <3313624E.22F2@naples.infi.net>
Source record: 96679

Tom V. Pfaffenbach wrote:
>
> Hi Folks;
>
> I wonder if anyone knows what the original application was for all of
> the surplus 88mHy toroids that seem to abound forever in flyer sheets,
> junk boxes, and handbook designs? They are very useful for all kinds of
> peaking, notching and band pass filter construction. They all seem to be
> constructed in similar fashion. Two separate windings of 22mHy each on
> opposite halves of a 5/16 inch square cross section powdered iron core
> about an inch in diameter, wound almost full with approximately #24
> magnet wire. I suspect the original application was for telephone
> networking since so many seem to have been produced, but I have never
> seen one in a phone, unless they are potted into the old input matching
> network box. Does anyone have the answer?
>
> 73 de K9JDU

I was once told that they were used in teletype circuits; that is all
I know. Yvon

2400. Re: MMIC's noisy ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: yvon <rextel@naples.infi.net>
Message-ID: <331365EE.6D43@naples.infi.net>
Source record: 96680

Hugh Duff wrote:
>
> I want to mix 2 VCO's and amplify the desired output to around 0 to +5
> dbm.
> Right now I am using a level-7 mixer with the L.O. VCO input at 0 dbm
> and the RF VCO input at about -20 dbm. The output of the mixer is
> about -26 dbm. I have a LPF to pass the lower mixing component. The
> signal at this point is relatively clean. I'm trying to amplifiy the
> signal to about +3 dbm using 2 MAR-1's. I am experiencing a
> substantially raised noise floor when I use the MMIC amplifier stage.
> The MMICs are decoupled using a cap and choke on the supply lines.
>
> Should I be able to cascade a couple of MMICs and come out with a
> clean signal ?
>
> Pse reply via email: hduff@ica.net

You could improve on the signal to noise ratio by mixing at higher level
+7 dbm at the LO and 0 dbm at the RF port.You may have a reason
for using lower levels; if it is the case, you could use a solid state
active mixer. Analog devices has a very interesting 500 Mhz mixer if
your frequencies are lower than 500 Mhz. Can you state your frequencies?
Yvon. VE2AUC <rextel@naples.infi.net>

2401. Re: Kokusae Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <Y62n7YA8O1EzEwF9@lfheller.demon.co.uk>
Source record: 96681

In article <33128981.4507@cadvision.com>, "Raj Singh, VE6RAJ"
<singhraj@cadvision.com> writes
>Hi:
>Does anyone have any information on Kokusae. Apparently they were a
>third party manufacturer of crystal filters for transceivers. Are they
>still in business? Any idea who carries their stuff?
>Thanks
>Raj VE6RAJ

I think Kokusai was the correct spelling. I remember having a 455 KHz
mechanical filter made by them. It must have been over 25 years ago.

Leon
--
Leon Heller, G1HSM
leon@lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home)
+44 (0) 1344 385556 (work)

2402. Re: Book wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Simon Robinson <pls5i50e@pop.plasma.co.uk>
Message-ID: <33133C01.51FE@pop.plasma.co.uk>
Source record: 96682

Nestor Belzarena wrote:
>
> I want the book: Single Sideband for the Radio Amateur - ARRL
> Nestor
> email: pete@adinet.com.uyWhich edition do you want and how much are you offering ??

Sorry to be blunt.

Regards

Simon - G8POO

2403. Re: Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <3313A58C.4531@aade.com>
Source record: 96683

Robert Harris wrote:
>
> Can anyone tell me who makes amateur, shortwave and/or UHF/VHF radio kits
> and how to get in touch with them?
>
> I'm just getting started in amateur radio and am thinking about building
> the following:
>
> CW transmitter or transceiver
> Amateur transceiver
> Shortwave receiver
> Morse code practice kit
>
> Thanks,
> Robert
check "my favorite links" for links to kit manufacturers on the web as
well as a very nice code practice program Codemaster V from milestone
technologies. I got this one and it is really nice and not expensive
$30. It is a DOS program but runs great under Windows 95.

Neil

2404. Re: Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: gspencer@stim.stim.tec.tn.us
Message-ID: <1997Feb25.210744.1@stim.stim.tec.tn.us>
Source record: 96684

In article <rharris-2502971631140001@user-37kb3tc.dialup.mindspring.com>, rharris@cris.com (Robert Harris) writes:
> Can anyone tell me who makes amateur, shortwave and/or UHF/VHF radio kits
> and how to get in touch with them?
>
> I'm just getting started in amateur radio and am thinking about building
> the following:
>
> CW transmitter or transceiver
> Amateur transceiver
> Shortwave receiver
> Morse code practice kit
>
> Thanks,
> Robert

Try these web sites:

http://www2.polarnet.com/~bhopkins/hamqrp.html#retailers

http://www.mnsinc.com/bry/mega/megakits.txt

http://www.tentec.com

http://www.ohr.com

I hope this helps.

Best Regards,
Garry Spencer (WB4JXN)

2405. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.265.00D93067@azstarnet.com>
Source record: 96685

In article <5f06ec$262q$1@news-s01.ny.us.ibm.net> subich@ibm.net (Joe Subich) writes:
>From: subich@ibm.net (Joe Subich)
>Subject: Re: good source for amplifier tips
>Date: 26 Feb 1997 02:16:44 GMT

>In message <3311d285.9488578@netnews.worldnet.att.net> -
>w8jitom@postoffice.worldnet.att.net (Tom Rauch) writes:
>:>
>:>
>:>If the 8877 was as unstable as you clkaim at VHF, it would never work
>:>in an unneutralized VHF strip line amplifier. Why is a strip line amp
>:>with a strip line Q in the double or triple digits stable, and a HF
>:>amplifier with less VHF not???
>:>

>Tom,

>FYI, the first broadcast transmitter that I worked on ... twenty
>years ago used the 8877. It was a grounded grid final with a
>4CX250 as an IPA. I can't remember if it had a half wave or
>quarter wave stripline in the output tank but there wasn't a
>supressor anywhere in the final. It would make about 4.5 KW output.

>The crazy thing ran very well at 105 MHz ... one final tube ran for
>more than three years at that station making 3+KW output (100 Meter
>stick with four bays of antenna in circular polarization).

>Of course, some would have us belive such a final would never work!

I have a "reject" 8877 acquired as a sample from my friend W6TC sometime
before 1980 as I recall. I have used it in the W6PO design two meter
amplifier with a SILVER PLATED, HIGH Q, PLATE CIRCUIT, without a trace of
nichrome to be found.

It is stable, reliable and tunes as if on 160 meters. I have used it for
tropo, meteor scatter and EME for years. It has never arced, sparked,
oscillated or passed wind in all this time. Of course, I believe the dry air
here in Arizona helps mitigate the damaging effects of cosmic rays, preventing
sudden bursts of VHF oscillations which, as we all well know, can cause gold
atoms to migrate to the output coax connector, in turn causing a high SWR.

As is also well known, the high reflected power is then dissipated in the
plate resistance (Rp) of the tube. Because this resistance has a positive
temperature coefficient, Rp tends to increase without bound. As has also been
explained here many times, gain equals mu * Rp.

Because the resistance is ever increasing, the gain must approach infinity. Since the input (drive) power is constant, the output power must then try to approach infinity as well. A practical limit is reached, however, when the electron suction force (esf) becomes strong enough to pull the line cord out of the wall receptacle. (For the newcomer to this field, the unit of esf is the flake, named after a well-known west coast amateur. These are very tiny units though, so we usually use mega-flakes in theoretical work.) But I digress...

In the event that the reader lives in a damper climate, say Ventura County, California for instance, where cosmic rays are more troublesome, a judicious application of nichrome wire may be called for. If one makes a coil of this material and installs it in series with the line cord, a number of useful benefits occur.

The immediate benefit accrues to the person who sold the nichrome wire (and the poor neighborhood nursing student who comes over on weekends and licks envelopes, or whatever, for the salesman).

A secondary benefit is that the tube heater will never be supplied with too much voltage. If the formulas supplied by the salesman are followed, the heater temperature will be lowered enough that the pesky problem of electron emission from the cathode is eliminated! Without this flow of electrons, the grid is no longer subjected to constant bombardment and it too runs much cooler. No more gold migration, reduced grid dissipation and when a cosmic ray goes zipping through the tube, nothing happens. Voila, the nearly-perfect amplifier!

Isn't science great?

N7WS

ps. You can read more about this at URL www.fruitcake.com/~nichrome

2406. FS: 2 - Heathkit WX stn's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Michael Kassay <mkassay@sympatico.ca>
Message-ID: <3313E30F.21BA@sympatico.ca>
Source record: 96686

Michael Kassay wrote:
>
> FOR SALE:
> 2 - Heathkit ID-5001 Weather Stations !
>
> The first unit is an UNBUILT kit - The kit does have a few minor
> parts missing, nothing too expensive that couldnt be purchased from a
> local electronic shop.
>
> The second unit is a complete working unit with out external
> sensors.
>
> Combine the two units to have one complete system, or obtain the
> missing sensors and have 2 COMPLETE units!
> A single ID-5001 unit is presently being sold for $1495 U.S. plus
> tax..fr Questech. in OHIO.
>
> These 2 RARE units will only be sold as a package, complete with
> manuals.(one set)
>
> Reason for selling? Insanity? To be honest, Im moving and need
> the bucks, otherwise they would never be leaving my shack.
>
> Im open for serious offers...
>
> Thks
> --
> *
> *
> Michael Kassay - Barrie, Ontario, Canada.
> VE3MKX
> E-Mail -
> MKassay@Sympatico.ca
> Packet - VE3MKX @ VE3FJB.#con.on.can.noam

--
* *
*
..

2407. Need a kit or schematic for a 10 meter single conversion RX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: dselwa@qualcomm.com
Message-ID: <5evn9v$5ki$3@thefuture.qualcomm.com>
Source record: 96687

I need one preferably with an Rf gain stage for 10 meters.
It seems a lot these single conversion receivers need a bit
more gain on 10. I could take one for 40 or 20 and rewind the
coils but I think that I would be guesstimating the number of turns.
Dennis Selwa
W6EH

2408. Astron supplies: can be made adjustable?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: dselwa@qualcomm.com
Message-ID: <5evmt8$5ki$2@thefuture.qualcomm.com>
Source record: 96688

I don't have a schematic to my astron 20a. Can someone tell me if
I can change a resistance value to make it adjustable from 6 volts
to 11 volts (presently there is a mini-pot inside that adjusts from
10 volts to 15 volts). I know it can be done but with out a schematic
makes it a bit awkward. I'll bet there is a resistor in series with
the pot that if changed will change the range of adjustment. Call me
lazy but I thought I'd get a quicker answer this way.
Dennis Selwa
W6EH

2409. Re: Type acceptance

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5etlqf$b39@news.Hawaii.Edu>
Source record: 96689
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thomas Gasta <tomgasta@worldnet.att.net> wrote:
>Yes, amateurs can make their own radio without type acceptance, but they
>cannot manufacture, in quantity, radios for sale or lease. I have heard a
>lot of people correcting my seemingly wrong statement. I would simply
>direct them to both Part 2.800 of the FCC rules and to the back of their
>very own commercially manufactured radios, and on the back, you will find
>an FCC ID number (the type acceptance). Type acceptance for Part 97
>operations only, and on the back of their Motowhiz, another FCC ID for
>Part 90 operations.

From the back of my Tempo S1 transceiver: Receiver certified to meet
FCC Part 15 as of date of manufacture.

Heck, even my shortwave receiver has a label similar to that. So does
my TV set.

These devices are all unintentional radiators that radiate RF as long
as the device is powered up, so they should be regulated.

Funny that no such label appears on my amateur transmitters (as opposed
to the trans*ceivers*).

Jeff KH2PZ

2410. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5etiko$8o8@news.Hawaii.Edu>
Source record: 96690
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5es5m2$o5r@mtinsc03.worldnet.att.net>,
Thomas Gasta <tomgasta@worldnet.att.net> wrote:
>Commercially manufactured amateur radio equipment (i.e. produced for
>resale) does in fact carry type acceptance. Take a look at the back of
>most radios, for instance my FT40 (yaesu), and it has the FCC ID (type
>acceptance) K66FT-40R and even a canadian type 511 101 525A. If you don't
>think the FCC regulates the commercial amateur equipment line, suggest a
>trip to Japan. You would love to have some of the "Amateur" equipment
>readily available in that country that is not imported to the US because
>they cannot be "type accepted". Now days, there are so many reasons for
>failing type acceptance that many radios never make it here. They may not
>have anything to do with "spectral purity", but the type is required. Home
>made stuff, no type needed, "yet"!

It's my understanding that commercially-built amateur transceivers must
satisfy type-acceptance *only* because the rcvr's oscillator is a Part 15
device.

Jeff KH2PZ

2411. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: tbryant@cannet.com
Message-ID: <5evit5$7q1@nerd.apk.net>
Source record: 96691
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

>> It is your right to pass or not pass as you see fit. In general I agree
>> with you Burt looks much worse for his posts. However if a sysop
>> chooses not to pass anti ham propaganda that too is his right. After
>> all you guys supply the time, equipment, location and expertise we all
>> enjoy thus it is your foot ball and you make the rules. Most reasonable
>> people would accept this but then Burt is not reasonable.
>
>I agree it is his right but it is not right.
>Can you understand this simple statement?

Some people tend to see a lot of gray areas. They only see the black and white when it suits their purpose.

Tom - N8ECW

2412. Re: Microwave Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Thilo Kootz <kootz@uni-koeln.de>
Message-ID: <3313034F.8F@uni-koeln.de>
Source record: 96692

Why dielectric ?
what is your requierd bandwidth?
wide filters are easy using striplines(bw=50-100%)
narrow filters are easy, too, using coupled lines (bw=1-10%)
if you are between, i cannot help you.

73 Thilo dl9kce
--

2413. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: chalpm@hqlab.ico.olivetti.COM
Message-ID: <199702241517.HAA21784@noc.ucsd.edu>
Source record: 96768

My Sony ICF-SW 7600 radio (Italian version) covers the following frequency range 150-285 KHz step 3 KHz, 531-1602 KHz step 9-10 KHz selectable, 3850-26100 KHz step 5 KHz, 88-108 MHz FM step 50 KHz.

The American version of the same radio covers the LF,MF and HF frequencies with the range 150-29995 KHz. I would liKE to obtain the same HF frequency range as that available on the American version but the frequencies 1602 - 3850 KHz and 26100 - 29995 KHz are not receivable on the Italian version!

The radio is controlled by CPU (NEC D1715G 569), it has a PLL utility, is equipped with a keyboard and can store 10 items in memory. The receiever is 48055 and 455 KHz double version and demodulates AM and SSB.

At power on the CPU checks the jumper configuration (LW, step 9-10 KHz in MW, SW, FM). Setting the LW jumper to OFF extends the frequency range from 285 to 531 KHz, while setting the FM jumper to OFF extends the FM range from 76 to 88 MHz step 100 KHz. Setting the SW jumper to ON or OFF has no effect, the frequency range remains 3850-26100 KHz in both cases.

* Does anybody have the ICF-SW 7600 schematics?

* Does anybody know how to extend the frequency range from 1602 to 3850 KHz and 26100 to 29995 KHz?

Please send your reply to my e-mail address, as detailed below.

Thanks.

Chalp Maurizio Olivetti (Italy)

e-mail address: chalpm@hqlab.ico.olivetti.com

2414. ICOM 706

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: chenshaw@cris.com
Message-ID: <5eta89$t98@chronicle.concentric.net>
Source record: 96769

My dad is going to buy a ICOM 706 in the next two days. Is there anything he should now before hand.
Donald
You can email him at:

dhenshaw@juno.com

2415. Re: Quieter Blower??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: UN93B@ford.com
Message-ID: <331258d2.268472136@news.ford.com>
Source record: 96770

On 19 Feb 1997 17:40:49 GMT, jayk@fc.hp.com (Jay Kesterson K0GU)
wrote:

>I'm in search of a quieter blower to replace the Dayton 4C443 in my
>2m 8877 amp. Any recommendations out there???
>
>Thanks,
>
>73, Jay K0GU DN70mq jayk@fc.hp.com

One way is to use a larger blower that spins slower.
Modifications to the case will be needed to hold the larger blower.
Bigger and slower is always quieter.
Make sure the different blower has about the same output(CFM).

Later, Brett

2416. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Pete Roberts <101657.1240@CompuServe.COM>
Message-ID: <5etdt2igj1@mhafn.production.compuserve.com>
Source record: 96771

Hey, cool it! 1000v/metre immunity!! Let's hope no European
Commission pen pushers are reading these postings. Otherwise
they'll start drafting new standards for CE marking involving
nuclear airbursts as part of the approval tests!!! <vbg>

Be seeing you, Pete

--
Be seeing you, Pete

2417. WTD: Info RE: Kenwood MC-50 Microphone Stand

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: rmwatson@eskimo.com
Message-ID: <E650F3.CHJ@eskimo.com>
Source record: 96772

I recently purchased a Kenwood MC-50 desk microphone, which has a 4-pin female DIN on the radio end. I need an accurate description of the DIN end wiring assignment, that I may use it for a Kenwood TS-440SAT, (which has a 8 pin jack).

In essence, I am going to convert from a 4 pin DIN to an 8 pin DIN. I only need the assignments for the 4 pin on the microphone stand, as I have the schematics for the TS-440SAT already.

Your help is appreciated. Thanks much.

73

Bob/KJ7BO
rmwatson@eskimo.com

2418. CELL PHONE----> ham band....anybody have any luck with these?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: tyler@cyberia.com
Message-ID: <5etkgeojq1@news3.microserve.net>
Source record: 96773

I've got a couple of cell phones laying around just dying to be used on a ham band. The trouble is, I don't have squat on them as far as schematics or block diagrams and the like. NO, I don't want programming info. I'll build my own uP for it. Has anyone had any luck getting pertinant info for these mods? Getting anything on them from the manufacturers is like pulling teeth from a bull Rhino in rut.

Thanks
73 de N3SPD
TYler

2419. H.V. Power supply. Will it work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: chem3p_s@declan.chem.uwa.edu.au
Message-ID: <5etkib$r76$1@enyo.uwa.edu.au>
Source record: 96774

I need a 2000V power supply for my tube amp.
Rather than using a heavy, costly transformer, I've been considering
the possibility of using a DC to DC converter.

Using 2 large toroids (Amidon red, about 2 inches o.d.) stacked
together as the transformer, the primary would consist of a center
tapped winding with the center grounded and the ends switched on and
off by power mosfets. The input would be at 250 V DC. The output
would be a winding with about 8 times as many turns, rectified and
filtered with caps. The mosfets would be driven at around 1MHz by an
oscillator. I only need to work out the value of the primary
inductance required (any ideas?).

Will this work (I need about 1.7 kW) or is there a fundemental problem
which I havent thought of ???

2420. Re: Electronic jamming device for home use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc22cc$589713a0$a40f2399@desktop>
Source record: 96775
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ed Price <edprice@pacbell.net> wrote in article
<3310F33A.3C92@pacbell.net>...
> This thread is morphing from jamming to immunity, but....
>

Ahhh, I saw your reply to my e-mail first so I responded there.

Ed, feel free to repost my reply (or parts thereof) here...

Cheers!

...Peter

2421. RE: HP8640B Operating Manual Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970225035800.WAA20921@ladder02.news.aol.com>
Source record: 96776

Looking for a operating manual for the HP8640B signal generator. Xerox okay, partial manual okay. Will pay duplicating expenses.

Rick K1BQT
POB 465
Barrington, NH 03825

2422. Re: H.V. Power supply. Will it work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5eto73$h1o@mtinsc04.worldnet.att.net>
Source record: 96777

chem3p_s@declan.chem.uwa.edu.au wrote:
>
> I need a 2000V power supply for my tube amp.
> Rather than using a heavy, costly transformer, I've been considering
> the possibility of using a DC to DC converter.
>
> Using 2 large toroids <snip>

Your idea is basically sound and full regulation can be obtained.
Design of an efficient switcher like you describe can be a complex
affair. Lots of details to work out... Ex: Appropriate transformer core
and winding (litz?, wide foil?), winding shunt capacitance needed for
core/winding, switch turn-on/off transients/snubbing, fast enough HV
diodes, other..
Suggest you read up on switching supplies a bit before begining to
build. Check applications notes from outfits like Unitrode, Motorola,
Linear, and other switcher chip makers...
Woody

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2423. Re: CELL PHONE----> ham band....anybody have any luck with these?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: nojunk@here.com
Message-ID: <33128738.11987930@nntp.ix.netcom.com>
Source record: 96778

On 25 Feb 1997 02:58:22 GMT, tyler@cyberia.com (tyler) wrote:

>I've got a couple of cell phones laying around just dying to be used on a ham
>band. The trouble is, I don't have squat on them as far as schematics or
>block diagrams and the like. NO, I don't want programming info. I'll build
>my own uP for it. Has anyone had any luck getting pertinant info for these
>mods? Getting anything on them from the manufacturers is like pulling teeth
>from a bull Rhino in rut.
>
>Thanks
>73 de N3SPD
>TYler
>

Yes , I am going about it by using a cordless phone from Sony the
SPP-ER101 the radio transmit and reciever full duplex. The transmit
is only -7 db. This can be put into a cell phones brick to up the
transmit power. The Service manual only cost $12.00 and $4.00
shipping. The phone you can find for about $ 120 and you get two full
duplex transceiver that are in the ham band. Transmit between
902-927.600 Mhz. Very easy uP interface 3 wire. I am working on
making some link for a repeater.

I hope this help you..

73 de KB8RLN

Richard

2424. Cohn filters, a question of W0IYH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <331260AB.1D11@tri.net>
Source record: 96779

Just finished reading another discussion of the Cohn filters in the Jan 97 Radio Communications, Technical Topics, p. 62 and have a couple of questions about the topic of receiver front ends in general to kick around. Where better than here.

Sabin discussed Cohn filters in QST July 1970, I think there was a similar filter used by Squires in an early, high dynamic RX using the 7360 tube as a mixer.

There was some discussion in TT about the Cohn filters being very lossy if not tuned correctly and this is addressed to some extent in the past TT discussions.

RF Design had a article comparing reed (I think) relay switching vs. saturated transistor switching and found the relays much inferior.

My homebrew 160 RX is a 15 year old Martin design using a MCL SAY-1 high level mixer with 23 dBm LO drive (a Gumm osc based on Hayward's Solid State Design for the Radio Amateur...it works better than Rhode's later simulation seems to indicate). This followed by a diplexer at 9 MHz, an early FET, the VMP-4 running grounded gate at about 150 ma current, into one of the KVG 8 pole filters, thru several Plessy gain/control stages, another KVG filter (14 poles total) and out. And old design.

I have the capability of switching in a 3 and 6 dB pad on the input and normally switch in whatever it takes to just have the noise level rise a bit when the input is switched from the termination (used during transmit) to the antenna. Then I manually adjust the IF gain so that the AGC doesn't bring the AF noise level too high when no signal is in the passband. (I never got around to getting away from the Plessy AF derived AGC so that method calms the AF output a bit.)

Input filtering? The antenna tuner. I'm setting here looking out of the window at 4 towers 3 miles away used by an AM station on 1150 and it's no bother. I don't even get a 2nd harmonic of a station on 910 about 8 miles away...probably a testament to their filtering!

After this lengthy introduction, questions:

Suppose I add the minimum-loss bandpass filter from the Jan TT, 4 sections, 4 dB loss on 160 with 66 KHz BW. This loss is about what I normally add. I'm apparently not bothered by the BC band signals and it certainly does not help much for contests as the whole contest band is essentially within this passband. What do I gain by adding this filter? (Can't get the passband much narrower without using a Q-multiplier type system or the loss gets too high for even 160.)

So possibly a different approach? Sabin (or was it Squires) used an impedance inverting circuit to present a reasonable load to an active mixer in the desired passband, but which thru the inverter presented a low impedance to the mixer (as the filter impedance rose out of the passband) lowering the gain outside of the passband (Av = gm * RL). You can't do this with a ring mixer as the reflected power circulates back thru the mixer causing all kinds of grief. (This approach must present all kinds of interesting situations to the filter which is normally designed to work with some fixed driving and load impedances.)

I throw this out mainly to get a thread going. As a long time RSGB member, Pat Hawker fan, I keep reading about the high RF levels in Europe, as presented by Chadwick and others, and high dynamic range efforts by all. I still can't see how a 20 M, 3 dB loss filter with a 510 KHz BW can do much more than lower the total signal level to the RX by 3 dB and help the blocking level, not dynamic range, that way. There seems from here to be a few high power signals in that passband. 40 m. looks worse.

Perhaps I'll take one of the pocket SW radios on my Sept/Oct trip to Amsterdam, Moscow, and St Petersburg to see what the fuss is all about.

Puzzled from Kansas,

N0UU

2425. FS 3 4-1000 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: corry@eburg.com
Message-ID: <5etok4$ktr@Holly.aa.net>
Source record: 96780

Hi all, selling some tubes for a technician friend of mine.
He has 3 , 4-1000 tubes for sale. 2 of them have 4 months use, 1 has 1
month of use. These are tubes pulled from a Sparta transmitter that
his station is no longer using- went solid state. He is asking $100 pc
for them.
-Dave

2426. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: w8jitom@postoffice.worldnet.att.net
Message-ID: <33129099.190765@netnews.worldnet.att.net>
Source record: 96781

I forgot I had some literature specifically dealing with gas in power grid tubes. The following may explain some of Rich's puzzlement.

First a review:

On Sun, 23 Feb 1997 14:29:58 +0000, "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk> wrote:

>R. L. Measures wrote (in reply to me and then Fred):
>>> >what about the cases
>>> >where the amplifier works for tens or hundreds of hours, and then
>>> >suddenly goes bang? What's the trigger mechanism?
>>>
>> That is the whole reason for this thread starting.
>>> Rich thinks it's cosmic rays when it goes bang during idling condx,
>>> parasitics if it goes bang when its operating..
>>> Tom, Joe, and others (including my very own self) believe
>>> defective--or damaged--tubes are at fault.
>>>
>>If internal gas were responsible for the big bang,, Fred, why does the
>>vacuum in grid-to-filament shorted 3-500Zs often appear to be normal during
>>a subsequent check with 8kV applied from anode to grid?
>
>Since bangs can happen with or without grid-filament shorts, let's treat
>those as a separate issue.
>
>One reason why the vacuum can return to normal after a gas release could
>be because, by the time you come to test it, the release has been
>cleaned up again by 'getter' action.
>
>73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
> 'In Practice' columnist for RadCom (RSGB)

Rich thinks because, when he hi-pots the tube some time later and it doesn't arc, he has proven a parasitic.

Here's what "Getters and Their Function in Vacuum Tube Manufacture" says:

page 4

"Gettering action takes place three ways, namely:

1.) By absorption of gas during dispersal of the getter.

2.) By absorption of the gas after dispersal of the getter.

3.) By absorbtion of gas under the action of an electrical discharge."

Number three is interesting.

An internal tube arc can actually getter the tube and remove the gas!!! It also goes on to talk about contaimination of insulators, and how an arc can clear the path.

Looks like the lack of proper research might have led to a false conclusion. Design level text on tubes indicates the arc path may very likely simply disappear after the arc is done.

Perhaps a magic gas measuring GDO could be used?

73 Tom

2427. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: billsohl@planet.net
Message-ID: <5ett05$4ib@jupiter.planet.net>
Source record: 96782
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thomas Gasta <tomgasta@worldnet.att.net> wrote:

>As a licensed amateur, and one who can read and understand the english
>language, I would direct you to Part 2.800 and specifically to Part 2.1005
>of the FCC rules, and if that doesn't work, take a look at the back of
>your kensucom radio, see that little FCC ID, know what that is, thats
>right, it is the type acceptance ID for that amateur radio. If you would
>like to read parts 2.981, 983, 991, 993, 997, 999, 1001, and 1003, you
>will see just how much trouble Icsuwood had to go through to be able to
>sell you that radio frequency device, and if you want to build one for
>your own use, Part 97 allows that, just don't build them for resale
>without going through the same trouble. Like anyone with such a poor
>understanding of "ALL THE RULES" could ever build anything!

The same rules that allow us to build our own also allow us to
modify or otherwise adopt any radio for use on the amateur
bands. There have been hundreds/thousands of Motorola
radios pressed into service on amateur radio by hams.

Bill Sohl K2UNK
ARRL Local Gov't Liaison, Mt. Olive Township, NJ

2428. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5eu0e8$moj@dfw-ixnews12.ix.netcom.com>
Source record: 96783
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In <33251448.40798592@news.cyberhighway.net>
glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) writes:
>
>kc5egg@ix.netcom.com(Gerald Schmitt) wrote:
>
>>In <330EFED7.20D0@geocities.com> Burt Fisher
<burtfisher@geocities.com>
>>writes:
>>>
>>>--
-
>>--
>>> I may not always agree with what you say. But I will defend to the
>>> death your right to say it.
>>>
>>>--
-
>>--
>>>
>>>The above quote clearly does not apply to Packet SYSOPS, does it?
>>
>>The right of free speech comes as a bundle with the responsibility of
>>free speech. Since you demonstrate little responsibility yourself it
>>would appear that packet sysops are forced to take responsibility.
The
>
>The BBS for which I'm a co-sysop has been on the air for about 8
>years, and in all that time we have never locked one legitimate ham
>out of the BBS for any reason. We've handled dozens of Burt's
>rantings, as have all the upstream SysOps, obviously. Burt loves to
>tar hams with a broad brush, but he gets more on himself than he does
>on others.
>
>
>--
>glenq@cyberhighway.net
>WB7DOW @ KB7CFD.ID.USA.NOAM

It is your right to pass or not pass as you see fit. In general I agree with you Burt looks much worse for his posts. However if a sysop chooses not to pass anti ham propaganda that too is his right. After all you guys supply the time, equipment, location and expertise we all enjoy thus it is your foot ball and you make the rules. Most reasonable

people would accept this but then Burt is not reasonable.

Jerry

2429. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Madd DOG <bmoceri@flash.net>
Message-ID: <3312818B.534F@flash.net>
Source record: 96784
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

```
Burt Fisher wrote:
>
> Madd DOG wrote:
>
> > Straight A student, who gives a SHIT!!!Im supposed to be impressed?
> > Damn, I will have to call her for every decision in my life..hehehehe..
> > Shes a straight A student..Carefull guys, your dealing with the power of
> > GOD now...Her statements will mean everything now..
>
> She also has the guts to use her real name.
> Usually the more impressive the handle the more wimpy the user.
> That leaves you just where?
>
>
> #================#=====================================================#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#=====================================================#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #=================================================================#

Brian Moceri
22424 Fresard St
St Clair Shores
MI 48080
810-775-6486
There ya go wing nut!
```

2430. Mod for Knwd TS450/690

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Madd DOG <bmoceri@flash.net>
Message-ID: <33128583.658E@flash.net>
Source record: 96785

Does anyone know of a mod for a Kenwood 450/690 to make the auto gain cont{agc}operate fast in the AM mode?? The agc is always slow in the AM mode regardless of setting. Please email me at bmoceri@flash.net
Thanks
Brian

2431. Re: H.V. Power supply. Will it work?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <3312903b.51698328@news.santafe.edu>
Source record: 96786

chem3p_s@declan.chem.uwa.edu.au wrote:

>I need a 2000V power supply for my tube amp.
>Rather than using a heavy, costly transformer, I've been considering
>the possibility of using a DC to DC converter.
>
>Using 2 large toroids (Amidon red, about 2 inches o.d.) stacked
>together as the transformer, the primary would consist of a center
>tapped winding with the center grounded and the ends switched on and
>off by power mosfets. The input would be at 250 V DC. The output
>would be a winding with about 8 times as many turns, rectified and
>filtered with caps. The mosfets would be driven at around 1MHz by an
>oscillator. I only need to work out the value of the primary
>inductance required (any ideas?).
>
>Will this work (I need about 1.7 kW) or is there a fundemental problem
>which I havent thought of ???
>
There are two problems with your plans. One, you need to get a handle on the core losses at 1 MHz You can do this easily if you know the material type. The next problem is finding some power rectifiers that have a fast enough recovery time for operation at 1 MHz.(If you find some let me know.)

I have built some 300 kHz switchers that put out 2 kW AC. I used 8 Amidon FT-240-F cores in a stack. With this many cores I could get the volts per turn up to 33 without overheating the core. I could have used fewr cores, but the trade of was that I wanted to use silicon insulated HV wire for HV isolation and that didn't leave room for many turns. My primary was 9 turns of #14. The secondary was 15 turns of #14 since it was cheaper to buy one big spool of wire. I was planning to use a voltage multiplier circuit. Voltage Multipliers, Inc is a good source of diodes for fast power retification.But, based on their recommendation of 70 ns recovery diodes for 100 kHz, the 25-30 ns diodes, which are the fastest they have might be usable at 300 kHz, but probably not 1 MHz.

The input dc voltage was 300 vdc by direct rectification. My system is designed for 208 three phase, but I tested at 2 kW with full-wave rectification off 240 single phase.

The next problem is switching at high frequency. The driver is extremely critical to get a low enough driving impedance at the MOSFET gate which takes some effort. Also, the body diode in the MOSFETs is not fast enough for even 300 kHz, so you need external fast diodes.

Also, be on the lookout for high frequency oscillations that will destroy the MOSFETs during turn on.

My power switcher is a full bridge, with 2 IRFP340's in parallel in each leg. They barely get warm, so I'm pretty consrvative there.

But my learning curve was about 15 months. I have a 5 lb box of explode MOSFETs to show for it. One important item is a fast shutdown to kill the drive in under 1 usec if the peak current gets too high. This cut way back on major failures. One mechanism that caused me a lot of grief was when one device failed, for whatever reason and the device in series with it turned on into a dead short. This makes for plastic shrapnel and ugly arcs spraying carbonized plastic onto your circuit.

Most of the big, high power witchers use 40 kHz because of the aboe problems. I didn't have a choice since the customer wanted 300 kHz ac out. (My circuit works to about 450 kHz,by the way.)

I built 8 kW supplies using 4 modules with their outputs in series. I was shocked when my second generation boards had new problems that didn't bother me in the first generation. Layout is critical.

My overall opinion, 1 MHz is too high. 300 kHz is doable, but the cost of the cores is the least of your problems.

Don't mean to be discouraging, but you did ask if there was anything you were overlooking! :-) :-)

73 de K9GXC, Jim

Temporary email address until my domain gets put on the new name server: jpotter@laintra.com Hopefully this happens tomorrow if the sysop in't out sick again.

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

2432. Inventory Reduction Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5eu342$6ns$1@zinger.callamer.com>
Source record: 96787

Dan's Small Parts and Kits has posted a Inventory Reduction Sale list
good until the end of March.

http://www.fix.net/dans.html

Enjoy,,,,Jerry...K

2433. AADE L/C meter IIB: Unsolicited testimonial

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <331397c6.53629652@news.santafe.edu>
Source record: 96788
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equuipment

I just received the L?C Meter IIB which I ordered from Almost All Digitial Electonics in auburn WA. (http://www.aade.com)

The unit I purchased was pre-wired, but is available as a kit for $20 less than the $110 that I paid.

The construction is adequate, but not fancy, as one might expect at this price.

The unit is self-calibrating and simple to use. The design concept is clever and the implementation is nicely done. It has relative mesurement and percent deviation capabilities as well as straight measurements. It is completly auto ranging. All you have to do is turn it on with all other pushbuttons out so it will self calibrate, select L or measurement, push the zero button with a shorted input for L or an open input for C, and connect the part to be measured.

The first thing I did was measure the inductance of some 150 nhy chokes I had made. Low and behold, they were 150 nhy. I expected that they were somewhere between 100 and 200 nhy and I regard the similarity of the calculated and measured numbers as more of a coincidence than anything.

I had been looking for an old Tektronix 130 L?C meter for sometime and hadn't come across one. The L/C Meter IIB is much more useful on both the low end and the high end. And, it doesn't have to warm up for half an hour either.

The only thing I wold like to have seen done differently woul be to reduce the spacing of the 5-way binding posts to 3/4 inch so I could use the standard Pomona banana jack to BNC adapter.

Also, I noticed the 5-way binding posts are only 3 or 4 way. I forget what all the 5 ways are, but the ones used here are missing the through hole, so that eliminates at least one of the 5 ways, if not two.

I highly recommend this unit to anyone with a need to measure iinductances from 1 nhy to 100 mhy and capacitances from 1 pf to 1 uf.

The L/C meter IIB is a very useful addition to my test equipment collection.

73 de K9GXC, Jim

email address is temporarily jpotter@laintra.com

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

2434. Req: antenna Installation Drawing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: aries dharmawan <aries@dnet.net.id>
Message-ID: <3312B7DD.6533@dnet.net.id>
Source record: 96789

Hi , are the any body can help me to find The Installation Drawing of
5 band Trap HF vertical antenna made by COMMET ANTENNA.
pls send me e-mail for this information.

best regard's
YC0CBO
aries@dnet.net.id

2435. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CA3C.2385@geocities.com>
Source record: 96790
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Glen Quarnstrom wrote:
>
> The BBS for which I'm a co-sysop has been on the air for about 8
> years, and in all that time we have never locked one legitimate ham
> out of the BBS for any reason. We've handled dozens of Burt's
> rantings, as have all the upstream SysOps, obviously. Burt loves to
> tar hams with a broad brush, but he gets more on himself than he does
> on others.

And thus the greatest way to hurt me if you think I am a fool is not to
censor me but to let me be heard, as you have done.
You have decency even if you think me a fool.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2436. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312CA94.6936@geocities.com>
Source record: 96791
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Gerald Schmitt wrote:

> It is your right to pass or not pass as you see fit. In general I agree
> with you Burt looks much worse for his posts. However if a sysop
> chooses not to pass anti ham propaganda that too is his right. After
> all you guys supply the time, equipment, location and expertise we all
> enjoy thus it is your foot ball and you make the rules. Most reasonable
> people would accept this but then Burt is not reasonable.

I agree it is his right but it is not right.
Can you understand this simple statement?

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2437. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-25 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3312C982.7B54@geocities.com>
Source record: 96792
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

> Burt, you're making a fool of yourself.

To be thought a fool by fools is what?

--
#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2438. balanced tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Larry DiGioia <larryd@bright.net>
Message-ID: <3314E9A2.3197@bright.net>
Source record: 96495

I am building the balanced tuner per the Feb 1990 QST article. I have the parts, and I find that while the variable capacitor has a reasonably long shaft, the roller inductors have only about a 1/2 inch long piece of shaft that sticks out.

This is not too handy, whether you wanted to put a knob on it, or as I want to do, put a pulley on it.

Does anyone know whether there is such a thing as a coupler to extend the length of 1/4-inch shafts? Sources?

email replies, please.

-Larry KC8FDY soon to be N8KU when the FCC gets their act together

2439. Re: Convert DC to superhet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <33151DBB.F0B@idecc.com>
Source record: 96496

Roy Lewallen wrote:
>
> In article <3314822C.1E75@idecc.com>,
> tim_hynde <tim_hynde@idecc.com> wrote:
> >I want to take my 80m DC reciever and change it to a superhet.
> >Do the following steps make sense?
> >
> >1. Use a mixer that gives me a 455KHz output separate from the existing
> >rx.
> >2. Replace the tuned front end of the dc rx to a 455KHz filter.
> >3. Replace the VFO (currently running at 3.5 to 3.6 MHz with one that
> > runs at about 452 to 458 KHz this would now be the BFO.
> >. . .
>
> This would work, but. . .
>
> Since you already have the tunable VFO, consider changing the VFO frequency
> by 455 kHz. Then add a 455 kHz IF and BFO after the existing mixer. (That
> is, use your existing VFO/mixer as the VFO/mixer rather than as the
> BFO/detector.)
>
> Regardless of which approach you take, you'll need to add a filter to the
> receiver's input for image rejection, if it doesn't already have a
> reasonable front-end filter.
>
> Roy Lewallen, W7EL

Ok, only reason I was going to outboard the new front end & mixer was
I'm using the w1fb universal DC rx and the board looks so nice without
me hacking it up.

Just one more question if you will, I have a 455KHz filter from Murata
it appears from the spec to be 2.5 KHz wide and is physically about 1/2
long and 1/4" wide in a metal can. Dont laugh but, Whats the difference
between this and one of the small black plastic filters you see
scattered all over inexpensive recievers? (Also made by Murata)

Thanks much,

Tim, ka8ddz

2440. who sells amplifier parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: john <jmul@microlink.net>
Message-ID: <3314AF95.2B40@microlink.net>
Source record: 96497

I am looking for a source for amplifier parts, addresses of amp repair businesses(I think there's a place in the Carolinas). Also need to know if Avatar Magnetics has a web page or email address. They make transformers. Thanks, John Anyone have a junker L4B RF deck for parts?

2441. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5f33n5$2vf@lehi.kuentos.guam.net>
Source record: 96498
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) wrote:

>adell@planet.net (Steve - KF2TI (Landing, NJ)) wrote:

>>In article <3310B581.4BB8@geocities.com>, burtfisher@geocities.com
>>says...
>>
>>> If you operate a PBBS to serve all amateurs who the hell are you to
>>> decide what THEY should read.
>>
>>Exactly..*I* am the owner/operator of the PBBS and *I* decide what gets
>>read. *I* take the input of the people who utilize MY equipment, *I*
>>decide what content is acceptable or not. Not YOU or the FCC
>>
>>That's who the hell *I* am. *I* and the others on my PBBS consider your
>>posts inappropriate to anything related to amateur radio, hence, no
>>posts.
>>
>>I firmly believe you have every right to show the fool that you may or
>>may not really be. HOWEVER, I DO NOT repeat, DO NOT have to give the
>>platform to prove it. That's for others to do.
>>
>>If you're suggesting that I have to allow you to access my property
>>(equipment, etc.) then you are barking up the wrong tree.

>You are technically correct, but ethically wrong wet. If you set up
>to provide a public service as a BBS, you have a moral obligation to
>forward all legal mail, or at least not to limit forwarding based on
>personal considerations such as who is saying what. SysOps who censor
>mail are a big problem on the ham BBS network, and responsible SysOps
>should and will route around them.

Sounds like you have the U.S. Post Office and ham radio confused.
The big problem with the packet network is sysops who don't pay
attention, forward anything to anywhere, loose mail by letting things
sit on their system forever, etc. Running a BBS is something that
requires a) time and b) effort, and too many packet BBS's consist
of a TNC, a radio, a computer with BBS software that somebody's
buddy set up, and a ham running around patting himself on the back
calling himself a 'sysop'.

>If you're not part of an open network, you're just cluttering up
>valuable space on the bands, and are giving jerks like Burt more
>ammunition.

I think you have that backwards, too. I don't know who the first two hams were who hooked up TNC's and BBS software, but I imagine that the intent of the first link of the 'packet network' was to forward information, not garbage. Keeping the network free of garbage reserves valuable space for valid information to be passed.

The amateur packet radio network already forwards, by design, an incredible amount of garbage in the form of message headers. I don't recall the exact figure, but a few years ago I analyzed a months worth of ALLUS bulletins, and I think that headers accounted for between 40 and 50 percent of the total character count. Add to that garbage a totally unnecessary ASCII drawing at the end of every message, a few lines of advertising from the guy who wrote the whiz bang terminal program used to generate the message, and top it off with an ACK at the end so the receiving system generates a totally unnecessary return message saying the mail got there, and you run the percentage of garbage up well over 50%. The packet network does a wonderful job of diseminating garbage, but unfortunaly falls flat on it's face when it comes to delivering mail from one ham to another ham.

I agree one hundred percent with Steve. I supplied the two computers, three radios, three TNC's, assorted power supplies, cables, antennas, etc. that are used to run my packet BBS and DX cluster. I pay the electric bill every month. When the little red transmit light on one of my packet radios turns on, I decided what gets transmitted, and it damn sure won't be Bubble Head's Bible Quotes or daily birthday lists from the Happy Club. Steve chooses to keep certain people off his system. I choose to keep certain garbage off my system. We are both doing what we are supposed to be doing, monitoring and eliminating garbage.

My packet equipment isn't a 'public service'. It's a service provided for hams to use in relation to ham radio. Bible banging and birthday lists have nothing to do with ham radio, so I make the decision to keep that junk off my system, and not contribute to the confusion by sending it to other systems.

When you, TAPR, or the ARRL decide you would like to reimburse me for the cost of my equipment and start sending me a paycheck, I will be happy to revert to your system of not excluding anything from my BBS.

By the way, Burt's messages pass freely thru my BBS, as his topic of discussion always seems to be ham radio related.

73, Jim KH2D

2442. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: "William A. Wetzel" <n6rky@pacbell.net>
Message-ID: <33153E5B.38B5@pacbell.net>
Source record: 96499
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Regarding Burke Baumann's message, it was very good. Perhaps I should had done the same thing when I was in this debate! In any event, anyone who's in the commercial radio service knows better than to modify amateur radio equipment for other radio services. It is poor engineering practice for a person to do so. I Thankyou Burke for your time in putting that together.
--
William A. Wetzel
N6RKY@PACBELL.NET
N6RKY@JUNO.COM

2443. need advice on home made high voltage cap's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Peter Shintani <shintani@tv.sony.co.jp>
Message-ID: <01bc243c$2724eba0$6103022b@dell-for-peter>
Source record: 96500

Hi:
I am interested in making some very high voltage caps for a loop antenna.
I gave up on the idea of making a variable HV cap so I will concentrate on
operating on a single frequency. My question is has anyone made some 30kv
rate caps using glass jars and copper tape or aluminum foil(heavy duty) for

a small loop antenna ? I understand that the er of glass is about 8, so
that I can
get away with 1/8 the surface area as compared to an air dielectric cap.
What sort of luck has any one had ?
Peter
PS what is the breakdown voltage of a typical canning jar ?

2444. Re: CELL PHONE----> ham band....anybody have any luck with these?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: nojunk@here.com
Message-ID: <33149c15.6837009@nntp.ix.netcom.com>
Source record: 96594

>ahhhhhhh....I see said the blind man.... They are already in the ham band.
>What about channel selection? They have something like 25 channels don't
>they? I was kind of thinking of using the cell phones I have now and
>converting them to that band, but it's been REALLY tough to get anything even
>close to a service manual on them.
>Thanks for the info..
>TYler
>

The RF board has 9 conection.

1 - +B 9 VDC
2 - GND
3 - AUDIO output
4 - SQUELCH output
5 - VFO inable
6 - data in
7 - clk in
8 - PTT
9 - transmit audio

This board is on a PC board the can be easily removed. It is SMALL!!!
The conection can be easily made by a inline socket.

You will need to build your own uP. I will be using a PIC. When I
get the to this project I will shared my code with you.

73 de KB8RLN.

****
Homepage: http://www.netcom.com/~kb8rln
Phone: (614)-888-3111 I believe that: 2 + 2 X 2 = 6
Author of XMIT_ID a shareware radio fingerprinting software --

2445. Xtal swapsies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Steve@chubs.DEmon.co.UK
Message-ID: <OiRYBPA223EzEwn3@chubs.demon.co.uk>
Source record: 96595

I'm going to put a list of my Xtals on a page on my site.

If anyone has a list of their own please e-mail it to me in this format.

Email@server.co.uk

4000 27125 12005 3575 56121 1800
14500 etc etc etc etc

This way I can cut and paste between the lines and update my list.
please put all frequencies in khz and use no more that 6 rocks a line.
They don't have to be in any order as those searching can use the find
option on their browser.
I know it would be ideal to include xtal types but this can be asked on
contact with swapper. I would rather that money was not charged (maybe
P&P) but that true swapping/giving occured.

the URL will be http://www.chubs.demon.co.uk/xtals.htm

Oh and don't forget to visit my homepage on the way out.

Regards all.
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
Visit Radio World -
HTTP://www.chubs.demon.co.uk

2446. Re: HEY! How about we knock off all the insults and arguments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <3313839f.114015644@news.santafe.edu>
Source record: 96596
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

k5dh@dlep1.itg.ti.com (THE Mustang Maniac) wrote:

>Okay, folks, enough is enough. PLEASE, let's end all of this petty
>arguing, griping, insulting, and personal attacks on each other.

Don't ya know, that's what ham radio is all about. At least it was the
last time I listened on 75m or 20 m . :-) :-)

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

2447. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc2385$637a1920$d3022399@desktop>
Source record: 96597
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

R. L. Measures <measures@mail.vcnet.com> wrote in article
<measures-ya02408000R2402972054150001@news.vcnet.com>...
> A reverse diode across the coil is important since it protects the coil
> from the otherwise large counter EMF across the coil during break. (I
> measured 450v peak across a 24v relay coil during break.)

The mosfet will harmlessly break down well before that. Just note that
some mosfets do weird things at breakdown, like oscillating for a moment
at several MHz. Don't use those ones ;)

...Peter

2448. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5f06ec$262q$1@news-s01.ny.us.ibm.net>
Source record: 96598

In message <3311d285.9488578@netnews.worldnet.att.net> -
w8jitom@postoffice.worldnet.att.net (Tom Rauch) writes:
:>
:>
:>If the 8877 was as unstable as you clkaim at VHF, it would never work
:>in an unneutralized VHF strip line amplifier. Why is a strip line amp
:>with a strip line Q in the double or triple digits stable, and a HF
:>amplifier with less VHF not???
:>

Tom,

FYI, the first broadcast transmitter that I worked on ... twenty
years ago used the 8877. It was a grounded grid final with a
4CX250 as an IPA. I can't remember if it had a half wave or
quarter wave stripline in the output tank but there wasn't a
supressor anywhere in the final. It would make about 4.5 KW output.

The crazy thing ran very well at 105 MHz ... one final tube ran for
more than three years at that station making 3+KW output (100 Meter
stick with four bays of antenna in circular polarization).

Of course, some would have us belive such a final would never work!

==========
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<subich@compuserve.com>
==========

2449. Re: 300 Mhz band?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc2398$3ba68060$9fc1e1ce@cstevens.usr.com>
Source record: 96599

The FCC has allocated 300 MHz *of_bandwidth* in the 5 GHz band
to the "NII band" ... it's unlicensed digital stuff ...

Check the FCC's web site ... http://www.fcc.gov

Carl - wa6vse
carl@ais.net

J. Keith Ostertag <OSTERTAGK@SNYCORVA.CORTLAND.EDU> wrote in article
<01IFU1WJ1YGY00A608@SNYCORVA.CORTLAND.EDU>...
> I just saw a short blurb in PC Magazine that says the FCC has set aside
the
> "300Mhz frequency band" to be used for free access for schools,
libraries, and
> businesses for wireless computing. It mentions the development of
so-called
> Unlicensed National Information Infrastructure (U-NII) devices.
>
> Could someone point me to any details?
>
> Thanks,
>
> Keith, N3KXZ
>
>
>

2450. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <3314c16f.2069452@news.airmail.net>
Source record: 96600

subich@ibm.net (Joe Subich) wrote:
> one [8877] final tube ran for more than three years

You know, Joe, the old Eimac guys say that, at full power, the life of the cathode never exceeded 6000 hours in their testing. The life you saw shows how little of the capapbility of the tube was actually being used when it was developing full power. I suspect--correct me if I'm wrong--that the transmitter was actually a 2.0-2.5 kW output unit with a station ERP of 5 KW, a typical Class A arrangement.

The design you describe closely parallels one of the designs that Fritz Bauer did when Granger Associates was building transmitters for him. I suspect Cetec might have, sometime later, modified one of Fritz's designs to use the 8877. The Cetec line was originally called Sparta and their 2 kW unit used a 4CX250B driving a 5CX1500A. After all the tube problems with the 5CX1500A in FM service (later fixed in the 5CX1500B) I suspect they were ripe for a tube-type replacement when the 8877 came along. It seems that the original price on the 8877 was less than $150; the 8873, 8874 and 8875 were $37.50 each when they came out.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

2451. VHF/ic22/tr33 homebrew/bldg

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: earlve3ab@igs.net
Message-ID: <5f01jj$kd3$1@nntp.igs.net>
Source record: 96601

im building a 2 meter rig for ssb/cw using an old tr33 drake 2m rock-
bound fm transciever. Im using the rcvr front end and mixer and the
local oscillator and im going to get that going b4 tackling the
transmitter which may require some additional surgery to get all stages
to work linear.. just curious if anyone else did this kind of
mod/bldg ....also looking for xtals for ic22. Ihave 145.010 i dont use
for swap 73 de earl...earlve3ab@igs.net

2452. When did you change your tune Burt Fisher??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: sc@webspan.com
Message-ID: <5f0hm9$n94@news.webspan.net>
Source record: 96602

Hey Burt,

About 4 years ago I posted a message on packet
from the N2IMC BBS asking for help designing
an antenna. You sent a one line response:

"First you need to get an education."

I replied to your message and you sent it
again. "First you need to get an education."

Now I find you on the Internet with a different
personality! Now you claim that it is wrong to
insult the individual, when that is exactly
what you did to me. I asked for help with a
problem I was having and all you could do is
insult me.

And you are trying to "correct" hams????
What nerve!

SPAM thwart: change the "sc" to "scasey" to e-mail.

2453. Informations about phone patch !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: va2prc@mediom.qc.ca
Message-ID: <5f0famebo1@wagner.spc.videotron.ca>
Source record: 96603

HI!
I would like to have any plans or information about the phone
patch (for use with the repeter).Please send me any info at:
va2prc@mediom.qc.ca

Thank's Yves Parent (va2prc)

2454. Homebrew an 800mhz Ant.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: n5xdn@pcok.com
Message-ID: <5f0iu4er1@okanogan.brigadoon.com>
Source record: 96604

See the plans at:

http://www.pcok.com/~n5xdn/800mhz

These plans are for a 1/4 wave 800mhz ground plane antenna
for a handheld radio.If your real good you can mount it on a
pole and make it a base station antenna.

73, de N5XDN
dB

2455. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: mike.luther@ziplog.com
Message-ID: <5f0pbd$ict@news.myriad.net>
Source record: 96605
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

In <measures-ya02408000R2502970419040001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:
>In article <01bc21ed$738b3540$f20f2399@desktop>, "Peter Gottlieb"
><peter_gottlieb@msn.com> wrote:
>
>> CRONIN <jdc3538@osfmail.isc.rit.edu> wrote in article
>> <5ecocf$9ha@news.isc.rit.edu>...
>> >
>> > I'm tinkering with a radio for packet use that has a relay for T/R
>> > switching. The relay has a diode across it to keep the transistor that
>> > runs it from getting fried. So far so good. Every now and then
>> > there is mention of how this increases relay switching time, obviously
>> > a bad thing for packet.
>>
>> In simple terms, a magnetic field holds the relay in, and the diode
>> prevents
>> the field from collapsing as fast by turning the voltage created by the
>> collapsing
>> magnetic field back into a magnetic field for some milliseconds.
>snip...
>
>A reverse diode across the coil is important since it protects the coil
>from the otherwise large counter EMF across the coil during break. (I
>measured 450v peak across a 24v relay coil during break.) However, such a
>diode increases the break-time. By placing a resistor in series with the
>diode, the break-time can be cheaply decreased and the counter EMF held to
>a reasonable amount. As a rule of thumb, the series R should be 2 to 3
>times the coil R. More R =s faster break-time, but with the trade-off of
>more counter EMF volts.
>
>The make-time of a DC relay can be decreased by connecting the coil in
>series with a resistor that has 3 to 5 times the resistance of the coil.
>Naturally, this arrangement increases the voltage needed to operate the
>relay. For example, a relay has a 240 ohm coil rated at 24v. A 720 ohm
>resistor is connected in series with the coil. In order to produce 24v
>across the coil, 96v must be applied to the series coil/resistor. This
>circuit is recommended by Jennings, the company that manufacturers
>vacuum-relays.
> Here's how it works: Relay coils have inductance. For instance, the
>Jennings RJ-1A's 26v coil has about 0.3H. It takes time to overcome the
>inductance and build up a flow of current before a relay can close. The
>circuit described temporarily provides more coil voltage at make, thereby
>shorting the time it takes for current to build up in the coil. I

>measured a make-time decrease of roughly 65% with the circuit described.
>
>--
>--Rich-- ag6k, 805-386-3734

The technique works *VERY* well. I've been using a T/R switch for QSK
that uses an RJ-1A driven this way for 22 years now. My plate voltage
switch has a Cramer hour meter on it that had over 10000 hours of plate-on
all-cw time for my hand built pair of 4-400a's that goes through this relay,
before the first one got to dragging. I bought two back in 1974, one for a
spare, thinking I would use in a year or so....

Surprise, the first one went over 20 years of *HARD* use, --- I gave up
even *THINKING* about the zero's in the number of operations when I
got to trying to figure that out for all those hours since my plate voltage
isn't brought up unless I need the stuff.... Yeah I know, how much do
you really send in an hour, but, pileups are pileups etc... :)

Of course I don't switch it hot, but it follows stuff nicely up past 60 WPM
in this sort of arrangement. I couldn't say enough good words about Jennings
stuff, besides which the pair of vaccuum variables in the amp are also
Jennings. These relays are available through Davilyn, Corp. out in California
as well as Nebraska Surplus. If you get them, be sure and get the new ones.
Even at $100 or so each they are worth it. The reason is that pulls are
also available, but you really have no way of knowing if the pulls have been
subjected to abuse.

There are certain products that just catch your eye for craftsmanship. BMW
cycles, Beech aircraft pruducts... the knid of things that you just can't seem
to put down without looking at them first or looking back at it as you walk
away from it...

These little jewels are a tiny example of that kind of stuff...

//-----------------------------
Mike - W5WQN
Mike.Luther@ziplog.com
MIke.Luther@f3000.n117.z1.fidonet.org

2456. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Burke Baumann <baumann@doitnow.com>
Message-ID: <01bc238f$d2659760$7d9d62cf@default>
Source record: 96606
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thomas Gasta <tomgasta@worldnet.att.net> wrote in article
<5esbnr$eml@mtinsc05.worldnet.att.net>...
> As a licensed amateur, and one who can read and understand the english
> language, I would direct you to Part 2.800 and specifically to Part
2.1005
> of the FCC rules, and if that doesn't work, take a look at the back of
> your kensucom radio, see that little FCC ID, know what that is, thats
> right, it is the type acceptance ID for that amateur radio. If you would
> like to read parts 2.981, 983, 991, 993, 997, 999, 1001, and 1003, you
> will see just how much trouble Icsuwood had to go through to be able to
> sell you that radio frequency device, and if you want to build one for
> your own use, Part 97 allows that, just don't build them for resale
> without going through the same trouble. Like anyone with such a poor
> understanding of "ALL THE RULES" could ever build anything!
>
>

Hi Tom

Tom I think part of the confusion here stems from the assumption that the only approval granted by the FCC is "Type Acceptance" and this is what is associated with the FCC ID number found on electronic devices. It also is assumed that this approval is related to the appropriate part of the FCC regulations for a particular radio service, in particular Part 97 covering the amateur radio service. These are both basically bad assumptions with the exception that some amplifiers for amateur service require type acceptance.

First in addition to "type acceptance" the FCC also issues several other types of "APPROVAL" including "Certification", "Type Approval" and "Notification". If you look at the ads for the ICOM IC-756 before it was approved it said waiting "FCC Approval" and nothing about "Type Acceptance". Also as I will show the "FCC parts" that the radio is tested to for approval may not in all cases be the same "FCC Parts" for the service the radio is going to be used in. This is not to say that an amateur transceiver does not have to meet Part 97 but that the "FCC approval" was not based on the part 97 requirements but instead on "part 15 " of the FCC regulations.

I own an ICOM IC-756 and waited several months for the FCC to "approve" this radio. During this time I repeatedly checked the FCC database to see if it to had been approved. (301-725-1072 for those who are interested. It might be a clue about the ft-920)

I apologize for the long attachment that follows. This is a capture file
from a session on this database.
It shows that the IC-756 approval was for a "notification" and was approved
under "PART(S) 15". The device was listed as a communications receiver
with a note that it was an amateur transceiver. Included in this file is a
definition of the fields in the report. Also included is a document
"MARKETING REGULATIONS FOR RADIO FREQUENCY DEVICES" that also contains info
about approvals and a document "Extended Coverage High Frequency
Transceivers". This last document covers use of amateur equipment in
services requiring equipment that is "TYPE ACCEPTED". It also states
"Transmitters designed and intended for use only in the ARS must comply
with the applicable technical standards contained in Part 97 of the
Commission's Rules but are not required to be
type accepted.

Some of the menus listings were deleted in the following capture file.

From the FCC PAL database.

1 - Access Equipment Authorization Database
2 - Definitions - Terms/Codes used in Application Records
3 - Applying for an Equipment Authorization (1/92)
4 - Other Commission Activities and Procedures (8/92)
5 - Laboratory Operational Information
6 - Public Notices (7/96)
7 - Bulletins / Measurement Procedures (3/93)
8 - Rulemakings (7/94)
9 - Help
a - Information Hotline (7/96)
b - Processing Speed of Service
c - Test Sites on File per Sec 2.948 (1/97)

0 - Exit PAL

Enter your selection: 1

Welcome to the Lab PAL Application Status program

The following functions are available. Grantee code
refers to the first 3 characters of the FCCID.

1 - Application status (requires EXACT FCCID)
2 - List GRANTED FCCIDs with just a Grantee code
3 - Grantee name and address from Grantee code
0 - Exit PAL status system

Enter your selection : 1

Enter EXACT FCCID (CR to end) : AFJIC-756.....

FCCID: AFJIC-756 Notification

Receipt Date: 12/13/96 Application Date: 12/11/96
Granted: 01/15/97 Original Grant Date: 01/15/97
FCC Rule Part(s): 15

Frequency (MHz) : .03-60
Equipment Class : Communications Receiver

Remarks:
Amateur Transceiver

Notes:
The manufacture and/or importation of this device must cease on June
23,
1999.

Enter EXACT FCCID (CR to end) : AFJIC-R10........

FCCID: AFJIC-R10 Certification

Receipt Date: 01/06/97 Application Date: 11/11/96
Granted: 02/11/97 Original Grant Date: 02/11/97
FCC Rule Part(s): 15
Frequency (MHz) : 0.500-823.9, 849.1-868.9, 894.1-960
Equipment Class : Scanning Receiver

Notes:
This device has shown compliance with new rules adopted under
Docket 87-389 and is not affected by Section 15.37, transition rule.

snip

Public Access Link Definition Menu

1 - Status Definitions
2 - Equipment Class Definitions
3 - Data Element Definitions

0 - Exit this Menu
Enter your selection: 3

Data Element Definitions

The following data elements shown in applications records are derived
from
the data listed by applicants on the current edition of FCC Form 731 and
rule
sections governing the specific class of equipment.

Application Date - Date of Applicant Certification by
authorized
signature on Form 731.

Emissions Designators - Pertains only to type accepted equipment, and
certain notified transmitting equipment used pursuant to a station
license.

Equipment Class - Derived from the particular rule sections specified
in the rules governing the particular class of equipment.

Expiration Date - Applicable to certain types of equipment as specified
in
the Rules. Equipment cannot be manufactured or marketed after this
date.

Frequency / Frequency Range - The frequency or frequency range the
equipment
is authorized to operate. Pertains to all equipment with the exception
of Class B Computing Device Peripherals.

Frequency Tolerance - Pertains only to type accepted equipment, and certain
notified transmitting equipment used pursuant to a station license.

Grant Date - Date of Grant as specified on the most recent
authorization
issued by the FCC for the specified FCC Identifier.

Grantee Name/ Address - Name and address of the applicant as it appears
on Form 731 and as listed by applicant/grantee code in the Commission's
records.

Note Codes - Two character codes used for referencing specific notes
which
apply to a grant as issued by the FCC. Notes can be referenced in
the
Note Code Definition file on the main menu (Selection #2).

Original Grant Date - This field was created in June, 1985.
The
original grant date represents the date of the last grant issued prior
to
June, 1985, or the date of the original grant of authorization if
the
application was approved after June, 1985.

Power Output - Pertains only to type accepted equipment, and certain
notified
transmitting equipment used pursuant to a station license.

Receipt Date - Date of receipt of the application at the Mellon Bank in
Pittsburgh, Pennsylvania.

Related ID - FCC Identifier assigned to a companion application filed
simultaneously.

Rule Part - FCC Rule Part(s) under which the equipment is authorized to
operate.

snip

Enter your selection: b

FCC LABORATORY EQUIPMENT AUTHORIZATION PROCESSING
SPEED OF SERVICE - FCC Form 731

The following figures represent speed of service processing time for the month 1/97. It is hoped that the following information will be useful to applicants planning to bring new products to the market.

Type
Acceptance Certification Notification

50% of applications
processed in (days) 37 39 14

90% of applications
processed in (days) 47 46 41

End of listing : .

Welcome to the FCC Public Access Link

Enter your selection: 3

snip

Enter your selection: b

MARKETING REGULATIONS FOR RADIO FREQUENCY DEVICES

A radio frequency device is defined in Section 2.801 of the Rules as any device which in its operation is capable of emitting radio frequency energy by radiation, conduction, or other means.

Section 2.803 - Equipment requiring Commission approval.

Equipment subject to Certification, Type Acceptance, Type Approval and Notification is required to be authorized by the Commission prior to marketing in the United States. Marketing means, "sell or lease, offer for dale or lease (including advertising for sale or lease) or import, ship. or distribute for the purpose of selling or leasing".

Advertising or display of a device requiring a grant, but has not been granted certification, type acceptance, type approval or notification will not be deemed to be an offer for sale, provided the advertisement contains, and the display is accompanied by a conspicuous notice as follows:

"This device has not been approved by the FCC. This device is not, and may not be offered for sale or lease, or sold or leased until the approval of the FCC has been obtained".

Any non-approved device displayed under the terms of the above provisions may not be activated or operated.

Section 2.805 - Equipment that does not require Commission approval.

Equipment which does not have to have a grant issued by the Commission, e.g.,
a device subject to verification, but must comply with specific technical standards prior to use, must not be offered for sale or lease (including advertisement for sale or lease), imported, shipped or distributed for the purpose of selling or leasing or offered for sale or lease, prior to

compliance testing to determine compliance with the administrative and technical provisions applicable to the specific class of equipment.

snip

Enter your selection: 8

Rulemakings

1 - Docket 93-1, R&O, Marketing of scanning receivers (6/93)
2 - Docket 92-165, R&O, Part 15 Restricted Bands of Operation expanded (6/93)
3 - Docket 91-269, R&O, Pt 15 rev, Intro of home automation & comm'n sys(8/92)
4 - Docket 90-413, FNPRM, Parts 2 & 15 rev, Intro of modular PC designs(8/92)
5 - Docket 92-152, NPRM, Harmonize Pt 15 Stds w/Intl Stds(8/92)
6 - Docket 89-116, 117 & 118, R&O, ANSI C63.4-1992 adopted as MP for Pt 15 radia
tors(8/93)
9 - Docket 89-622, NPRM to revise Parts 80 & 87 EPIRBS & ELT Rules
f - Docket 91-313, NOI to adopt CISPR standards for Part 18 (ISM) equipment (12/
91)
g - Docket 90-312, Part 1 amended implementing Sec 5301 of Anti-Drug Abuse Act o
f 1988
h - Doc 94-45, NPRM, Part 2 Revision (7/94)
i - Extended Coverage High Freq Transceivers (5/96)

0 - Exit this Menu
Enter your selection: i

Extended Coverage High Frequency Transceivers

The purpose of this Public Notice is to clarify the Commission's Rules regarding equipment that is intended to operate in various radio services in the high frequency radio spectrum, including "10-Meter" Amateur Radio Service (ARS) equipment.

The Commission has noted that a number of transceivers imported as ARS equipment are also capable of transmitting and are being operated in nearby frequency bands allocated to other radio services such as the Private Land Mobile Radio Services, Maritime Services, Auxiliary Broadcast Services, International Broadcasting Services, the Citizens Band Radio Service, and the U.S. Government. Operation of this equipment causes interference to the authorized users of these frequencies. Some of these <<<<read here transceivers are capable of using output powers or emission types which are not permitted for the radio services listed above and some are capable of transmitting in the radio astronomy band where no two-way radio communication is permitted. Some

manufacturers are promoting the sale of conversion kits, or have designed their transceivers such that they can easily be modified by the users, to extend the operating frequency range into the frequency bands listed above. In addition, so called "export" radios which are deliberately designed to facilitate this capability are also being imported and marketed.

Manufacturers, importers, vendors and users of these transceivers are reminded that transmitters intended for operation on frequencies allocated to any of the FCC authorized radio services listed above, except the ARS, must be type <<<<read here
accepted by the Commission for the particular radio service(s) in which they are intended to operate prior to their importation, marketing or use. The Commission considers that the transceivers discussed above are intended to be operated on frequencies where the use of type accepted equipment is required, because of the simplicity of modifying them to extend their operating frequency range. Transmitters designed and intended for use only in the <<<<read here
ARS must comply with the applicable technical standards contained in Part 97 of the Commission's Rules but are not required to be type accepted.

It is a violation of the Commission's regulations to: (1) import or market a transmitter that is designed or intended to operate on frequencies outside of the ARS bands, if it has not been issued a grant of equipment authorization for the radio service(s) in which the transmitter is capable of operating; (2) <<<<read here
import, market or operate a transmitter that requires a grant of equipment authorization but for which no grant has been issued; or, (3) transmit on a frequency allocated to a licensed radio service without the appropriate Commission-issued station license. Violation of the Commission's regulations will subject <<<<read here
manufacturers, importers, vendors and users of this equipment to appropriate criminal penalties as provided for by federal law(s), including fines and/or imprisonment. In addition, the equipment described above can be seized by, and forfeited to, the government.

For further information concerning this Public Notice, contact Gary Hendrickson at the FCC Laboratory, 7435-A Oakland Mills Road, Columbia, Md. 21046, (301) 725-1585, Extension 223, or E-mail: ghendric@fcc.gov.
End of listing : .

I hope this helps.

73 Burke
KF7NP

2457. NEED FAST CASH??? WE PAY TOP $$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: fastcash@usacellular.com
Message-ID: <5f0pr0$1u34@useneta1.news.prodigy.com>
Source record: 96607

$$$$$$$$$WE BUY ALL$$$$$ *F*A*S*T C*A*S*H*

CASH IS WAITING FOR YOUR UNWANTED ITEMS

* INCLUDING BUT NOT LIMITED TO
GOLD
DIAMONDS
WATCHES
SILVER
PLATINUM
ELECTRONICS,TVS, STEREOS,VCR'S
COMPUTERS, MEMORY CHIPS, MODEMS
*FOR MORE INFO STOP IN TO

http://www.usacellular.com/fastcash.htm

2458. Re: Why I am the way I am.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2602970347260001@wd1v.mv.com>
Source record: 96608
Cross-posted to:
alt.support.divorce,rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

> Burt Fisher <burtfisher@geocities.com> wrote in article
> <3310B1E9.7BF1@geocities.com>...
> > I am the way I am because as a teen I was an active ham radio operator.
> > I used "the mike" to not face real people thus missing my teen years the
> > way real people experience it. It is not ham radio's fault of course,
> > the fault is entirely mine. However I am not that person now and I
> > despise in others what I despised in myself. I am much like a reformed
> > smoker (they tend to be fanatics against smoking).

Good insights but why still play the role of a victim? To be liberated
from your past, you have to LET IT GO. Ten years from now, you'll hate
who you are today. There is no peace or healing going on when you
despise anything, past, present, or future. Its all INSIDE you - what
isn't there to love?

Peace and healing come with acceptance and forgiveness. Then you can love
instead of hate. Much better use of energy. In fact, the sensation is
that it takes no energy. What we resist (the pain of not loving) persists.

73,

John/WD1V

2459. Re: Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5f1ae1$lua@news1.mnsinc.com>
Source record: 96609

Er Neil - since you didn't supply a URL(!)
HOW exactly do we FIND your "favorite links" please???????

Neil Heckt <neil@aade.com> whistled a happy tune like:

|>Robert Harris wrote:
|>>
|>> Can anyone tell me who makes amateur, shortwave and/or UHF/VHF radio
kits
|>> and how to get in touch with them?
|>>
|>> I'm just getting started in amateur radio and am thinking about building
|>> the following:
|>>
|>> CW transmitter or transceiver
|>> Amateur transceiver
|>> Shortwave receiver
|>> Morse code practice kit
|>>
|>> Thanks,
|>> Robert
|>check "my favorite links" for links to kit manufacturers on the web as
|>well as a very nice code practice program Codemaster V from milestone
|>technologies. I got this one and it is really nice and not expensive
|>$30. It is a DOS program but runs great under Windows 95.

|>Neil

All the best - from bry
bry@mnsinc.com
http://www.mnsinc.com/bry/
http://www.mnsinc.com/litlcaps.html
You MAY NOT use my email address for unsolicited Email!
*** REMOVE ".NO_SPAM" to reply ***

2460. Re: Radio theory

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5f1a7d$d08_001@leeds.ac.uk>
Source record: 96610

In article <3306363C.7A972AF1@tgi.net>, paul <kcsut@tgi.net> wrote:
>Does anyone know of a web site where I can get information on radio
>Theory?

I don't know of any web sites with this information. You are probably better off with a good book like the ARRL Handbook, or the Radcom Handbook (here in the UK).

73 de Laurens

2461. Re: 88 mHy TOROID Application

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: "Tom V. Pfaffenbach" <tvpfaffe@mail.delcoelect.com>
Message-ID: <33143FA3.64A7@mail.delcoelect.com>
Source record: 96611

Bob Miller wrote:
>
> Tom V. Pfaffenbach wrote:
> >
> > Hi Folks;
> >
> > I wonder if anyone knows what the original application was for all of
> > the surplus 88mHy toroids that seem to abound forever in flyer sheets,
> > junk boxes, and handbook designs?

> > 73 de K9JDU
> Hi Tom,
>
> They were used as loading coils on phone lines to counteract the
> capacitive reactance of long metallic lines. they would be mounted in
> pole mounted enclosures or in splice case assemblies and were usually
> found in little tin or metal assemblies with a half dozen or so in an
> assembly which was stapled together.
>
> Hope this helps..
>
> Bob, KE6F

Hi Bob;

Thanks for the information. The cardboard tube assembly of 6 toroids
together with approximately 6 dipped mica capacitors and 2 or 3
resistors on an external terminal strip is exactly what I picked up. It
had no other ID. It was so heavy that I wondered what was inside. I
slapped the assembly on an oscillator and noted that it had a rising
characteristic with a fairly sharp peak at 13,200 Hz with Zin = 600 ohms
and the output unloaded. I have used the toroids many times over the
years, but I usually picked them up loose at hamfests or from Fair
Radio. I had never seen the assembly before, and I was surprised when I
unstapled the end caps and saw the old familiar toroids! I figured
someone would know what
the original intended application was!
Thanks for sharing you knowledge!

73 de K9JDU

2462. RE: 4-1000 CHIMNEY -PURCHASED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: nimski1@aol.com
Message-ID: <19970226142000.JAA07692@ladder02.news.aol.com>
Source record: 96612

THANKS FOR THE REPLYS FOR MY WANT ON A 4-1000 CHIMNEY, I HAVE FOUND ONE.
73'S STEVE W1SN

2463. HW8-MANUAL WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: nimski1@aol.com
Message-ID: <19970226142500.JAA08121@ladder02.news.aol.com>
Source record: 96613

LOOKING FOR A MANUAL OR AT LEAST A WIRING DIAGRAM FOR THE HEATH HW-8
TRANCEIVER. CONTACT ME AT NIMSKI1@AOL.COM OR 508-222-1261 STEVE W1SN

2464. Re: Radio theory

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: gelleric@goethe.informatik.uni-stuttgart.de
Message-ID: <5f1i2s$j1s@zdi.informatik.uni-stuttgart.de>
Source record: 96614

```
|> In article <3306363C.7A972AF1@tgi.net>, paul <kcsut@tgi.net> wrote:
|> >Does anyone know of a web site where I can get information on radio
|> >Theory?
|>
|> I don't know of any web sites with this information. You are probably better
|> off with a good book like the ARRL Handbook, or the Radcom Handbook (here in
|> the UK).
|>

And, if you are interested in antenna theory, try "antennas" by J.D. Kraus.

73, Wolfgang DJ3TZ
```

2465. Re: Any way to rejuvinate Nickel metal Halide batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: r.d.partos@larc.nasa.gov
Message-ID: <5f1irh$5sc@reznor.larc.nasa.gov>
Source record: 96615

>Im really not sure what happened...the battery just refuses to
>hold a charge for very long at all. Its in a IBM Thinkpad 500 and
>at full charge will last only 15 minutes or so. Looks like im
>gonna have to break down and get a new one
>

I also lost a battery in a TP500. Turns out you want to remove the
battery when you're using the AC power supply. Leaving the AC plugged
in for long periods of time will definitely trash the battery in this
unit. Charge for 1.5-2 hours to recharge the battery.

-dick
--
|---|
|Dick Partos in Norfolk, VA |
r.d.partos@larc.nasa.gov

2466. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2602970656470001@news.vcnet.com>
Source record: 96616
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

In article <3312C982.7B54@geocities.com>, burtfisher@geocities.com wrote:

> > Burt, you're making a fool of yourself.
>
> To be thought a fool by fools is what?

According to my dictionary:
PUERILE
1. Belonging to childhood; juvenile.
2. Immature; childish. See Synonyms at young. [Latin *puerlis*, from puer, child, boy.] • puerilely adv. •puerility or puerileness n.

--
--Rich-- ag6k, 805-386-3734

2467. Re: Single chip SW radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5f1jq6$482@nnrp1.news.primenet.com>
Source record: 96617
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components,sci.electronics.design

Maroof H. Choudhury <maroof@triton.kaifnet.com> wrote:
: Hi,
: I feel sad to learn that the Plessey SL6xx series radio
: chipset has been given the death sentence!

: I'm looking for single chip (or chipset) radio receivers (short wave),
: preferably from Europian & Japanese manufacturers
: (Philips/ST/Sanyo/Toshiba...), simple & easy to construct (suitable
: for hobykits). I looked in NS & Philips product line & found out that
: most are becomimg obsolete.
: Thanks for reading.

: Maroof

Maroof,
You might want to look at the Motorola MC13030. This device is a dual-conversion AM receiver chip, and the advanced information that I received has applications that include AM broadcast, 5-10 MHz, and CB band.

I'm not sure how long this device will be available. The track record for ICs suitable for SW receiver designs has not been good, beginning with the ill-fated LM373 of many years ago, which had lousy dynamic range.

Myself, I us an FM IF device (NE604) as a synchronous detector and have had pretty good results using it in IMS applications, and recently put together a 40m receiver using an NE605 as the core for a single-conversion design. An NE605 with an NE602 first converter would make a fairly good dual-conversion scheme, but the mixers in both these devices have a less than desireable third-order intercept point, and therefore the topology is limited to hobby applications.

On the other hand, this series of devices (from Philips) has been around forever, and promises to continue being available, at least for the forseeable future. They are, after all, very basic building blocks for FM receivers and therefore lies their longevity.

Regards,

Chris

,----------------------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _______,--------------'
_ |/

oo\ Chris Trask / N7ZWY
(__)\ _ Principal Engineer
\ \ .' `. ATG Design Services
\ \ / \ P.O. Box 25240
\ '" \ Tempe, Arizona 85285-5240
. ( ) \
'-|)__| :. \
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com

Graphics by Loek Frederiks

2468. 88 mHy TOROIDS: source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5f1luh$2v42@info4.rus.uni-stuttgart.de>
Source record: 96618

Hi all,

I wonder if there is a good way for a stranger to acquire a few of these
toroids. I will be visiting the US (San Francisco) for a short time though.

73, Moritz DL5UH

2469. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Burt Lang <burt@rocler.qc.ca>
Message-ID: <3314118C.C39@rocler.qc.ca>
Source record: 96619
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

>> CRONIN <jdc3538@osfmail.isc.rit.edu> wrote in article
> > <5ecocf$9ha@news.isc.rit.edu>...
> > >
> > > I'm tinkering with a radio for packet use that has a relay for T/R
> > > switching. Every now and then
> > > there is mention of how this increases relay switching time, obviously
> > > a bad thing for packet.
> > >
>

Another proven way to speed up relay drop-out is to use a zener diode in series with a regular diode across the relay coil. The cathodes of both are tied together and the anode of the zener goes to the positive terminal of the coil and the anode of the regular diode to the negative terminal. For a 12 volt coil, a 20v zener is suitable. This arrangement will clamp the peak reverse spike to 21 volts or so.

I have used this technique on a Mocom 70 which measured 65 ms drop-out when using a regular diode spike suppressor and it was reduced to 15 ms (same as the pull-in time) with the above mentioned circuit.

A MOV surge suppressor of suitable ratings (18v or so) should also do the same job at somewhat higher cost.

Burt Lang VE2BMQ

2470. Convert DC to superhet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <3314822C.1E75@idecc.com>
Source record: 96620

I want to take my 80m DC reciever and change it to a superhet.
Do the following steps make sense?

1. Use a mixer that gives me a 455KHz output separate from the existing rx.
2. Replace the tuned front end of the dc rx to a 455KHz filter.
3. Replace the VFO (currently running at 3.5 to 3.6 MHz with one that runs at about 452 to 458 KHz this would now be the BFO.

I am doing this because I want single signal reception and I though it would get me a litte gain too. I am a novice at this, am I missing anything in my conversion?

Can I use one of those 455KHz cans found in AM radios as the occ. circuit? I was going to outboard the BFO and not use the occ. on board the NE602 mixer. Someone said this was better. I picked 455KHz because I have a plethora of filters for this freq.

73,
Tim, ka8ddz
Rochester, MI

2471. Re: 88 mHy TOROID Application

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Burt Lang <burt@rocler.qc.ca>
Message-ID: <331416A5.1AE8@rocler.qc.ca>
Source record: 96621

Charles Wenzel wrote:
>
> Tom V. Pfaffenbach wrote:
> >
> > Hi Folks;
> >
> > I wonder if anyone knows what the original application was for all of
> > the surplus 88mHy toroids that seem to abound forever in flyer sheets,
> > junk boxes, and handbook designs? (snip)
>
> I thought they were for the oscillators in early touch-tone phones.

They were used for equalizing the response on phone lines. They
normally were mounted 5 at a time inside a tin can with the terminals
coming out on a cardboard strip along the side. There were also 44 mh
coils but they were not as common.

Burt>>

2472. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2602970834500001@news.vcnet.com>
Source record: 96622

In article <n7ws.265.00D93067@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) wrote:

> In article <5f06ec$262q$1@news-s01.ny.us.ibm.net> subich@ibm.net (Joe Subich) writes:
> >From: subich@ibm.net (Joe Subich)
> >Subject: Re: good source for amplifier tips
> >Date: 26 Feb 1997 02:16:44 GMT
>
> >In message <3311d285.9488578@netnews.worldnet.att.net> -
> >w8jitom@postoffice.worldnet.att.net (Tom Rauch) writes:
> >:>
> >:>
> >:>If the 8877 was as unstable as you clkaim at VHF, it would never work
> >:>in an unneutralized VHF strip line amplifier. Why is a strip line amp
> >:>with a strip line Q in the double or triple digits stable, and a HF
> >:>amplifier with less VHF not???
> >:>
>
> >Tom,
>
> >FYI, the first broadcast transmitter that I worked on ... twenty
> >years ago used the 8877. It was a grounded grid final with a
> >4CX250 as an IPA. I can't remember if it had a half wave or
> >quarter wave stripline in the output tank but there wasn't a
> >supressor anywhere in the final. It would make about 4.5 KW output.

The max. input rating for the 8877 is 4000 volts at 1 ampere, or 4kW in max.. 4.5 kW out with 4kW in is 4500/4000 = 112.5% efficiency.

> >The crazy thing ran very well at 105 MHz ... one final tube ran for
> >more than three years at that station making 3+KW output (100 Meter
> >stick with four bays of antenna in circular polarization).
>
> >Of course, some would have us belive such a final would never work!

I believe it could work. although the apparent efficiency does seem a bit high to me. How about adding another 8877 to make the story wash a bit better?
>
> I have a "reject" 8877 acquired as a sample from my friend W6TC sometime
> before 1980 as I recall. I have used it in the W6PO design two meter
> amplifier with a SILVER PLATED, HIGH Q, PLATE CIRCUIT, without a trace of
> nichrome to be found.

A Ni-Cr-Fe VHF suppressor in a VHF amplifier? Crazy. Ni-Cr-Fe is pretty
much death on VHF.

> It is stable, reliable and tunes as if on 160 meters. I have used it for
> tropo, meteor scatter and EME for years. It has never arced, sparked,
> oscillated or passed wind in all this time. Of course, I believe the dry air
> here in Arizona helps mitigate the damaging effects of cosmic rays,
preventing
> sudden bursts of VHF oscillations which, as we all well know, can cause gold
> atoms to migrate to the output coax connector, in turn causing a high SWR.

> Spreading a 1 inch layer of this around rose plants during the next few
weeks usually increases the size as well as the quantity of blossoms. .
>
> As is also well known, the high reflected power is then dissipated in the
> plate resistance (Rp) of the tube. Because this resistance has a positive
> temperature coefficient, Rp tends to increase without bound. As has also
been
> explained here many times, gain equals mu * Rp.

> This is far too potent for roses. However, watermellon and cantaloupe
thrive on the strong stuff.

> Because the resistance is ever increasing, the gain must approach infinity.
> Since the input (drive) power is constant, the output power must then try to
> approach infinity as well. A practical limit is reached, however, when the
> electron suction force (esf) becomes strong enough to pull the line cord out
> of the wall receptacle. (For the newcomer to this field, the unit of esf is
> the flake, named after a well-known west coast amateur. These are very tiny
> units though, so we usually use mega-flakes in theoretical work.) But I
> digress...

> This is even too potent for watermellon plants. However, it may be used
as a herbicide.

> In the event that the reader lives in a damper climate, say Ventura County,
> California for instance, where cosmic rays are more troublesome, a judicious
> application of nichrome wire may be called for. If one makes a coil of this
> material and installs it in series with the line cord, a number of useful
> benefits occur.

Does this guy sound like he has an agenda or what?
At this latitude we get secondary cosmic rays, neutrinos, gamma rays and
the like--but no cosmic rays per se.

> The immediate benefit accrues to the person who sold the nichrome wire (and
> the poor neighborhood nursing student who comes over on weekends and licks
> envelopes, or whatever, for the salesman).

Hmmmmm. ....
.....
Getting a tar baby unstuck must be pretty frustrating. You might try
using ethanol, Wes.

...snip...
---
e-mail copy to Mr. Stewart.

--
--Rich-- ag6k, 805-386-3734

2473. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: w6tg@aol.com
Message-ID: <19970226165801.LAA21083@ladder02.news.aol.com>
Source record: 96623

From: subich@ibm.net (Joe Subich)
Date: 26 Feb 1997 02:16:44 GMT
Message-ID: <5f06ec$262q$1@news-s01.ny.us.ibm.net>

In message <3311d285.9488578@netnews.worldnet.att.net> -
w8jitom@postoffice.worldnet.att.net (Tom Rauch) writes:
:>
:>
:>If the 8877 was as unstable as you clkaim at VHF, it would never work
:>in an unneutralized VHF strip line amplifier. Why is a strip line amp
:>with a strip line Q in the double or triple digits stable, and a HF
:>amplifier with less VHF not???
:>

Tom,

FYI, the first broadcast transmitter that I worked on ... twenty
years ago used the 8877. It was a grounded grid final with a
4CX250 as an IPA. I can't remember if it had a half wave or
quarter wave stripline in the output tank but there wasn't a
supressor anywhere in the final. It would make about 4.5 KW output.

The crazy thing ran very well at 105 MHz ... one final tube ran for
more than three years at that station making 3+KW output (100 Meter
stick with four bays of antenna in circular polarization).

Of course, some would have us belive such a final would never work!

==========
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<subich@compuserve.com>
==========
//
//

Having been in the broadcast business for more years than I care to think
about, I can not hold back any longer.

Joe, what you stated above cannot be. That exceeds the Eimac specs of the
8877 almost double.

I am amazed how someone would make such a statement, and that same person
be so critical of others.

Terry Gaiser - W6TG

2474. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: niels <niels@blast.net>
Message-ID: <E67y49.FAy@nonexistent.com>
Source record: 96624
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

People,
You are missing the point! The object of newsgroups is the free exchange of ideas and information, just like ham radio is supposed to be enjoyed. Not by ignoring peoples views just because you don't agree with them. That is what makes the United States of America GREAT!
Not censorship!
You don't like don't logon or turn off your radio.

Burt Fisher <burtfisher@geocities.com> wrote in article
<33136121.2684@geocities.com>...
> tim_hynde wrote:
>
> > I am guilty of this myself but, the only way to end it is to STOP
> > responding to his posts. He will go away if no one acknowleges him.
>
> Like you did?
>
> > Bad idea, he has the right to post lets just stop responding.
>
> Like you did?
>
> > Yes, let's start a club and join each other in solidarity to NOT
respond
> > to Burt Fisher ANYMORE.
>
> Like you did.
>
> > I Tim Hynde pledge to never respond to Burt Fisher in a PUBLIC forum
> > again.
>
> Like you did?
>
> >
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

2475. Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <856976154@infoway.com>
Source record: 96625

Rh> Subject: Amateur Radio Kits?
Rh> Organization: MindSpring Enterprises

Rh> Can anyone tell me who makes amateur, shortwave and/or UHF/VHF radio
Rh> kits and how to get in touch with them?

Rh> I'm just getting started in amateur radio and am thinking about
Rh> building the following:

Rh> CW transmitter or transceiver
Rh> Amateur transceiver
Rh> Shortwave receiver
Rh> Morse code practice kit

Hi Robert,
Start with the morse code practice kit, learn the code and
talk to us on the air. It's easier to get started buying
used equipment at flea markets and fixing it up.

There is a fair amout to build, just getting everything connected
up, even when you buy the pieces at the swap meets.
Such as your power supplies, antennas, etc.

Find an electronics store near you and ask where the closest
stores are that have these.

But in general, get yourself on the air first, before putting yourself
behind with a transceiver kit. There is no equivalent kit of the
quality of the old Heathkits because todays electronics technology
does not lend itself to cost effective kits.

73, Don N6MCE

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

2476. Re: Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Greg Boren <symntlab@netxpress.com>
Message-ID: <3314735D.1DB2@netxpress.com>
Source record: 96626

Try the links:

http://www.hamtronics.com/

http://www.tentec.com/

http://www.ramseyelectronics.com/

2477. Re: Can Heathkits be Found Anywhere?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Jim Devenport <jdevenport@lanl.gov>
Message-ID: <33147426.6531@lanl.gov>
Source record: 96627

Robert Harris wrote:
>
> I assume Heathkit is out of business. I use to see the various Heathkit
> radio kits when I was a kid.
>
> Is anyone else making the old Heathkit amateur/shortwave/radio kits?
>
> Thanks,
> Robert
No, but there are numerous smaller outfits selling electronics and ham
radio kits:
Ramsey Electronics (800-446-2295)
Ten-Tec (800-833-7373)
As well as many other vendors producing QRP transceiver kits, etc.
--
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |
|My views rarely (if ever) reflect those of my employers|
http://nis-www.lanl.gov/~jdport/

2478. Re: Need help constructing a transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Jim Devenport <jdevenport@lanl.gov>
Message-ID: <33147281.1E29@lanl.gov>
Source record: 96628

I highly recommend the Ramsey Electronics FX series VHF/UHF transceiver kits. (1-800-446-2295)
In contrast to your other response, these are fully functional FM voice (as well as packet) radios and, while lacking the polish and bells and whistles of other commercially produced units, work reasonably well and are fun to build and use. Their manuals are practically worth the cost of the radio. Unlike the old Heathkit days where the manual merely instructed you to install a 1K resistor between points A and B and solder it, Ramsey manuals have you build the project stage by stage and test and play with it at each stage, and you will know a LOT about radios and electronics by the time you get finished. As for the limited diode programmability, it is easy to add a row of DIP switches to one of the diode channel positions that will allow you to program ANY available frequency from the front panel (in binary, of course, but hey it works). Not only that but it is EASY to remotely control and program this radio from most ANY PC with an I/O port which allows you to scan, record, frequency hop or anything else you can imagine and program. I've controlled mine via a C64 and relatively simple shift register, used it mobile and lots of action on packet. It is a real kick for me to use the radio and casually mention "I built it". Very few people have built their own radios in this day and age and I commend you on your choice of honors project.
The only complaints normally registered about Ramsey transceivers are their receive audio quality and squelch action but mods exist to improve these. Also their kits often are a bit more difficult to align for full sensitivity and power output than the manuals make out, but I maintain they are a good buy dollar per performance wise. And, you'll NOT be afraid to dig into this radio to repair or modify it.

BryanT13 wrote:
>
> I am a high school student who is attempting to construct a ham radio
> transceiver as an honors project for my Electronics class. I have built
> relitively few electronic kits in the past, but I feel pretty confident
> that I could get most things working with effort. I plan to construct a
> transceiver for the 2 meter band. And I am mostly planning to use voice
> and packet radio. I am looking for either a kit or good schematics. I
> would like to know if it is advisable for me to try to build a transciver
> from schematics, and if so, where are the best places to obtain
> schematics. <snip>
--
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |

```
|My views rarely (if ever) reflect those of my employers|
|http://nis-www.lanl.gov/~jdport/ |
|-------------------------------------------------------|
```

2479. Re: Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <3314818E.5F1C@aade.com>
Source record: 96629

Brian Carling AF4K/G3XLQ wrote:
>
> Er Neil - since you didn't supply a URL(!)
> HOW exactly do we FIND your "favorite links" please???????
>
> Neil Heckt <neil@aade.com> whistled a happy tune like:
>
> |>Robert Harris wrote:
> |>>
> |>> Can anyone tell me who makes amateur, shortwave and/or UHF/VHF radio
> kits
> |>> and how to get in touch with them?
> |>>
> |>> I'm just getting started in amateur radio and am thinking about building
> |>> the following:
> |>>
> |>> CW transmitter or transceiver
> |>> Amateur transceiver
> |>> Shortwave receiver
> |>> Morse code practice kit
> |>>
> |>> Thanks,
> |>> Robert
> |>check "my favorite links" for links to kit manufacturers on the web as
> |>well as a very nice code practice program Codemaster V from milestone
> |>technologies. I got this one and it is really nice and not expensive
> |>$30. It is a DOS program but runs great under Windows 95.
>
> |>Neil
>
> All the best - from bry
> bry@mnsinc.com
> http://www.mnsinc.com/bry/
> http://www.mnsinc.com/litlcaps.html
> You MAY NOT use my email address for unsolicited Email!
> *** REMOVE ".NO_SPAM" to reply ***

http://www.aade.com

2480. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: bill harris <billharr@pop.flash.net>
Message-ID: <5f206k$f8l$1@excalibur.flash.net>
Source record: 96630
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Anyone who has been around amateur radio for any length of time has
probably heard the term 'California Kilowatt'. This term generally
referred to certain West Coast station know for running 'high power',
thus any amplifier capable of running this 'high power' was referred to
as a 'California Kilowatt'. I have often wondered just when this term
orginiated and I may have stumbled upon the answer. Point your browser to
the URL below and check out the item CALIFORNIA KILOWATT and let me know
what you think.

-73-

****
* Bill Harris - K5MIL *
* Bill's Antique Radio Emporium - http://www.flash.net/~billhar *
* To e-mail, remove the second 'r' from my address. This was *
* added to discourage junk e-mail. *
****

2481. Origin of 'California Kilowatt'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: bill harris <billharr@pop.flash.net>
Message-ID: <5f20s8ghu1@excalibur.flash.net>
Source record: 96631
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Anyone who has been around amateur radio for any length of time has
probably heard the term 'California Kilowatt'. This term generally
referred to certain West Coast station know for running 'high power',
thus any amplifier capable of running this 'high power' was referred to
as a 'California Kilowatt'. I have often wondered just when this term
orginiated and I may have stumbled upon the answer. Point your browser to
the URL below and check out the item CALIFORNIA KILOWATT and let me know
what you think.

-73-

```
*****************************************************************
* Bill Harris - K5MIL *
* Bill's Antique Radio Emporium - http://www.flash.net/~billhar *
* To e-mail, remove the second 'r' from my address. This was *
* added to discourage junk e-mail. *
*****************************************************************
```

>

```
--
*****************************************************************
* Bill Harris *
* Bill's Antique Radio Emporium - http://www.flash.net/~billhar *
* To e-mail, remove the second 'r' from my address. This was *
* added to discourage junk e-mail. *
*****************************************************************
```

2482. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <3321a5a0.27065598@news.cyberhighway.net>
Source record: 96632
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

kc5egg@ix.netcom.com(Gerald Schmitt) wrote:

>In <33251448.40798592@news.cyberhighway.net>
>glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) writes:

<discussion of BBS censorship>

>>The BBS for which I'm a co-sysop has been on the air for about 8
>>years, and in all that time we have never locked one legitimate ham
>>out of the BBS for any reason. We've handled dozens of Burt's

>It is your right to pass or not pass as you see fit. In general I agree
>with you Burt looks much worse for his posts. However if a sysop
>chooses not to pass anti ham propaganda that too is his right. After

Correct. I agree with and support this right. However, just because
you have a "right" does not mean you have to exercise it. After all,
you have a "right" to make a fool of yourself, too. Remember, power
corrupts, and once you start censoring what goes through your BBS,
you'll find all sorts of excuses to filter out anything that annoys
you.

>all you guys supply the time, equipment, location and expertise we all
>enjoy thus it is your foot ball and you make the rules. Most reasonable
>people would accept this but then Burt is not reasonable.

And if all the Sysops who find various things unreasonable start
killing them, the network collapses. If you don't want to be part of
a free-flowing information net, then you have no business setting up a
BBS on such a net. Put your little up-tight closed BBS off on some
peripheral channel, and lock out folks to your heart's content.

I repeat: It's legal to lock out folks like Burt (or me - it's
happened more than once) but it's not ethical, nor is it in the spirit
of Amateur Radio. It's hard to overemphasize the importance of this
principle.

Hint: How far do you think the Internet would have grown if it
catered to the same sort of censorship that some hams practice?
--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

2483. Re: Need help constructing a transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: n1ist@netcom.com
Message-ID: <n1istE68677.Kvw@netcom.com>
Source record: 96633

In article <33147281.1E29@lanl.gov> jdevenport@lanl.gov writes:
-I highly recommend the Ramsey Electronics FX series VHF/UHF transceiver
-kits. (1-800-446-2295)
-The only complaints normally registered about Ramsey transceivers are
-their receive audio quality and squelch action but mods exist to improve
-these. Also their kits often are a bit more difficult to align for full
-sensitivity and power output than the manuals make out, but I maintain
-they are a good buy dollar per performance wise. And, you'll NOT be
-afraid to dig into this radio to repair or modify it.

Before putting this (or ANY Ramsey transmitter) on the air, MAKE SURE
that you check it out on a spectrum analyser. Harmonic suppression is
often too poor to meet FCC specs (spurs all over the place), and there
are other design flaws (keying the TX before the PLL locks, That
annoying squelch thump, non-existant shielding, etc.

I'd strongly recommend the Ten Tec kit over the Ramsey; it's a
much better design, and much easier to build it so it works legally.

Ramsey is OK if you want a bunch of parts and a starting point for a
design, but be prepared to do some major redesign work.

/mike

--
\|/ Michael L. Ardai N1IST n1ist@netcom.com \|/
-*- === Boston Amateur Radio Club: http://www.barc.org/barc === -*-
/|\ or send "info barc-list" to listserv@majordomonetcom.com /|\

2484. AVVid is moving

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <3314A0C4.765B@onramp.net>
Source record: 96634

To all our loyal customers,

Congratulations,

Because of your support we are moving to a newer and larger facility
to better serve you. Our new address will be effective Mar 1, 1997.
The 1-800-214-5779 number will not change but the local number will.

New Address:

AVVid
222 N. Story Rd. Suite 128
Irving, Tx. 75061

Again thanks for your support,

Clif and the crew at AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid/

2485. Info on AM Broadcast transmitter needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: TZ <zoch@data-io.com>
Message-ID: <01bc2422$946b9de0$c2128a8b@petom4-pc.data-io.com>
Source record: 96635

I am looking into starting a small low power non-profit AM Broadcast Radio Station.
This station will be used as a platform for religions and educational broadcasts.
Day time programming will be primarily to aid in home schooling children.
Evening programming would be some what more diverse. I have been in contact with
the FCC and am in the process of collecting information and starting to put the application together.

I am now looking into finding or building a transmitter and would like any input on sources of low cost surplus gear or where I might find a schematic for a super stable Xtl controlled AM
Transmitter. This will be a community station so Power out would not be more then a few hundred watts, depending on what output we are approved for under the Licence.

Thanks
Tom KC7PMQ

No trees were destroyed in the sending of this message, however a significant number of electrons were terribly inconvenienced.

2486. Best Frequency Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Dave Riley <daveaa1a@ssih.com>
Message-ID: <3314B7DB.515D@ssih.com>
Source record: 96636

Well after a year of trying different schemes, here is what I find best/easy to accomplish..

Being close to Nantucket Loran 'C' I receive this frequency with a ferrite rod and coil/cap tuned to 100 khz. This signal has enough output to drive scope directly. (No pre-amp)

I then take my best 5 mhz oven, counted down to 100 khz. and use for scope sync.. Well i took a 10 turn precision pot and with voltage divider was ablt to go +/- 4 hz. at 5 mhz. Now i just sync manually and hardly ever need a reset.. System seems to be faithfully within 10-8th to 10 -9th..

I call it the POOR MAN's Cesium Clock.. Thanks to the taxpayers..

Any ideas??

de daveaa1a@ssih.com

2487. Re: Astron supplies: can be made adjustable?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970226225800.RAA18074@ladder02.news.aol.com>
Source record: 96637

In article <5evmt8$5ki$2@thefuture.qualcomm.com>, dselwa@qualcomm.com (Dennis Selwa) writes:

> I don't have a schematic to my astron 20a. Can someone tell me if
> I can change a resistance value to make it adjustable from 6 volts
> to 11 volts (presently there is a mini-pot inside that adjusts from
> 10 volts to 15 volts). I know it can be done but with out a schematic
> makes it a bit awkward. I'll bet there is a resistor in series with
> the pot that if changed will change the range of adjustment. Call me
> lazy but I thought I'd get a quicker answer this way.
> Dennis Selwa
> W6EH
>
>
>

I am sure it can be done, but at those voltages, the current handling capability of the supply will be severely compromised due to the large voltage drop across the pass transistors!

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

2488. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3314C00B.6690@geocities.com>
Source record: 96638
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Glen Quarnstrom wrote:
>
> I repeat: It's legal to lock out folks like Burt (or me - it's
> happened more than once) but it's not ethical, nor is it in the spirit
> of Amateur Radio. It's hard to overemphasize the importance of this
> principle.
>
> Hint: How far do you think the Internet would have grown if it

I wish I was able to express myself with as much dignity as you.

#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other k1oik@ccsnet.com |
#===#

2489. REQ: PSpice vs. S-Parameters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5f2ej2$klm@nnrp1.news.primenet.com>
Source record: 96639

Does anyone out there have any information that would help me generate S-Parameters using PSpice? Any information, particlarly a book or an article in a journal, would be most helpful. I'm trying to characterise some MMIC devices and am not overly familiar with PSpice at the present moment.

--
I gotta go.

Regards,

Chris


```
,----------------------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _______,--------------'
_ |/
oo\ Chris Trask / N7ZWY
(__)\ _ Principal Engineer
\ \ .' `. ATG Design Services
\ \ / \ P.O. Box 25240
\ '" \ Tempe, Arizona 85285-5240
. ( ) \
'-| )__| :. \
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com
```


Graphics by Loek Frederiks

2490. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: gary <tech@thereporter.com>
Message-ID: <5f1rs1$fgo@clark.zippo.com>
Source record: 96640
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:
>On the hour at 4 PM and 5 PM I will appear on 7208 or thereabouts
>Tuesday.
>From 6 PM on the hour until 9 PM I will be on 391o or thereabouts.
>Meet me
>
>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other k1oik@ccsnet.com |
>#===#

BURT, I sorta hate to burst your bubble, but your steady flow of BS has
been steadily rejected on the packet network - what makes you think your
presence one either Internet or the ham bands is likely to be any more
successful? Do you often trip over your own ego and hurt yourself?
--
Gary... KJ6Q...I am the NRA...
(that NRA bit REALLY tics off the gun haters...:-)
==========
INTERNET NEWSGROUPS:
A world wide time wasting garage sale, where
the inmates constantly attempt to unload their mentally
defective baggage and lawn furniture on the gullible and
unwary - Shoppers beware, you'll NEVER find a bargain here!
ALSO, be warned that many of the yapping mongrels infesting
this area are not housebroken, watch where you step!
==========

2491. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: bbowers@townsqr.com
Message-ID: <5f2m9v$l9i@tofu.alt.net>
Source record: 96641
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote:

>It's my understanding that commercially-built amateur transceivers must
>satisfy type-acceptance *only* because the rcvr's oscillator is a Part 15
>device.

That is not type acceptance, but rather, type certification. Two
completely and totally different animals.

2492. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: The Bakers <mbaker@monmouth.com>
Message-ID: <3314E78C.24A2@monmouth.com>
Source record: 96642
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

gary wrote:
>
> BURT, I sorta hate to burst your bubble, but your steady flow of BS has
> been steadily rejected on the packet network - what makes you think your
> presence one either Internet or the ham bands is likely to be any more
> successful? Do you often trip over your own ego and hurt yourself?
> --
> Gary... KJ6Q...I am the NRA...
> (that NRA bit REALLY tics off the gun haters...:-)
> ==========
> INTERNET NEWSGROUPS:
> A world wide time wasting garage sale, where
> the inmates constantly attempt to unload their mentally
> defective baggage and lawn furniture on the gullible and
> unwary - Shoppers beware, you'll NEVER find a bargain here!
> ALSO, be warned that many of the yapping mongrels infesting
> this area are not housebroken, watch where you step!
> ==========

So Gary, what brings *you* here ??

2493. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: "Raj Singh, VE6RAJ" <singhraj@cadvision.com>
Message-ID: <3314E38F.598C@cadvision.com>
Source record: 96643
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

> Burt Fisher wrote:
>
> Glen Quarnstrom wrote:
> >
> > I repeat: It's legal to lock out folks like Burt (or me - it's
> > happened more than once) but it's not ethical, nor is it in the spirit
> > of Amateur Radio. It's hard to overemphasize the importance of this
> > principle.
> >
> > Hint: How far do you think the Internet would have grown if it
>
> I wish I was able to express myself with as much dignity as you.
>

I use Netscape and it's newsreader. Is there anyway that I can filter
out certain subjects/individuals from having them show up in my reader.
If not can you reccomend a news reader that has this facility.

I am not denying individual's right to blow hot air. As far as I am
concerned, their argument is lost at the outset by posting it to an
inappropriate news group anyway. This last posting reminds me of "Oh you
are so good at milking cows. I wish I could do it as well as you do."
The only problem is someone doesn't know a cow from an ass.

Thank you for your help with ther news reader.

Raj VE6RAJ

2494. Re: CELL PHONE----> ham band....anybody have any luck with these?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-26 00:00:00 UTC
From: nojunk@here.com
Message-ID: <33138627.2020086@nntp.ix.netcom.com>
Source record: 96693

On 25 Feb 1997 13:22:47 GMT, tyler@cyberia.com (tyler) wrote:

>
>>Yes , I am going about it by using a cordless phone from Sony the
>>SPP-ER101 the radio transmit and reciever full duplex. The transmit
>>is only -7 db. This can be put into a cell phones brick to up the
>>transmit power. The Service manual only cost $12.00 and $4.00
>>shipping. The phone you can find for about $ 120 and you get two full
>>duplex transceiver that are in the ham band. Transmit between
>>902-927.600 Mhz. Very easy uP interface 3 wire. I am working on
>>making some link for a repeater.
>
>
>Wow, that's great!! By cordless phone, you mean a hand held phone as opposed
>to a bag phone? Where in the world did you get a manual for it? What about
>changing the frequency? It's almost an 80 Mhz shift isn't it? Is that a very
>popular band? I've never even heard of anybody working the 900 to 928 band.
>(probably because there is no equipment for it)
>
>Thanks for the reply
>73 de N3SPD
>Tyler
>

This is a non-cell phone. This is a phone that you hook up at home
to a land line. It can transmit unmoded (if that is a word?) about
3000'. Just with real antennas beams about 2 mile point to point.
You can call 1-800-488-SONY just ask for service manual SPP-ER101 it
will take two week to get it. This phone cost 119 as Sears. The
shift is 27 Mhz on the cordless phone. It has some filter at the
fround end that can be replaced. You can still used the brick out of
you cell phone to amp the signed with not mod to the brick.

Just thing for 119+12+4 you have a two complete receiver/exciter.
This is a cheap as it comes.

73 de KB8RLN

****
Homepage: http://www.netcom.com/~kb8rln
Phone: (614)-888-3111 I believe that: 2 + 2 X 2 = 6
Author of XMIT_ID a shareware radio fingerprinting software --

2495. Re: Convert DC to superhet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5f2kc1$5qf$2@nadine.teleport.com>
Source record: 96501

In article <3314822C.1E75@idecc.com>,
tim_hynde <tim_hynde@idecc.com> wrote:
>I want to take my 80m DC reciever and change it to a superhet.
>Do the following steps make sense?
>
>1. Use a mixer that gives me a 455KHz output separate from the existing
>rx.
>2. Replace the tuned front end of the dc rx to a 455KHz filter.
>3. Replace the VFO (currently running at 3.5 to 3.6 MHz with one that
> runs at about 452 to 458 KHz this would now be the BFO.
>. . .

This would work, but. . .

Since you already have the tunable VFO, consider changing the VFO frequency by 455 kHz. Then add a 455 kHz IF and BFO after the existing mixer. (That is, use your existing VFO/mixer as the VFO/mixer rather than as the BFO/detector.)

Regardless of which approach you take, you'll need to add a filter to the receiver's input for image rejection, if it doesn't already have a reasonable front-end filter.

Roy Lewallen, W7EL

2496. Re: Can Heathkits be Found Anywhere?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5f2m7e$kk4@news1.mnsinc.com>
Source record: 96502

rharris@cris.com (Robert Harris) whistled a happy tune like:

|>I assume Heathkit is out of business. I use to see the various Heathkit
|>radio kits when I was a kid.

|>Is anyone else making the old Heathkit amateur/shortwave/radio kits?

|>Thanks,
|>Robert

No Robert, BUT there are a number of companies that make kits, and a few of
them even make shortwave receiver kits, ham radio kits etc.

Take a look at my file.
Go to -

http://www.mnsinc.com/bry/hamfiles.htm

and click on KITS for the list.
All the best - from bry
bry@mnsinc.com
http://www.mnsinc.com/bry/
http://www.mnsinc.com/litlcaps.html
You MAY NOT use my email address for unsolicited Email!
*** REMOVE ".NO_SPAM" to reply ***

2497. Skywarn site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: tadunlap@kellnet.com
Message-ID: <33150b65.2837370@news.supernews.com>
Source record: 96503

This is a third posting. I recently put up a North Central
Ohio Skywarn page and would like some input. Please visit
the site and let me know your opinions. Feel free to e-mail
me with your comments or criticisms. Please help me make the
page informative and interesting. Thanks.

http://www.qsl.net/kc8eds

Todd...
KC8EDS
tadunlap@kellnet.com

2498. Re: Can Heathkits be Found Anywhere?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: earlve3ab@igs.net
Message-ID: <5f2l79$1if$2@nntp.igs.net>
Source record: 96504

In article
<rharris-2502971658200001@user-37kb3tc.dialup.mindspring.com>,
rharris@cris.com says...
>
>I assume Heathkit is out of business. I use to see the various
Heathkit
>radio kits when I was a kid.
>
>Is anyone else making the old Heathkit amateur/shortwave/radio kits?
>
>Thanks,
>Robert
I recently saw a chap with a whole raft of Heathkit rigs and
accessories at his operating table. Im not sure what publication but
email me and ill see if i can find it. perhaps in the canadian amateur
mag. Sometimes you see someone advertising an unbuilt heathkit but not
very often..im sure there are collectors, on air on the web nets etc.

2499. Re: Best Frequency Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc2458$4e6fc100$ac102399@desktop>
Source record: 96505

Dave Riley <daveaa1a@ssih.com> wrote in article <3314B7DB.515D@ssih.com>...
> Well after a year of trying different schemes, here is what I find
> best/easy to accomplish..
>
> Being close to Nantucket Loran 'C' I receive this frequency with a
> ferrite rod and coil/cap tuned to 100 khz. This signal has enough
> output to drive scope directly. (No pre-amp)
>
> I then take my best 5 mhz oven, counted down to 100 khz. and use for
> scope sync.. Well i took a 10 turn precision pot and with voltage
> divider was ablt to go +/- 4 hz. at 5 mhz. Now i just sync manually
> and hardly ever need a reset.. System seems to be faithfully within
> 10-8th to 10 -9th..
>
> I call it the POOR MAN's Cesium Clock.. Thanks to the taxpayers..
>
> Any ideas??
>
> de daveaa1a@ssih.com
>

I am not close enough to do that. So, what I did was to tune my
synthesized
receiver to WWV, set it to ISB mode, and connected the two audio outputs to
my PC which is running a 11 KHz 65536 point FFT in stereo. Then I tuned
plus
and minus 50 Hz. Tune low and there should be 50 Hz beat on one channel,
tune high the 50 Hz goes to the other channel. Resoultion is 0.168 Hz on
the
FFT. Then I carefully adjust the ovenized osc (I let it fully warm up, of
course)
to get the same 50 Hz on both sides. Now the master osc, which has an
output
on the rear panel, is darn close to 5.0000000 Mhz.

Thoughts on this?

2500. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc2457$40d6b9a0$ac102399@desktop>
Source record: 96506
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

niels <niels@blast.net> wrote in article <E67y49.FAy@nonexistent.com>...
> People,
> You are missing the point! The object of newsgroups is the free exchange
of
> ideas and information, just like ham radio is supposed to be enjoyed.

In another message about trunked systems you question the motives of
someone
who seeks information.

Aren't you being just a wee bit inconsistent?

2501. Re: Info on AM Broadcast transmitter needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc2458$f15f2e00$ac102399@desktop>
Source record: 96507

TZ <zoch@data-io.com> wrote in article
<01bc2422$946b9de0$c2128a8b@petom4-pc.data-io.com>...
> I am looking into starting a small low power non-profit AM Broadcast
Radio
> Station.
> I am now looking into finding or building a transmitter and would like
any
> input on sources of low cost surplus gear or where I might find a
schematic
> for a super stable Xtl controlled AM
> Transmitter.

I believe you will need a type certified transmitter. You cannot
reasonably build it,
as you really want to spend your time broadcasting rather than going
through the
certification process.

Put a WTB ad in the for sale groups, these units are floating around.

2502. Re: Any way to rejuvinate Nickel metal Halide batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Burke Baumann <baumann@doitnow.com>
Message-ID: <01bc2457$6aa84aa0$7a9d62cf@default>
Source record: 96508

Grif I think you are correct it is not the battery but the battery charge monitoring software. I have seen similar complaints in the laptop news group about Tohsibas. I suggest he should read his user manual for the proper battery maintance. This would be alot cheaper than a new battery.

73 Burke

'Grif' w. keith griffith <kgriffit@wolfenet.com> wrote in article <3310BA0C.594@wolfenet.com>...
> Bigdad wrote:
> > >I understood that NMH cells did not suffer from the dreaded memory
> > >effect, so I wonder why the loss of performance?
> > >*******************************
> > >* steve100@dircon.co.uk *
> > >* *
> > >* M1BJR Plymouth *
> > >*******************************
> >
> > Im really not sure what happened...the battery just refuses to
> > hold a charge for very long at all. Its in a IBM Thinkpad 500 and
> > at full charge will last only 15 minutes or so. Looks like im
> > gonna have to break down and get a new one
>
> Are you really sure the battery is going dead in 15 min, or is it the
> battery charge monitoring software telling you it's dead? My (Crummy)
> KeyNote pentium laptop will loose track of how much time has been on
> discharge sometimes (not voltage) and tell you it's gotta shut down, the
> only fix is turn off all the powersaving features and just force it to
> really run the battery down which in my case, is a known software/bios
> issue. running the sucker down is the only way to really reset the
> counter.
>
> Well,,, that's not true, just to keep the flames at bay, it calculates
> the amout of charge time, and deducts run time from it. If you swap
> batteries, or change the 2nd battery for the floppy, the battery may be
> at say 75% charge, it only is on charge for 25%, so the charge monitor
> starts fussing at 75% cause it expects it to be flat. Doesn't seem to
> be much of an improvement over the old nicad problems.
>
> I understand NMH cells are much more sensitive to
> overcharge/gassing/seperator damage than nicads.
> Anyway,,, good luck
>
> 'Grif' N7IVS
>

2503. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Mark Bryant <bryant@sohobusiness.com>
Message-ID: <01bc245c$af28a940$a3d879a8@soho>
Source record: 96509
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

> I am not denying individual's right to blow hot air. As far as I am
> concerned, their argument is lost at the outset by posting it to an
> inappropriate news group anyway.

This last posting reminds me of "Oh you
> are so good at milking cows. I wish I could do it as well as you do."
> The only problem is someone doesn't know a cow from an ass.
>
> Thank you for your help with ther news reader.
>
> Raj VE6RAJ
>

The first rule of milking a cow is to make sure it is not a bull.

Mark

2504. B-LINE +SB-1000 FOR SELL OR ??????????????????????????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: jkanejr182@aol.com
Message-ID: <19970227040201.XAA11435@ladder02.news.aol.com>
Source record: 96510

DRAKE T-4XB TRANS R-4B REC 2 MS-4 SPK 1 AC-4 PS
GOLD D104 MINT COND NEW FINALS FULL OUTPUT
400.00$ OR ?
HEATH SB-1000 1KW AMP RUNS 1 3-500Z TUBE BRAND NEW
10 TO 160 METERS FULL OUTPUT WIRED FOR 220 BUILT IN
MID 1991 600.00 $ OR
850.00 + SHIPPING WILL

BUY BOTH
JKanejr182@aol.com

2505. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Les Alverson <docfester@mindspring.com>
Message-ID: <01bc2468$674057c0$6bfb0b26@junior>
Source record: 96511
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

BULLSHIT!!
--
"I will not be pushed, filled, stamped, indexed, briefed, debriefed, or numbered" - The Prisoner

Burt Fisher <burtfisher@geocities.com> wrote in article <330A6B3E.6279@geocities.com>...
> AL7OQ wrote:
>
> > Ask FEMA (Federal Emergency Management Agency), who has opposed the
> > Little LEOS proposal on the ground that hams provide invaluable
> > emergency communications services on 2 meters.
> >
> > Burt: be honest! Why are you supporting this industry band grab?
>
> Because I am public service minded person.
> --
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

2506. Re: How to choose FET for VLF loop antenna preamplifier?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Alan.Peake@dsto.defence.gov.au
Message-ID: <Alan.Peake.31.000F827A@dsto.defence.gov.au>
Source record: 96512
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article <5efd42$bh4@sun20.ccd.bnl.gov> scott@gorzarg5.phy.bnl.gov (david scott coburn) writes:
>From: scott@gorzarg5.phy.bnl.gov (david scott coburn)
>Subject: How to choose FET for VLF loop antenna preamplifier?
>Date: 19 Feb 1997 17:26:26 GMT

>Hello,

>I am looking for some references to books or articles about how to
>choose the proper FET for use in a VLF loop antenna preamplifier.

>The RF design books that I have access to are either too theoretical
>and don't go into specs at all, or they are too practical and just
>say "use an MPF102 here".

One of the best articles I've read on this subject is :

"The Design of Low-Noise Amplifiers"
by Yishay Netzer, member, IEEE

in "Proceedings of the IEEE" Vol. 69, No. 6, June 1981

It's theoretical to be sure but is thorough and quite understandable.
Specs receive proper attention and specific devices are discussed.
Should be just what you need.

Alan

2507. Re: Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Les Alverson <docfester@mindspring.com>
Message-ID: <01bc2469$61d44ac0$6bfb0b26@junior>
Source record: 96513
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Pied Piper Like oh lets say the ARRL, Mao's China, Stalin's USSR, Nazi Germany.... Do I need to clarify any further?
PS Look at the Constitution and the Bill of Right and the The Amendments.
I do.
Thank God for the Freedom of Speech.
Of course, Congress is trying to stop that to for "Politcal Speeches"
--
"I will not be pushed, filled, stamped, indexed, briefed, debriefed, or numbered" - The Prisoner

Burt Fisher <burtfisher@geocities.com> wrote in article <3308DF7C.3F5E@geocities.com>...
> Barney wrote:
> >
> > WHY do you ONLY want to give away 2 meters, Burtie?
>
> Actually you are correct. Hams need nothing except to SERVE THEMSELVES.
>
> > Why not get all the hams to write the FCC and recommend that they give
> > away ALL of our spectrum?
>
> Great!
>
> > I am sure the readers of this newsgroup are already dashing off letters
> > by the DOZEN to the FCC in response to your great message, since we all
> > follow you like the pied piper!
>
> Actually you all follow each other like the Pied Piper. Listen to a
> contest.
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other k1oik@ccsnet.com |
> #===#
>

2508. FS: Kenwood YK-455C-1 500Hz Mech.Filter for Ts140/680

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <33152401.688297@news.interbusiness.it>
Source record: 96514
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 80 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

2509. Re: Book wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970227005035.22112A-100000@Stratus.CAM.ORG>
Source record: 96515

There were three or four editions of this book. The earlier ones were probably better in the theory department, since at that point SSB was so new that people wanted to know about it and the information needed to be included because it wasn't available elsewhere. The later editions were probably better in the construction department, since the equipment being described was fancier and more like what we are used to today.

I think the last edition had a copyright of 1970 or so. I don't believe that they published a later edition. So the equipment described is over a quarter century old at this point. Rather like WWII vintage equipment being looked at in 1970 in terms of state of the art.

If you are looking for SSB construction articles, you might do better to look in more recent ARRL Handbooks. The ARRL's Solid State for the Radio Amateur, though twenty years old, also included some SSB gear.

The ARRL SSB books never did include much in the way of receiving equipment. Of course, you could always find plenty of receiver construction articles in the Handbook and the other ARRL books.

Collins put out a book on SSB. Howard Sam's also put out a book on SSB. I also seem to recall a more recent book that was quite expensive on SSB, perhaps published by McGraw Hill.

CQ Magazine also put out a book on SSB in the late fifties. It is a mix of construction articles (and I had the impression they were less likely to be reprints from CQ) and details (including schematics) of commercial equipment from the era. Since it was put out early in the SSB cycle (in terms of more common useage, at least), it too does a good job on theory. This one also stands out since it's the only SSB book meant for the amateur market that I know of that included a section (though admittedly brief) on The Third Method of ssb generation.

One good thing about the early editions of the ARRL and CQ SSB books is coverage of using phasing to generate and receive SSB signals. The CQ book even includes a section on DSB including an adapter for adding sychronous detection to an already existing receiver.

Virtually all the contents of the ARRL books is made up of from articles that were originally in QST. If there was some specific article in one of the editions of the SSB book, you can get back issues (or photocopies if the specific back issue is no longer available) from the ARRL for a reasonable price. Though you would have to figure out when the particular article was published in QST first.

The point to all this is that if you are just looking for a book with details on SSB, there are other possibilities. If you need a specific article, there are ways of getting it without tracking down the book.

MIchael VE2BVW

On 25 Feb 1997, Nestor Belzarena wrote:

> I want the book: Single Sideband for the Radio Amateur - ARRL
> Nestor
> email: pete@adinet.com.uy
>
>
>

2510. Re: Convert DC to superhet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970227010817.22112B-100000@Stratus.CAM.ORG>
Source record: 96516

Wouldn't it be easier to use the mixer that's already there as your first mixer? Then, you don't have to move the input tuned circuit, and just shift the VFO frequency a little bit. Disconnect the audio amplifier from the output of the mixer. Put a tuned circuit there, or if you are using some sort of ceramic filter (or mechanical filter), you might be able to get by with just a resistor on the output of the mixer. Add your IF amp and detector (with BFO) and you've got it made. Of course, all of this depends on what you were using as the mixer int he direct conversion receiver. If you are using something that is commonly used as a first mixer, then there's no problem. But some of the simpler product detectors might work better by keeping them as product detectors.

Whether you change the product detector into a first mixer, or add a product detector afterwards just might depend on circuit layout. Look at the possibilities, and consider which requires the least effort.

Years ago, there was a series in QST that was about using semiconductors. It started out with a direct conversion receiver, and then later turned it into a superhet. Of course, since they planned it that way, they described the construcion in module format, so it was easy to make the changes later. Modifying an already existing receiver might be messier. In fact, considering the cost of semiconductors (thought those variable caps can be costly), it might be simpler to keep your DC receiver as it is, and just build a superhet from the ground up.

In more recent years there was a receiver in the ARRL Handbook called something like "The Progressive Receiver". I thought progressive in this case meant state of the art, but it turne dout to be built in steps. I think it originally was a QST article, and it did start off as a direct conversion receiver, and then turned into a superhet.

Another thing to consider is that with a 455KHz first IF, images may be a problem, depending on how good the front end filtering is. Images, of course, the same thing as the lack of single-signal reception in a DC receiver, except instead of the image being an audio frequency away, in a superhet it's twice the IF away.

One thing that I've considered doing to get around the image problem but still make receivers relatively simple (and I admit that this is only for simple receivers where top-notch specs are not expected), is to use a ceramic filter in the megahertz range, and make the receiver double conversion. It's done all the time in narrow band FM receivers, where the first IF is commonly 10.7MHz. You don't use the first ceramic filter for signal-selectivity, but only to get rid of the image created by the low second IF. The same scheme was used years ago in amateur receivers, though tuned circuits were used in the first IF. The ceramic filter

just makes it easier.

You can use a 10.7MHz first IF. Find an old CB set that is double conversion, and in many cases it does have a 10.7MHz ceramic filter, along with the crystal needed to convert to the 455KHz IF. In fzct, it should also have the 455KHz ceramic filter. You can also find similar filters in those cheap 49MHz walkie talkies (though make sure it is a superhet). YOu probaby would do better to use an AM specific second IF ceramic filter though.

I've also seen tv sets with 4.5MHz ceramic filters for the sound circuitry. You might get by with using that, and a 4MHz conversion oscillator (they are commony available) to get down to 455KHz. It depends ont he selectivity and shape of the 4.5MHz ceramic filter. If you end up too far down the slope, then you'll need a crystal on a slightly higher frequency, and if you have to custom order it, the scheme is hardly worthwhile.

JUst to be complete, you can have a superhet that is not single-signal. I seem to recall that the early superhets were not single-signal (well, I seem to recall reading that, I wasn't around back then). When direct conversion receivers were first in vogue, and I suppose to a certain extent now, it was common to make a DC receiver multi-band by adding crystal controlled receivers ahead of it. It didn't make the receiver single-signal, but it was easier than switching tuned circuits, and it kept the VFO stable by keeping it in a single relatively low frequency.

Michael VE2BVW

On Wed, 26 Feb 1997, tim_hynde wrote:

> I want to take my 80m DC reciever and change it to a superhet.
> Do the following steps make sense?
>
> 1. Use a mixer that gives me a 455KHz output separate from the existing
> rx.
> 2. Replace the tuned front end of the dc rx to a 455KHz filter.
> 3. Replace the VFO (currently running at 3.5 to 3.6 MHz with one that
> runs at about 452 to 458 KHz this would now be the BFO.
>
> I am doing this because I want single signal reception and I though it
> would get me a litte gain too. I am a novice at this, am I missing
> anything in my conversion?
>
> Can I use one of those 455KHz cans found in AM radios as the occ.
> circuit? I was going to outboard the BFO and not use the occ. on board
> the NE602 mixer. Someone said this was better. I picked 455KHz because I
> have a plethora of filters for this freq.
>
> 73,
> Tim, ka8ddz
> Rochester, MI

>
>

2511. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: magne@radar.no
Message-ID: <5f3gge$1dc_006@magne.radar.no>
Source record: 96517
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

In article <E67y49.FAy@nonexistent.com>, "niels" <niels@blast.net> wrote:
>That is what makes the United States of America GREAT!

Yeah - contrary to the rest of the world?

Blah!

--Magne

2512. Torriods and working out???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Steve@chubs.DEmon.co.UK
Message-ID: <h4pzHZAQcNFzEwKS@chubs.demon.co.uk>
Source record: 96518

I wonder if anyone can help me with this little problem?

Is their a computer program that let's you input some simple figures like wire size, type of torriod (eg T50-6) size of former etc, and works out how many turns you need for a given inductance?

I mainly like to work with T-50 torriods but I have no idea how to work out how many turns to use for a given frequency or to use as an RF choke.

Also does anyone know the maximum power one can get away with using a T-50 as an output matching transformer in a VMOS FET PA stage. I read somewhere 25 watts but I'm not sure. If one wanted to go above 25 watts, what would be best torriod to use?

Regards to all.
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
Visit Radio World -
HTTP://www.chubs.demon.co.uk

2513. FS: Resistors & Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <3315BEB1.1558@ix.netcom.com>
Source record: 96519
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Purchased the assets of a small company and ended up with several cabinets of 1/4 watt resistors, metal film and carbon film. In packages of 100. Every value you can imagine. Would like to sell a portion of these or even a few at a time. Cost would be 1/2 what the catalogs ask.

Also have a cabinet of tantalum capacitors:

10V: 33, 47 mfd
16V: 2.2, 3.3, 4.7, 6.8, 10, 15, 22, 33, 47 mfd
20V: 1.5, 4.7, 6.8, 10, 22, 33 mfd
25V: 2.2, 4.7, 10 mfd
35v:, .1, .68, 1, 1.5, 2.2, 3.3, 4,7, 6.8, 10, 15 mfd

have qty up to 10 of these. Brand new. Price also 1/2 catalog.

e-mail if interested in any/all.

73 de Ron, WA1UWZ

2514. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2702970634320001@news.vcnet.com>
Source record: 96520

In article <19970226165801.LAA21083@ladder02.news.aol.com>, w6tg@aol.com (W6TG) wrote:

> From: subich@ibm.net (Joe Subich)
> Date: 26 Feb 1997 02:16:44 GMT
> Message-ID: <5f06ec$262q$1@news-s01.ny.us.ibm.net>
>
> In message <3311d285.9488578@netnews.worldnet.att.net> -
> w8jitom@postoffice.worldnet.att.net (Tom Rauch) writes:
> :>
> :>
> :>If the 8877 was as unstable as you clkaim at VHF, it would never work
> :>in an unneutralized VHF strip line amplifier. Why is a strip line amp
> :>with a strip line Q in the double or triple digits stable, and a HF
> :>amplifier with less VHF not???

• Why?.....Because the anode-resonant circuit in a VHF amplifier IS the (loaded) tank circuit. In a HF- amplifier the anode is connected to TWO resonant circuits, one of which is obviously the HF tank. However, a virtually-unloaded VHF resonance is principally formed by the anode-to-grid C (typically 5 to 10 pF) plus the anode-to-enclosure C (typically 1 to 2 pF) and the incidental inductance between the anode and the tuning capacitor, C1. There is a large difference between an oscillaion in a resonant circuit that IS loaded and an oscillation in a resonant circuit that is NOT loaded. The Rs/Ls VHF parasitic oscillation suppressor is essentially an attempt to load the unloaded VHF resoant circuit in HF amplifiers, thereby reducing VHF voltage amplification.

> FYI, the first broadcast transmitter that I worked on ... twenty
> years ago used the 8877. ...snip... It would make about 4.5 KW output.
>
...snip...
..............chortle

> Having been in the broadcast business for more years than I care to think
> about, I can not hold back any longer.
>
> Joe, what you stated above cannot be. That exceeds the Eimac specs of the
> 8877 almost double.
>
> I am amazed how someone would make such a statement, and that same person
> be so critical of others.
>
> Terry Gaiser - W6TG

&#65533; For those with impaired reality, being somewhat less than truthful is pretty much SOP when supporting pals with the same impairment. Joe Subich has warned us that telling the truth can be libelous. Apparently, Joe practices what he preaches.

--
--Rich-- ag6k, 805-386-3734

2515. Re: Info on AM Broadcast transmitter needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <331552DB.5DC8@atl.org>
Source record: 96521

Peter Gottlieb wrote:
>
>
> I believe you will need a type certified transmitter.

FCC lets you roll your own for SW broadcast.
Why would AM be any different.

Engineer checks it, if it meets specs, you're
ready to go (with SW anyway).

-bob

2516. Re: balanced tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: rohrwerk@pcOnline.com
Message-ID: <rohrwerk-2702970857160001@tsc-p21.pconline.com>
Source record: 96522

In article <3314E9A2.3197@bright.net>, larryd@bright.net wrote:

> I am building the balanced tuner per the Feb 1990 QST article. I have
> the parts, and I find that while the variable capacitor has a reasonably
> long shaft, the roller inductors have only about a 1/2 inch long piece
> of shaft that sticks out.
>
> This is not too handy, whether you wanted to put a knob on it, or as I
> want to do, put a pulley on it.
>
> Does anyone know whether there is such a thing as a coupler to extend
> the length of 1/4-inch shafts? Sources?
>
> email replies, please.
>
> -Larry KC8FDY soon to be N8KU when the FCC gets their act together

Boy, I've seen them in lots of rigs and other mechanical devices, but couldn't tell you where to get them. You could easily make them out of plastic rod -- drill a 1/4 inch hole down the middle, then drill and tap some screw holes in the side.

I'll go a bit further, though, and tell you my experiences with this scheme. I used a kludged version of that tuner for some time (that is, no real good pulley connection between the inductors, just manually adjusted both of them). It looks neat and symmetrical, but you often can get good results without the second inductor -- that is, just hook your favorite unbalanced tuner configuration (in this case, a simple L network) across the output of the balun. If the balun forces balanced currents, it will force balanced currents no matter what is hooked up to it -- or nearly so, depending on stray coupling of the components to ground.

I have applied this approach to the SPC tuner circuit -- a more flexible, resonant tuner with a somewhat wider range of matching than the standard L net -- in a clipleaded-together high power version, and a compact QRP version.

The QRP version uses a ferrite balun on the input -- 3 turn primary and secondary on Amidon BN-43-3302 core. Haven't measured the balance scientifically, but I do know that when I bypass the balun, I get a higher noise level on my horizontal loop. I take that as evidence that this approach at least approaches the performance of a true balanced setup. Someday I'll get around to measurement and settle the question for me, anyway :-)

Good luck,

John Seboldt K0JD

2517. Re: Best Frequency Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: William W Janssen <billj@9calweb.com>
Message-ID: <5f4abmoak1@news.calweb.com>
Source record: 96523

My frequency standard uses a stable crystal oscillator and a
devider chain to get a pulse rate that is the same as my nearby
LORAN transmitter. I use my pulse to sample one of the LORAN pulses.
The sampled voltage is fed to an amplifer/filter and is used
to control my oscillator.

I think I am getting accuracy of about 10^-10. I have had
trouble with phase delay changes in my receive equipment of about
20 nanoseconds. It seems to be better now that I removed a tuned
circuit from my antenna coupler.

LORAN has a faily strong signal in most parts of the USA. and
in many other parts of the world as well.

Bill K7NOM

2518. WTB: Used or new 7591 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: fisherdoc@aol.com
Message-ID: <19970227162901.LAA00502@ladder02.news.aol.com>
Source record: 96524

i am looking for used or new 7591 tubes. Please let me know what you have!

Thanks!

AL

Fisherdoc@aol.com

2519. Re: Any way to rejuvinate Nickel metal Halide batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5f4fbi$rh6$2@nadine.teleport.com>
Source record: 96525

Are you referring to nickel metal hydride batteries, or is there another chemistry around involving nickel and halides?

Roy Lewallen, W7EL

2520. Re: HEY! How about we knock off all the insults and arguments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: mlyon@mvhs.fuhsd.org
Message-ID: <mlyon-2702970005560001@205-173-43-244.mvhs.fuhsd.org>
Source record: 96526
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

In article <3313839f.114015644@news.santafe.edu>, jpotter@jpaw.com wrote:

> k5dh@dlep1.itg.ti.com (THE Mustang Maniac) wrote:
>
> >Okay, folks, enough is enough. PLEASE, let's end all of this petty
> >arguing, griping, insulting, and personal attacks on each other.
>
> Don't ya know, that's what ham radio is all about. At least it was the
> last time I listened on 75m or 20 m . :-) :-)
>
> 73 de K9GXC, Jim
>
>
> James M. Potter, President TEL: (505) 662-5804
> JP Accelerator Works, Inc. FAX: (505) 662-5210
> 2245 47th Street EMAIL: jpotter@jpaw.com
> Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

Ithink your radio needs to be retuned, it's really off, recieving 11
meters thinking it was 75. :) :)
-Mike

--

////////////////////////////////
| Mike Lyon |
| Amateur Radio Callsign |
| KE6MRE |
| E-Mail Addresses |
| mlyon@mvhs.fuhsd.org |
| ke6mre@wvara.org |
| education@wvara.org |
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\

2521. Need filament xfmr Drake L4B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: jmul@microlink.net
Message-ID: <857067298.29095@dejanews.com>
Source record: 96527
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I am in need of a filament transformer for the Drake L4B HF amplifier that uses a pair of 3-500Z tubes. Also looking for a junker L4B RF deck. john

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2522. need meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: jmul@microlink.net
Message-ID: <857067572.29473@dejanews.com>
Source record: 96528
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I need a meter for a Drake MN7 tuner, actually I need the plastic lense.
The WH7 and MN2700 tuner uses the same plastic lense. Anyone have a meter
that they replaced with a new one? John N0EE

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2523. Replacment mic element?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: adkinsg@piranha.ianet.net
Message-ID: <5f4kl1$859@piranha.ianet.net>
Source record: 96529
Cross-posted to: rec.radio.cb,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Hi.

I have a TRC-484, and I've decided the mic is completly
crummy. I thought about replacing it with an astatic
or something, but I didn't really want to fork out that
much money, since the radio was only $50 to start.
Plus, the mic has channel up/down buttons on it, and
the CB is mounted far enough away for this to be very
helpful.

Are there any replacement mics that up/down channel
selectors? I cracked open the mic, and it's a simple
three wire circut. (i.e. center to left is down one
channel, center to right is up one channel)

I thought about just adding some small momentary switches
to a regular mic, but that becomes clumsy and looks bad.

Alternatively, I could just replace the mic element, I suppose.
I looked in an "All Electronics" catalog, and they only had
electret mics, and I was concerned about fitting a battery
and isolation circuits in the small mic case. (RS only
sells electret mic elements, too) I guess i could use
one of those strange T175 7v little batteries, it might
fit.

If i change the mic element to an electret, will I overdrive
the input circuits on the cb? This would probably be
the cheapest solution...

Thanks for any help!

Garry

2524. Receiver- kit for Weather Sat's (2)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: abom@iaehv.nl
Message-ID: <3315d9a3.475925@news.iaehv.nl>
Source record: 96530

Receiver- kit for Weather Sat's (2)

Dear weathersatellite- fan,

A few weeks ago I announced a weathersatellite receiver- kit.
The necessary zip- file for building the receiver can be found on the
url of the technical university of Eindhoven in the Netherlands. The
URL- address is:
ftp://ftp.esrac.ele.tue.nl/pub/ham/wefaxreceiver-kit.
The VHF2_10.zip -file of about 125kb contains the next files:

VHF2.plt The complete schematic of the receiver in HPGL- format
VHF2.par The complete partslist of the receiver in ASCI- format
VHF2t.tif The topside of the PCB in TIF- format
VHF2b.tif The bottomside of the PCB in TIF-format
VHF2c.tif The componentlayer of the PCB in TIF- format
README.txt Some background information.

In about 4- 6 weeks a nice glass epoxy print with silkscreen lettering
will be available.
If you want to make the PCB yourself, you can start immediately with
copying the top and bottom layers to transparent sheets.
On this moment the assembly- instructionsheet is being prepared and
will be send as an attached .txt- file to those who are going to
build the receiver.
For changes that are essential for the design, I will direct- mail the
WX- receiver builders.

Important design changes will result in a new VHF2_X0.zip file.
Small design changes will result in a new VHF2_1X. zip file.

Remarks before building your own Wefax- receiver:

Keep in mind that building a receiver is not just a matter of placing
the right components in the right holes. The receiver should be
adjusted for optimum results.

After that I designed last year the Wefax- receiver it's now for me a
challenge to help others in building the receiver via the internet-
possibility and to help them in getting good results with "normal"
components and limited measurement- means. Further I hope to receive
sufficient feedback for possible new receiverextensions , like PC-
operation, synthesizer and scan-possibility, this could lead to a
new and more advanced design.

For more details, questions or problems during assembling your
receiver, you can contact me via E-mail : abom@iaehv.nl or

pa0axb@amsat.org.

Succes in building your own Wefax- receiver!!!!

,

Alex Bom
Veldhoven/ the Netherlands
tel: +31 40 2539851
email: abom@iaehv.nl
email: pa0axb@amsat.org

2525. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5f4o41$e4f@hplms2.hpl.hp.com>
Source record: 96531
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <01bc238f$d2659760$7d9d62cf@default>,
Burke Baumann <baumann@doitnow.com> wrote in part:
>
>
>Some manufacturers are promoting the sale of conversion kits, or have
>designed their transceivers such that they can easily be modified
>by the users, to extend the operating frequency range into the
>frequency bands listed above. In addition, so called "export"
>radios which are deliberately designed to facilitate this
>capability are also being imported and marketed.
>
> Manufacturers, importers, vendors and users of these
>transceivers are reminded that transmitters intended for
>operation on frequencies allocated to any of the FCC authorized
>radio services listed above, except the ARS, must be type
>accepted by the Commission for the particular radio service(s) in
>which they are intended to operate prior to their importation,
>marketing or use. The Commission considers that the transceivers
>discussed above are intended to be operated on frequencies where
>the use of type accepted equipment is required, because of the
>simplicity of modifying them to extend their operating frequency
>range. Transmitters designed and intended for use only in the
>ARS must comply with the applicable technical standards contained
>in Part 97 of the Commission's Rules but are not required to be
>type accepted.
>
> It is a violation of the Commission's regulations to: (1)
>import or market a transmitter that is designed or intended to
>operate on frequencies outside of the ARS bands, if it has not
>been issued a grant of equipment authorization for the radio
>service(s) in which the transmitter is capable of operating; (2)
>import, market or operate a transmitter that requires a grant of
>equipment authorization but for which no grant has been issued;
>or, (3) transmit on a frequency allocated to a licensed radio
>service without the appropriate Commission-issued station
>license. Violation of the Commission's regulations will subject
>manufacturers, importers, vendors and users of this equipment to
>appropriate criminal penalties as provided for by federal law(s),
>including fines and/or imprisonment. In addition, the equipment
>described above can be seized by, and forfeited to, the
>government.

Allow me to extrapolate here for a moment.....

If I read this correctly, If a transceiver is designed to be easily modified, then it must be 'type accepted' (or approved or what-ever) before it can be marketed and sold. That would lead one to believe that if buy a radio that can have its coverage extended mearly by removing a jumper for instance, then it should already be 'type accepted' for that use. Otherwise, it could not be marketed and sold.

Continuing, (and recapping,)

> It is a violation of the Commission's regulations to: (1)
>import or market a transmitter that is designed or intended to
>operate on frequencies outside of the ARS bands, if it has not
>been issued a grant of equipment authorization for the radio
>service(s) in which the transmitter is capable of operating; (2)
>import, market or operate a transmitter that requires a grant of
>equipment authorization but for which no grant has been issued;

OR,

>(3) transmit on a frequency allocated to a licensed radio
>service without the appropriate Commission-issued station
>license. Violation of the Commission's regulations will subject
>manufacturers, importers, vendors and users of this equipment to
>appropriate criminal penalties as provided for by federal law(s),
>including fines and/or imprisonment. In addition, the equipment
>described above can be seized by, and forfeited to, the
>government.

As I read this; if I have a modified transmitter, and I'm operating under a valid business license, then I'm OK because of the giant word OR between #2 and #3.

How do you interpret this?

BTW, thanks for the great post. Finally, some real information

KF6JAS

2526. Re: Old diode radio drawings.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: ah8341@eclipse.co.uk
Message-ID: <5f4pfm$44o@news.cableinet.net>
Source record: 96532

"Joar Hetland" <joarh@netpower.no> wrote:

>Would anyone please send me a drawing of how to make an old diode radio?
>Nothing to complicated, just an "easy to undertand" drawing.
>Thanks.
>joarh@netpower.no

What you mean is a "Crystal Set", search the Web for such and you will
find a nice crystal set site, giving construction details and info
about books etc. Very simple really, just a parallel coin and
variable capacitor with a GERMANIUM diode and high impedance
headphones. And a good aerial and earth. There are endless
configurations to experiment with.

Alan G4TKV

2527. Watkins Johnson 8617B Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: alanger394@aol.com
Message-ID: <19970227201101.PAA15522@ladder02.news.aol.com>
Source record: 96533

Hi All

Please can anybody help me with parts for this radio

Thanks

Allan

alanger394@aol.com

2528. Re: DTMF decoder ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: ah8341@eclipse.co.uk
Message-ID: <5f4pmr$44o@news.cableinet.net>
Source record: 96534

nprogres@aol.com (NPROGRES) wrote:

>Anyone know where I might find info on building a DTMF decoder that could
>be connected to a radio or scanner ? Thanks.

Maplin in the UK do a single chip solution HT9170 Holtec
Tandy (radio Shack) used to do one , perhaps the same, as well.

Alan G4TKV

2529. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <331dfee2.8263707@news.cyberhighway.net>
Source record: 96535
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

kh2d@kuentos.guam.net (Jim Kehler) wrote:

>glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) wrote:

>>You are technically correct, but ethically wrong wet. If you set up
>>to provide a public service as a BBS, you have a moral obligation to
>>forward all legal mail, or at least not to limit forwarding based on
>>personal considerations such as who is saying what. SysOps who censor
>>mail are a big problem on the ham BBS network, and responsible SysOps
>>should and will route around them.
>
>Sounds like you have the U.S. Post Office and ham radio confused.

Well, no, I don't.

>>If you're not part of an open network, you're just cluttering up
>>valuable space on the bands, and are giving jerks like Burt more
>>ammunition.
>
>I think you have that backwards, too. I don't know who the first
>two hams were who hooked up TNC's and BBS software, but I

I imagine you could find at least one of them right here in this
newsgroup, or at least one or more of the first small group.

>imagine that the intent of the first link of the 'packet network' was
>to forward information, not garbage. Keeping the network free of
>garbage reserves valuable space for valid information to be passed.

Nonsense. One man's trash is another man's treasure. Who appointed
you arbiter of what's garbage and what's not?

>The amateur packet radio network already forwards, by design, an
>incredible amount of garbage in the form of message headers. I

At one time, those were mandatory. They still contain an amazing
amount of information essential to maintaining and troubleshooting a
network. Yes, they could be streamlined. So could a lot of other
things.

>that garbage a totally unnecessary ASCII drawing at the end of
>every message, a few lines of advertising from the guy who wrote
>the whiz bang terminal program used to generate the message, and

Yes, those are wasteful. But that's a separate issue, unless you
decide that you aren't going to forward anything by anyone who uses
ASCII in his signature.

>network does a wonderful job of diseminating garbage, but unfortunaly
>falls flat on it's face when it comes to delivering mail from one ham to
>another ham.

That's why we have the Post Office and the telephone. Of course, if
sysops were doing their job instead of worrying about censorship and
power trips, it'd work a lot better. In fact, it DID work better
several years ago than it does now.

>I agree one hundred percent with Steve. I supplied the two computers,
>three radios, three TNC's, assorted power supplies, cables, antennas,
>etc. that are used to run my packet BBS and DX cluster. I pay the

Don't teach your grandmother to suck eggs. I've done all that stuff,
and more.

>electric bill every month. When the little red transmit light on one of
>my packet radios turns on, I decided what gets transmitted, and it damn
>sure won't be Bubble Head's Bible Quotes or daily birthday lists from
>the Happy Club. Steve chooses to keep certain people off his system.
>I choose to keep certain garbage off my system. We are both doing
>what we are supposed to be doing, monitoring and eliminating garbage.

You're both part of the problem, not part of the solution. You have
no business setting yourselves up as arbiters of what's garbage and
what isn't. If everybody did that, there'd BE no packet network. If
you want a closed net, be my guest. Forward to *each other*, sans
"garbage." But don't pretend to be part of an open, global BBS
network, because that is NOT in the spirit of Amateur Radio.

>My packet equipment isn't a 'public service'. It's a service provided for
>hams to use in relation to ham radio. Bible banging and birthday lists

No, it's an ego trip that allows you to force your decisions of what's
"right" or "wrong" on your fellow hams.

>have nothing to do with ham radio, so I make the decision to keep that
>junk off my system, and not contribute to the confusion by sending it
>to other systems.

You're a disgrace to good sysops everywhere.

>When you, TAPR, or the ARRL decide you would like to reimburse me for
>the cost of my equipment and start sending me a paycheck, I will be
>happy to revert to your system of not excluding anything from my BBS.

When folks like Burt get their way, thanks in large part to attitudes
like yours, I hope you'll be very happy with your commercial station.
Of course, if you had to compete with commercial stations, you'd be
out of business in a week, since the real world has little tolerance
for censorship and ego trips.

--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

2530. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <331effc9.8495015@news.cyberhighway.net>
Source record: 96536
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

"Raj Singh, VE6RAJ" <singhraj@cadvision.com> wrote:

>I use Netscape and it's newsreader. Is there anyway that I can filter
>out certain subjects/individuals from having them show up in my reader.
>If not can you reccomend a news reader that has this facility.

Download Forte Free Agent. If you like it, you can purchase Agent for
$29, and it will do all you ask and more.

Here's Forte's URL:

http://www.forteinc.com.

--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

2531. TRIO KENWOOD TR751 info pse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: ANTISPAMsteve100@dircon.co.uk
Message-ID: <3316068e.1993589@news.dircon.co.uk>
Source record: 96537

Anyone have any frequency expansion info for the TR751E, it is the UK
version, so I assume it can be expanded to the "A" American spec.
But > can it be dragged any further... i.e to RX higher than 146.00 ??
Thanks in advance.....

Regards from Steve.

<<REMOVE "ANTISPAM"from e-mail address B4 replying>>

2532. Re: Best Frequency Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <E6A316.62A@eskimo.com>
Source record: 96538

William W Janssen <billj@9calweb.com> writes:

>I think I am getting accuracy of about 10^-10. I have had
>trouble with phase delay changes in my receive equipment of about
>20 nanoseconds. It seems to be better now that I removed a tuned
>circuit from my antenna coupler.

This is pretty good. You can get better with GPS with a little work.
Pretty easy to get 10e-11.

>Bill K7NOM

--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

2533. Help on software for KANSAS CITY TRACKER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc24f4$2241f7a0$LocalHost@pass>
Source record: 96539

Hello

Can some one tell me what software are availeble for the Knasas City
Tracker ?

And are you a owner of a KCT ?

Let me now!

Regards

Geert ONL2057

2534. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: "Raj Singh, VE6RAJ" <singhraj@cadvision.com>
Message-ID: <33164CB5.FA6@cadvision.com>
Source record: 96540
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Glen Quarnstrom wrote:
>
>
> Download Forte Free Agent. If you like it, you can purchase Agent for
> $29, and it will do all you ask and more.
>

Thanks very much Glen. I appreciate it.

73
Raj VE6RAJ

2535. Re: DON'T Support Little Burt instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Wilhelm Tomaschik <W_Tom@msn.com>
Message-ID: <01bc250e$8081eea0$c23e2399@wtomaschik>
Source record: 96541
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

You wanna know what? Are you a ham? Or is that a FAKE call, because this doesn't sound like an amateur's proposal! And you are idiots!!! This is our spectrum, they have enough!!! WE provide emergency communictions, to save your ass when a disaster strikes!!!

Barney <barney@google.com> wrote in article
<5ea6e0$ljg@news1.mnsinc.com>...
> WHY do you ONLY want to give away 2 meters, Burtie?
>
> Why not get all the hams to write the FCC and recommend that they give
> away ALL of our spectrum?
>
> I am sure the readers of this newsgroup are already dashing off letters
> by the DOZEN to the FCC in response to your great message, since we all
> follow you like the pied piper!
>
> Burt Fisher <burtfisher@geocities.com> whistled a happy tune like:
>
> |>Anyone wishing to register opposition for the ARRL/AMSAT submission
> |>should send a brief e-mail message to wrc97@fcc.gov. The Subject line
> |>should say "Reference No. ISP-96-005 IWG-2A." A simple statement to
this
> |>effect, "I oppose the ARRL/AMSAT opposition to the NVNG MSS flexible
> |>allocation proposal," will be included in the public record and will
> |>help to drive home the point that there is broad-based approval to well
> |>conceived 2 metere sharing proposals. It ought to be clear to the FCC
> |>the public good is poorly served by allowing hams exclusive use of
these
> |>valuable
> |>frequencies.
>
> |>Please note! The proposals the League opposes are not FCC proposals,
nor
> |>are
> |>they endorsed by any other branch of the government. They are industry
> |>proposals. The League's objective is to falsely demonstrate there is
> |>broad citizen opposition to the industry proposals.
>
> |>Additional arguments or evidence also is welcome. Important! Comments
> |>should
> |>reach the FCC no later than March 4, 1997!
> |>#================#===#
> |>| Burt Fisher | Teacher of idiocy, broadcasting and electronics |

> |>| Amateur call | South Dennis, Ma. (Cape Cod) |
> |>| K1OIK | http://www.geocities.com/WallStreet/5169 |
> |>#================#===#
> |>|Visit my WWW site, it stinks like no other k1oik@bozonet.com |
> |>#===#
>
>
>

2536. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5f5p45$fad@lehi.kuentos.guam.net>
Source record: 96542
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) wrote:

>kh2d@kuentos.guam.net (Jim Kehler) wrote:

>>network does a wonderful job of diseminating garbage, but unfortunaly
>>falls flat on it's face when it comes to delivering mail from one ham to
>>another ham.

>That's why we have the Post Office and the telephone. Of course, if
>sysops were doing their job instead of worrying about censorship and
>power trips, it'd work a lot better. In fact, it DID work better
>several years ago than it does now.

O. I C. The packet 'network' isn't for forwarding mail from one ham to another.
It's a digital soapbox for Bible Bangers and Birthday Clubs. Thanks for letting
me in on that secret. Next time I see someone put NTS traffic or a personal
message on the BBS here, I'll kill it and tell them to use the telephone.

You appear to be of the 'forward it anywhere and my job is done' mentality.
No wonder you'd rather forward bulletins than personal mail. ANYPLACE
is the right place to forward a bulletin. Personal mail requires a bit of
work .....

>Don't teach your grandmother to suck eggs. I've done all that stuff,
>and more.

Well, since you have already taught your grandmother to suck eggs,
I guess we can have her teach mine, but if you want your grandmother
to teach my grandmother to do anything, tell her to bring a shovel, cuz
she's gonna have to dig my grandmother up before she can start class.

>You're both part of the problem, not part of the solution. You have
>no business setting yourselves up as arbiters of what's garbage and
>what isn't. If everybody did that, there'd BE no packet network. If
>you want a closed net, be my guest. Forward to *each other*, sans
>"garbage." But don't pretend to be part of an open, global BBS
>network, because that is NOT in the spirit of Amateur Radio.

There is no such thing as a global Amateur Radio BBS network. There
never has been, and there never will be. Unless, perhaps, if you define
'global' as a hundred miles in any direction of your house. Most of us
who don't live in the United States Of Drug Dealers use the word
'global' to mean the ENTIRE world, not just the little part that you live
in. If you have fooled yourself into thinking there is a 'global' packet
network, send me a packet message with your phone number in it and I'll call you
when it gets here: KH2D@KH2D.GUAM.USA.OC

Don't bother staying up late waiting for me to call.....

>>My packet equipment isn't a 'public service'. It's a service provided for
>>hams to use in relation to ham radio.

>No, it's an ego trip that allows you to force your decisions of what's
>"right" or "wrong" on your fellow hams.

Now I'm on an ego trip. OK. Didn't you just tell me "Don't teach your
grandmother to suck eggs. I've done all that stuff, and more. "

>When folks like Burt get their way, thanks in large part to attitudes
>like yours, I hope you'll be very happy with your commercial station.
>Of course, if you had to compete with commercial stations, you'd be
>out of business in a week, since the real world has little tolerance
>for censorship and ego trips.

You lost me a bit here, I'm not sure what 'Burt's Way' is, I thought this
discussion originated because you were upset with the fact that Burt's
mail was being kept off Steve's system. I'm not here to compete with
commercial stations. I'm here to enjoy ham radio. But you're right.
Nobody gets fired when the operator of an Amatuer Packet Radio BBS
runs around patting himself on the back yelling 'I'm a SYSOP ! I'm a SYSOP !"

while the mail is getting forwarded to La La Land. And judging from
the amount of mail that goes to La La Land, it's a good thing, because
a lot of 'sysops' would be out of a job.

73, Jim KH2D

2537. Re: The duplicity of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: kh2d@kuentos.guam.net
Message-ID: <5f5pje$fad@lehi.kuentos.guam.net>
Source record: 96543
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

glenq@NOSPAM.cyberhighway.net (Glen Quarnstrom) wrote:

>And if all the Sysops who find various things unreasonable start
>killing them, the network collapses. If you don't want to be part of
>a free-flowing information net, then you have no business setting up a
>BBS on such a net. Put your little up-tight closed BBS off on some
>peripheral channel, and lock out folks to your heart's content.

I think we have found the problem here, Glen. You don't seem to have
a firm grasp of the definition of the word 'network'. Networks don't
collapse from lack of traffic, they just move the existing traffic much
faster.

73, Jim KH2D

2538. Help with crystal source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <33166D10.6294@aeneas.net>
Source record: 96544

I'm looking for a source of crystals suitable for use in a ladder or Cohn crystal filter. The design is the one Wes Hayward did for QST back several years ago. I'm going to build two for CW in a homebuilt receiver. The bandwidth will be between 250 and 500Hz. Mouser has several inexpensive crystals but I don't know if these are high enough quality for filter use or not.

Anyone have any experience for a good source of quality crystals?

Thanks in advance,
Mark
mmans@aeneas.net

2539. SideBand

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: "'Grif' w. keith griffith" <kgriffit@wolfenet.com>
Message-ID: <33162484.60FB@wolfenet.com>
Source record: 96545

Somebody give me an understandable description of the Weaver method of generating single sideband? (Little or none calculus or above!)

2540. Info wanted about CAI (brand) tuner (prefer schematic!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.d7fe747e4d02b898969a@news.infoave.net>
Source record: 96546
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I traded for a remote tuner made by the CAI (Communications Associates Inc.) of Huntington Station, New York. I've tried the telephone, and didn't get anywhere, so I can only assume they're out of business. The one I have doesn't have the control box, so I'm going to have to build one. Does anyone know what voltages are used, and which pins to apply/receive the voltage from/to? (I guess I'm asking for a schematic or owners manual to make my request simpler!) It's a model CU-4-6. I want to use it in an antenna project this coming week- thanks for any information! 73, Web- KR4WM

2541. Info wanted about CAI (brand) tuner (prefer schematic!)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: kr4wm@sccoast.net
Message-ID: <MPG.d7fe783527c2ada98969b@news.infoave.net>
Source record: 96547

I traded for a remote tuner made by the CAI (Communications Associates Inc.) of Huntington Station, New York. I've tried the telephone, and didn't get anywhere, so I can only assume they're out of business. The one I have doesn't have the control box, so I'm going to have to build one. Does anyone know what voltages are used, and which pins to apply/receive the voltage from/to? (I guess I'm asking for a schematic or owners manual to make my request simpler!) It's a model CU-4-6. I want to use it in an antenna project this coming week- thanks for any information! 73, Web- KR4WM

2542. Re: Re-engineering Henry amp from FM--->ATV HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: dwentz@accessus.net
Message-ID: <5f48sl$tf1$1@news.accessus.net>
Source record: 96548

I am working on doing the same with a motorola micor amp. I have a few 60 watt units here, and would like to push them into ATV service.

Anyone ever try this?

In article <MPG.d7a3cca10e0d2989699@news.infoave.net>, kr4wm@sccoast.net says...
>
>I have a Henry UHF "brick" amplifier, model C40D02 (the 2 may be a 3, >hard to see). It's a 1-5 watts in for 40 out amp. It uses one transistor >to develop 15 watts, which drives a second transistor to develop 40 >watts. It's tuned to 468.xxx. Now the question:
>
>I called Henry, and asked how difficult it would be to re-tune the amp >and use it on ATV at 439MHz. I was told that I probably would not have >access to the proper equipment to retune it, and I concede to that. >He further told me that it would only cost $30 (hard for me to >believe they'd do it that cheap!). However, in discussing the problem >with our local QRP group, the question arose that it may need biasing to >put it in class AB or something like that. So at this point, I'm >wondering if the person I spoke with at Henry was really an engineer, or >a "customer service" person. Can anyone tell me exactly what would need >to be done to convert a UHF amp from FM-commercial-mobile-voice-468MHz to >Amateur-ATV-420-to-440 (6MHz wide signal) service? I really only need the >basics, but if it gets technical, that's fine too. I just don't know a >whole lot about television signals. I have a basic understanding of how >to bias/tune amplifiers, but don't know how to apply that knowledge to >ATV.
>
>One other question- what would be involved in providing a switching >circuit for low 15 watts/ high 40 watts? I've heard that adjustments >to the transmitter need to be made each time you switch power levels.
>
>Thanks & 73, Web- KR4WM
>(A new ATV'er using a PC Electronics TC70-1)

2543. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2702972344140001@news.vcnet.com>
Source record: 96549

In article <5f5jrh$7go@news.asu.edu>, w9cf@ptolemy.la.asu.edu wrote:

> R. L. Measures (measures@mail.vcnet.com) wrote:
> : In article <n7ws.264.00ED468B@azstarnet.com>, n7ws@azstarnet.com (Wes
> : Stewart) wrote:
> : >
> : > Unfortunately, the references remain on his page in clear violation of
> : > copyright laws.
> : >
> : > Beware dem tar babies ya'll
> : ----------
> : U. S. Copyright Law provides for 'fair-use' quotes of excerpts from
> : copyrighted materials---provided that credit is given to the copyright
> : holder. It would be a violation of U. S. Copyright Law NOT to give Mr.
> : Wesley D. Stewart, Jr. credit for a fair-use quote of any part of his
> : copyrighted materials.
>
> I am not a lawyer, but what the university administration here has
> communicated to me about fair use of copyrighted material in
> classes is:
>
> 1. I can make a copy of, for example, a figure or graph from a
> copyrighted source and show it to my class (with appropriate credit of
> course) to demonstrate a point in my lectures. This is considered fair
> use.

I did not copy a graph. I made the Rp graph with ClarisWorks, using 2 of the 46 columns of copyrighted measurements.

Mr Stewart's statement regarding LICKING of what appears to be private parts, leaves little doubt in my mind that his interest in helping amateur radio operators LICK VHF parasitic-oscillations was, and is, secondary to helping Mr. Rauch defend his self-appointed, self-annointed title as one of our 'recognized amplifier experts'.

IMO, people who have a general understanding of AC power amplifiers do not reject AC Circuit-Analysis---as we have witnessed from Mr. Rauch and a number of his supporters..

The denouement of this debate was November 28.

--
--Rich-- ag6k, 805-386-3734

2544. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5f2tpc$lhk@news.Hawaii.Edu>
Source record: 96550
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

William A. Wetzel <n6rky@pacbell.net> wrote:
>Dana...
>
>The more I read your material trying to "worm-out" of the hole you placed
>yourself into, the more it is becoming apparent that you are not very apt
>in engineering or RF work at all. It is useless at this point to continue
>a debate with you - since you are always right in everything you do, even
>when you are wrong. It's no wonder why hams have no access to much of the
>commercial radio sites. Think about it...

(I'm always suspicious of flames such as above when the author fails
to include any of the remarks he's disagreeing with. It usually
indicates he has no defense, so instead he insults.) What portion of
Dana's statement do you take issue with, Bill? As I recall, Dana's
concern with taking an amateur radio and using it out-of-band was
in regard to the freq'y agility of such radios. It's a very valid
concern.

I've already pointed out why someone shouldn't use an amateur HT
for fire service communications; its freq'y agility and non-resistance
to the heat of fire were two main points that caused me concern
(I had a portion of my helmet melt in one structure fire - can't
imagine any amateur HT being able to survive such heat, but commer-
cial radios *will* be able to withstand such temperatures).

Let's supposed someone wants to use their 2m HT in the marine band.
Most boaters know that they can contact the Coast Guard on ch. 16.
But what's a channel designation mean to someone whose HT only
reads the freq'y of operation? Suppose you have an emergency and
the USCG tells you to shift to channel 22A? Or channel 12? Those
designations are useless to someone who doesn't have a channel-to-
frequency chart in their hand. Bridge-to-bridge comms are supposed
to be done on channel 13. What freq'y are you going to set your HT
to? The marine operator just asked you to shift to channel 83 for
a phone call. What freq'y is that, Bill? Are you going to commit
to memory all 80+ or so frequencies/channel numbers?

You're sore because we've presented some valid reasons (aside from
the legal issue) for not using an amateur radio for out-of-band
service. Don't be sore - just open your wallet and *buy* the proper
radio for your needs.

Jeff KH2PZ (former fireman *and* former Coast Guard radio officer)

2545. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-27 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5f4qlt$pe5@news.Hawaii.Edu>
Source record: 96551
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher <burtfisher@geocities.com> wrote:
>On the hour at 4 PM and 5 PM I will appear on 7208 or thereabouts
>Tuesday.
>From 6 PM on the hour until 9 PM I will be on 391o or thereabouts.
>Meet me

14030 CW. I'll keep the rig on on day listening for your call.

Jeff KH2PZ

2546. Simpson Model 260 Multimeter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: jphipps@aztec.asu.edu
Message-ID: <5f5ads$2ia@news.asu.edu>
Source record: 96552

I'm looking for a schematic/manual for the subject multimeter. Any thoughts/ suggestions will be appreciated.

Thanks in advance.

John Phipps K7BTA
--
q

2547. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: subich@ibm.net
Message-ID: <5f5aqnpke1@news-s01.ny.us.ibm.net>
Source record: 96553

In message <3314c16f.2069452@news.airmail.net> - jfriley@airmail.net (J. Fred Riley) writes:
:>
:>I suspect--correct me if I'm wrong--that the transmitter was actually
:>a 2.0-2.5 kW output unit with a station ERP of 5 KW, a typical Class
:>A arrangement.
:>

It was a McMartin 3 KW transmitter and our licensed TPO was just a bit above 2800 Watts as I remember (this WAS 1976). Class A stations were 3 KW ERP at 300' in those says, not the 6 KW at 100 Meters as is the norm today.

I had one night a week when we were off the air (Sunday night). One Sunday night another college ham buddy and I decided to see just how much power we could get out of the box ... (we knew full well we were exceeding Eimac's ratings but I had a good spare tube and didn't know any better) ... we tapped the plate primaries all the way down to get about 4500 Volts of HT and cranked the drive all the way up. It made about 4450 Watts and we didn't run it very long. However, I did make regular meter calibrations at 110% of licensed power (3050 Watts if I remember correctly).

The tube was almost a year old when I got there ... I did not have to change it in the year I was at the station. The guy who followed me commented about replacing the final about a year after I left so I assumed it was the same tube I was running.

:>It seems that the original price on the 8877 was less than $150; the
:>8873, 8874 and 8875 were $37.50 each when they came out.

I noticed those prices ... the 8875 was < $200 when I did the budget at that station (yes, I did budget for a replacement ... it's good practice ... even though I had a new spare). I would like to find the tubes at that price today <G>!

--
==========
Joe Subich, W8IK ex-AD8I
<W8IK@IBM.NET>
<W8IK@AMSAT.ORG>
<subich@ibm.net>
<subich@compuserve.com>
==========

2548. HELP- Need Pinout for Eimac 8295A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: oscardb@chem.uwa.edu.au
Message-ID: <5f5bh8$3v1$1@enyo.uwa.edu.au>
Source record: 96554

Can someone please help. I 've got an Eimac 8295A tube but I've had one hell of a hard time getting the pinout. People have given me other details but for some reason have not bee able to find pinout information. I'd really appreciate any help.

2549. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: atkes@imap1.asu.edu
Message-ID: <5f5jrh$7go@news.asu.edu>
Source record: 96555

R. L. Measures (measures@mail.vcnet.com) wrote:
: In article <n7ws.264.00ED468B@azstarnet.com>, n7ws@azstarnet.com (Wes
: Stewart) wrote:
: >
: > Unfortunately, the references remain on his page in clear violation of
: > copyright laws.
: >
: > Beware dem tar babies ya'll
: ---
: U. S. Copyright Law provides for 'fair-use' quotes of excerpts from
: copyrighted materials---provided that credit is given to the copyright
: holder. It would be a violation of U. S. Copyright Law NOT to give Mr.
: Wesley D. Stewart, Jr. credit for a fair-use quote of any part of his
: copyrighted materials.

I am not a lawyer, but what the university administration here has communicated to me about fair use of copyrighted material in classes is:

1. I can make a copy of, for example, a figure or graph from a copyrighted source and show it to my class (with appropriate credit of course) to demonstrate a point in my lectures. This is considered fair use.

2. They specifically tell us that we cannot, for example, scan items into our computers and place the files on web pages available to the public. This is considered publication and is not fair use. So if I put a copy of my lecture notes on a public web page, I must leave out material for which I don't have a copyright unless I have prior written permision.

3. If access to a web page is restricted i.e. it requires a user name and password, and only my class is given access, other rules can apply.

73 Kevin w9cf

2550. Small 30 - 50 ohm Pot Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: w1ksz@juno.com
Message-ID: <5f59ev$n56@news-central.tiac.net>
Source record: 96556

I need a small (1/2 - 3/4 inch dia) 30 ohm pot to help restore a fine
old Gonset G-66B Receiver. It's the S-Meter adjust pot. Actually any
size up to 50 ohms will be OK, I'll just pad it. Can anyone help ??
Tnx es 73 de Dick, W1KSZ.

2551. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Burke Baumann <baumann@doitnow.com>
Message-ID: <01bc251f$85fe9840$212bd3cf@default>
Source record: 96557
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Joseph I am glad you enjoyed the post. See my comments below.

73 Burke

Joseph Kral <kral@hpl.hp.com> wrote in article
<5f4o41$e4f@hplms2.hpl.hp.com>...
> In article <01bc238f$d2659760$7d9d62cf@default>,
> Burke Baumann <baumann@doitnow.com> wrote in part:
> >
> >
> >Some manufacturers are promoting the sale of conversion kits, or have
> >designed their transceivers such that they can easily be modified
> >by the users, to extend the operating frequency range into the
> >frequency bands listed above. In addition, so called "export"
> >radios which are deliberately designed to facilitate this
> >capability are also being imported and marketed.
> >
> > Manufacturers, importers, vendors and users of these
> >transceivers are reminded that transmitters intended for
> >operation on frequencies allocated to any of the FCC authorized
> >radio services listed above, except the ARS, must be type
> >accepted by the Commission for the particular radio service(s) in
> >which they are intended to operate prior to their importation,
> >marketing or use. The Commission considers that the transceivers
> >discussed above are intended to be operated on frequencies where
> >the use of type accepted equipment is required, because of the
> >simplicity of modifying them to extend their operating frequency
> >range. Transmitters designed and intended for use only in the
> >ARS must comply with the applicable technical standards contained
> >in Part 97 of the Commission's Rules but are not required to be
> >type accepted.
> >
> > It is a violation of the Commission's regulations to: (1)
> >import or market a transmitter that is designed or intended to
> >operate on frequencies outside of the ARS bands, if it has not
> >been issued a grant of equipment authorization for the radio
> >service(s) in which the transmitter is capable of operating; (2)
> >import, market or operate a transmitter that requires a grant of
> >equipment authorization but for which no grant has been issued;
> >or, (3) transmit on a frequency allocated to a licensed radio
> >service without the appropriate Commission-issued station
> >license. Violation of the Commission's regulations will subject
> >manufacturers, importers, vendors and users of this equipment to
> >appropriate criminal penalties as provided for by federal law(s),

> >including fines and/or imprisonment. In addition, the equipment
> >described above can be seized by, and forfeited to, the
> >government.
>
>
> Allow me to extrapolate here for a moment.....
>
> If I read this correctly, If a transceiver is designed to be easily
> modified, then it must be 'type accepted' (or approved or what-ever)
before
> it can be marketed and sold. That would lead one to believe that if buy a
> radio that can have its coverage extended mearly by removing a jumper for
> instance, then it should already be 'type accepted' for that use.
> Otherwise, it could not be marketed and sold.
>

First it may be easy to remove a jumper it is just the problem of which
resistor or diode to remove that makes it difficult. Also by using your
logic you could argue robbing backs is not agaist the law if you don't get
caught. Seriously there are legitimate uses for amateur radios that
transmit out of band such as use by people with valid MARS license and also
many amateur operators use HF radios to drive vhf/uhf transveters and never
transmit on frequecies where the radio must be type accepted.

>
> Continuing, (and recapping,)
>
> > It is a violation of the Commission's regulations to: (1)
> >import or market a transmitter that is designed or intended to
> >operate on frequencies outside of the ARS bands, if it has not
> >been issued a grant of equipment authorization for the radio
> >service(s) in which the transmitter is capable of operating; (2)
> >import, market or operate a transmitter that requires a grant of
> >equipment authorization but for which no grant has been issued;
>
> OR,
>
> >(3) transmit on a frequency allocated to a licensed radio
> >service without the appropriate Commission-issued station
> >license. Violation of the Commission's regulations will subject
> >manufacturers, importers, vendors and users of this equipment to
> >appropriate criminal penalties as provided for by federal law(s),
> >including fines and/or imprisonment. In addition, the equipment
> >described above can be seized by, and forfeited to, the
> >government.
>
>
> As I read this; if I have a modified transmitter, and I'm operating under
a
> valid business license, then I'm OK because of the giant word OR between
#2

> and #3.
>
> How do you interpret this?

Gee I hope your not a lawyer or logic designer. Let me write this a little different.

Fine and/or jail = operate a transmitter that requires a grant of equipment authorization (for the band your transmitting on) but for which no grant has been issued OR transmitting without a licence on a band that requires a licence.
Have fun. Good hamming.

73 Burke
KF7NP

>
> BTW, thanks for the great post. Finally, some real information
>
> KF6JAS
>

2552. Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Peter <gremlin@iaccess.com.au>
Message-ID: <01bc2533$9faff540$a24a05cb@gremlin>
Source record: 96558
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In Australia Optus Cable Vision is rolling out a massive overhead cable
television and phone system. The system comprises optic fibre and coax.
Question-:
What are the caracteristics of the coax. impedance, loss etc.

Regards

Peter Miles
VK3YSF

2553. Conversion of A.W.A. Model RT80 (Australia)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Peter <gremlin@iaccess.com.au>
Message-ID: <01bc252b$a57bb2a0$a24a05cb@gremlin>
Source record: 96559
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I wish to convert a A.W.A. Model RT80 Type 2M 82004 transceiver with a frequency coverage of 450 - 485Mhz to 438Mhz.
If anyone has had experience with this task I would appreciate any advise and or references that can assist. I believe that a change of crystals and modest retune may be all that is required.

Regards
Peter Miles
VK3YSF

2554. Re: Need filament xfmr Drake L4B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: ad7k@accessnv.com
Message-ID: <331680c0.2666197@news.accessnv.com>
Source record: 96560
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Thu, 27 Feb 1997 12:21:06 -0600, jmul@microlink.net wrote:

>I am in need of a filament transformer for the Drake L4B HF amplifier that
>uses a pair of 3-500Z tubes. Also looking for a junker L4B RF deck. john
>
>-------------------==== Posted via Deja News ====----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet
If you don't find a Drake replacement transformer (have you tried
calling Drake? - They have moved recently, so you will have to get
their new phone number) try the Peter W. Dahl Company - they have a
web site, but I don't have it bookmarked - you can find it thru Yahoo!
or any other good web search engine.

Good Luck!

73 to all!

"Squeak" Porray, AD7K
Manager, Amateur Electronic Supply/Las Vegas

2555. Re: HELP- Need Pinout for Eimac 8295A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <33169C68.207A@rcru.rl.ac.uk>
Source record: 96561

oscardb@chem.uwa.edu.au wrote:
>
> Can someone please help. I 've got an Eimac 8295A tube but I've had
> one hell of a hard time getting the pinout. People have given me other
> details but for some reason have not bee able to find pinout
> information. I'd really appreciate any help.

You may be able to work it out. I am not familiar with the 8295A, but if you use a similar technique to that you would use with an unknown transistor you should be OK.

Identify the heater first with a multimeter. You should then be able to find the cathode - if not directly connected to the heater, the capacitance betweeen them will be greatest.

Once you know those two electrodes, apply heater volts and a few 10s of volts will allow you to figure out which is the anode, and which grids are which.

2556. Re: Any way to rejuvinate Nickel metal Halide batteries?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: "John C. Fakan" <usscod@kellnet.com>
Message-ID: <3316D12F.60D@kellnet.com>
Source record: 96562

Dick Partos wrote:

>Im really not sure what happened...the battery just refuses to
>hold a charge for very long at all. Its in a IBM Thinkpad 500 and
>at full charge will last only 15 minutes or so. Looks like im
>gonna have to break down and get a new one
>

Hi, Dick,

From the symptoms you report my experience says you have a bad cell. That seems to be the leading cause of what has been misinterpreted as a memory effect.

I have been very succesful with repairs to such batteries, but it does require getting into the innards and replacing the bad cell. That is not always easy unless you have some decent small tools and some courage. It is also nice if you can minimize the cosmetic damage, which isn't always easy. The manufacturers don't design the packs for service.

If you would like some more specific info let me know.

Regards,

John Fakan, KB8MU

2557. Microwave Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@telis.org>
Message-ID: <3316D72D.4FD3@telis.org>
Source record: 96563

I am looking for info on the construction of dielectric resonator filters for 1-10Ghz frequencies.Tnx 73 Ken W6GHV

2558. S-meter Modification - MFJ QRP rigs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <33170896.5B2C@ix.netcom.com>
Source record: 96564

I would like to add an S-meter to my MFJ 9020 qrp rig. Any suggestions, schematics, horror stories? Am Mechanical Engineer by trade, not electronics! Any help would be appreciated.

TNX de Ron, WA1UWZ

2559. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc2579$e2023fc0$7860b6cd@chris>
Source record: 96565
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

The Hardline is good stuff, but its 75 Ohm. The drop line is not lowloss
and is also 75 Ohm (you can have it!)

Christopher Cox
KC8FRJ
TRA#4901

Peter <gremlin@iaccess.com.au> wrote in article
<01bc2533$9faff540$a24a05cb@gremlin>...
> In Australia Optus Cable Vision is rolling out a massive overhead cable
> television and phone system. The system comprises optic fibre and coax.
> Question-:
> What are the caracteristics of the coax. impedance, loss etc.
>
> Regards
>
> Peter Miles
> VK3YSF
>

2560. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.266.003353F2@azstarnet.com>
Source record: 96566

In article <measures-ya02408000R2702972344140001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>From: measures@mail.vcnet.com (R. L. Measures)
>Subject: Re: good source for amplifier tips
>Date: Thu, 27 Feb 1997 23:44:14 -0800

[blah,blah...]

> Mr Stewart's statement regarding LICKING of what appears to be private
>parts, leaves little doubt in my mind that his interest in helping amateur
>radio operators LICK VHF parasitic-oscillations was, and is, secondary to
>helping Mr. Rauch defend his self-appointed, self-annointed title as one of
>our 'recognized amplifier experts'.

Interesting how the mind works(?) isn't it. Where did I say anything about private parts? Perhaps a minor change will show how more conventional minds operate..."(and the poor neighborhood nursing student who comes over on weekends and licks envelopes, or whatever *she does*, for the salesman)".

For those who may wonder what is being discussed, the story may be found at www.azstarnet.com/~n7ws.

Rich you are given special permission to post or link to this on your web page *without* attribution. However, you are advised that I am preparing a patent disclosure on the use of nichrome wire in the primary and secondary AC power circuit of high power RF amplifiers.

I believe I'm really on to something here. In fact, I'm trying to get retrofit kits on the market by April 1st. Boy, I AM EXCITED!!! Just think another giant leap forward in the quest for "The Nearly-Perfect Amplifier"!!!

N7WS

2561. Re: Wind your own coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Jan Axing <janax@li.icl.se>
Message-ID: <3316A425.59C6@li.icl.se>
Source record: 96567

I lost the thread about the coil winding issue so pardon me for posting outside. Anyway, here is the reply.

Douglas "Lonely Planet Boy" Shawhan wrote:

> Jan and everybody else who has made their own coils:
>
> Can you suggest a good, inexspensive reference for winding coils? I have
> seen many neat schema that require "twisting yer own" but have never
> found easy-to understand instructions.... Please don't direct me to the
> ARRL handbook! I have gotten them from the library and they seem more
> geared toward someone who:
>
> A. Has a ton of time
> B. A ton of money
> C. Wants to buy _their_ kits!

I have seen tables every now and then but can't recall where for the moment.

Quickies for air wound solenoid coils I'm using are:

L=(0.008*d^2*n^2)/(3*d+9*l) single layer
L=(0.008*d^2*n^2)/(3*d+9*l+10*a) multilayer

where d=average diameter
l=length of coil
a=radial thickness of winding (multilayer)
n=# of turns

All measures are in millimeters. For inches, replace 0.008 with 0.2032. The resultant L will pop out in microhenries. Average diameter is diameter to the center of the winding, for single layer it's simply inner diameter + wire diameter.

For maximum Q, let l be 2 to 2.5 times d. The coil diameter should be more than 5 times the wire diameter. As for the wire gague, well, use the largest diameter wire that fills up the coil or for higher freq's wind with one wire diameter between the turns.

The formulas works rather well for coils from 0.1 microhenry and up. I usually hit within 5% with the single layer version.

The formulas are a mess to use if you don't have a computer. I wrote an Excel spreadsheet where I can play around with the variables until I have
what I want. Believe me, it reduces the calculation time a lot.

If you want a tunable coil... well, VHF coils can be trimmed by
spreading
or compressing the winding. Coils with an adjustable core are a real
pain
to calculate even if you know the properties of the core material. But
basically, with an iron powder slug, I usually try a coil with 5 to 10
times lower inductance with the formulas above. With ferrite slugs, much
lower. Don't expect the first coil to hit the target...
>
> (asbestos shorts are now on....)

IMHHHO Internet flames are less dangerous to your health than the
asbestos shorts... :)

--
Jan, SM5GNN
Linkoeping, Sweden
janax@algonet.se
janax@li.icl.se

2562. Re: Best Frequency Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: William W Janssen <billj@9calweb.com>
Message-ID: <5f6v49$1i3$1@news.calweb.com>
Source record: 96568

novatech@eskimo.com (Steven Swift) wrote:
>William W Janssen <billj@9calweb.com> writes:
>
>>I think I am getting accuracy of about 10^-10. I have had
>>trouble with phase delay changes in my receive equipment of about
>>20 nanoseconds. It seems to be better now that I removed a tuned
>>circuit from my antenna coupler.
>
>This is pretty good. You can get better with GPS with a little work.
>Pretty easy to get 10e-11.
>
>>Bill K7NOM
>
>

Yep You can do better with LORAN also but with more work than
I have put into it.

>--
>Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
>NOVATECH INSTRUMENTS, INC. 1530 Eastlake Avenue East, Suite 303
>206.322.1562, fax 206.328.6904 Seattle, Washington 98102 USA

2563. Hi, looking for VFO gear mechanisms...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Kari Back <Kari.Back@karttakeskus.fi>
Message-ID: <33167AA6.3EE4@karttakeskus.fi>
Source record: 96569

Hello all,

I am trying to find two good quality, spring-loaded for
low backslash, 10:1 or greater VFO gear drives for HF
receiver/transmitter pair
(there is need to mount a dial plate to the low rotating
side of the gear drive)

These seem to be difficult to find nowadays, but if someone
had some info where to ask, would be great.

Thanks in advance

please email to
kari.back@karttakeskus.fi

2564. WTB-Plate xfmr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: jmul@microlink.net
Message-ID: <857149015.11999@dejanews.com>
Source record: 96570
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I am wanting a plate transformer, 115-230vac dual primary, 2600-3000vac secondary @ 1amp minimum. Also want oil filled capacitor 25-50uf 4kv. If you have an xfmr or capacitors near the values listed, I'd appreciate hearing from you. Thanks John

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2565. Re: Best Frequency Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5f74k2$d8i@hpscit.sc.hp.com>
Source record: 96571

In article <E6A316.62A@eskimo.com>, Steven Swift <novatech@eskimo.com> wrote:
>William W Janssen <billj@9calweb.com> writes:
>
>>I think I am getting accuracy of about 10^-10. I have had
>>trouble with phase delay changes in my receive equipment of about
>>20 nanoseconds. It seems to be better now that I removed a tuned
>>circuit from my antenna coupler.
>
>This is pretty good. You can get better with GPS with a little work.
>Pretty easy to get 10e-11.

>>Bill K7NOM

The short term stability of GPS itself is only 5 x 10^-11. You have
to average for a whole day to get down to 10^-11 and that only works
well if your oscillator has low aging AND you measure the aging and
factor it in. High end crystal oscillators typically age 10^-11
per hour. The cream of the crop of these will age at least several
parts in 10^11 per day. And of course for 10^-11 to mean much, the
short term stability of your oscillator should be parts in 10^12, which
only the best oscillators do. Finally, you would have to compare
your standard against a cesium frequency standard (or maybe a very good
rubidium that has just been calibrated) to be sure you have everything
working at that level. I wouldn't describe that as "pretty easy".

Rick Karlquist N6RK
rkarlqu@scd.hp.com

2566. Re: Wind your own coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <p4LNcBAiFyFzEwa7@falstaf.demon.co.uk>
Source record: 96572

In article <3316A425.59C6@li.icl.se>, Jan Axing <janax@li.icl.se> writes
>I lost the thread about the coil winding issue so pardon me for posting
>outside. Anyway, here is the reply.
>
>Douglas "Lonely Planet Boy" Shawhan wrote:
>
>> Jan and everybody else who has made their own coils:
>>
>I have seen tables every now and then but can't recall where for the
>moment.
>
You may find these difficult to find but try:

Radio Data Charts
R.T.Beatty revised by J McG Sowerby
Published by IlIFFE back in, I think, the 1950s.

These or similar ABACs give simple graphical solutions to
single/multilayer coils. Heaven knows where you might find one these
days. I got mine from my father and it has a sheet stuck in the front
for making your own transmission line calculator by building a
specialised slide rule dated 1944. I asked him but he didn't know when
he bought it.

If you can find one of these then they are a god send so try ordering
something from your library. They may have something in their reference
section.
>> (asbestos shorts are now on....)
>
>IMHHHO Internet flames are less dangerous to your health than the
>asbestos shorts... :)
>
Very true
>--

Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

2567. Re: Torriods and working out???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: earlve3ab@igs.net
Message-ID: <5f76ea$k02$2@nntp.igs.net>
Source record: 96573

In article <h4pzHZAQcNFzEwKS@chubs.demon.co.uk>,
Steve@chubs.DEmon.co.UK says...
>
somewhere 25 watts but I'm not sure. If one wanted to go above 25
watts,
>what would be best torriod to use?
>
>Regards to all.
>--
>Steve "Chubby" Simpson
>Radio/Night Club D.J.
>Steve@chubs.demon.co.uk
>Visit Radio World -
>HTTP://www.chubs.demon.co.uk

hi Steve: i can probably give you a few tips. I have been studying
books such as w1fb qrp notebook and solid state design for the radio
amateur..these two i would recommend and to answer your question on
rf choke..mostly these are to suppress all rf from getting into or
onto the dc voltage supply lines to the circuit(s).since they have
to suppress the whole spectrum of rf they are generally wideband
devices and the torroid cores often used are ferrite such as material
43 ie t-37-43 the full p/n . for an amp above 25 watts say up to 50
watts you could probably use the next size up from the "50" size
torroid say the t-68 series and maybe for pennies more the next higher
one up from that say the t-80? or whatever it is. Anytime you build
something it helps to get ideas from established similar designs. Since
torroids are scarce and expensive up in canada i will often try to
avoid using them if i can. I use them sparingly so as not to deplete
my junkbox too quickly..if you have any furthur questions please feel
free to email me ...earlve3ab@igs.net

2568. Re: K1OIK on the air

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: orion@capital.net**
Message-ID: <33183f22.30126463@news.capital.net>
Source record: 96574
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

On Wed, 26 Feb 1997 20:46:52 -0500, The Bakers <mbaker@monmouth.com>
wrote:

>> Gary... KJ6Q...I am the NRA...
>> (that NRA bit REALLY tics off the gun haters...:-)
>> ==
>> INTERNET NEWSGROUPS:
>> A world wide time wasting garage sale, where
>> the inmates constantly attempt to unload their mentally
>> defective baggage and lawn furniture on the gullible and
>> unwary - Shoppers beware, you'll NEVER find a bargain here!
>> ALSO, be warned that many of the yapping mongrels infesting
>> this area are not housebroken, watch where you step!
>> ==
>
>So Gary, what brings *you* here ??

Comic Relief, possibly?

--
73,
Butch N2YMJ
To send mail, delete
the two stars at the
end of my address.

2569. Re: Help with crystal source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <K7XzrcA8d0FzEw+E@lfheller.demon.co.uk>
Source record: 96575

In article <33166D10.6294@aeneas.net>, Mark Mansfield <mmans@aeneas.net>
writes
>I'm looking for a source of crystals suitable for use in a ladder
>or Cohn crystal filter. The design is the one Wes Hayward did for
>QST back several years ago. I'm going to build two for CW in a
>homebuilt receiver. The bandwidth will be between 250 and 500Hz.
>Mouser has several inexpensive crystals but I don't know if these
>are high enough quality for filter use or not.
>
>Anyone have any experience for a good source of quality crystals?

Colour-burst crystals (NTSC - 3.5794545 MHz and PAL - 4.433619 MHz) are
cheap and can be used to build very effective CW filters. Higher
frequency crystals are better for SSB. It's best to buy, say, 10 of
them, and select those that have the closest parameters for the filter.
You can buy good quality crystals suitable for ladder filters from
crystal manufacturers (such as IQD here in the UK), but they are quite
expensive, and they usually have a minimum order charge. However, since
they will have tightly controlled parameters, you don't need to select
them.

Leon
--
Leon Heller, G1HSM
leon@lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home)
+44 (0) 1344 385556 (work)

2570. 2.5 Ghz bolometer project wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: rmander@mbox.4net.it
Message-ID: <5f7l2n$iec@server-b.cs.interbusiness.it>
Source record: 96576

Hello everyone,
I'm looking for a project of a bolometer to measure the output power
of a 2.5 Ghz local oscillator.Can someone help me find it ?
73 , Roberto IK4JQW

2571. Re: Help with crystal source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002802971501570001@news.europa.com>
Source record: 96577

A QEX article by J. Makhinson several years ago recommended Fox 8.000mhz microprocessor crystals. Supposed to be able get quite a few Q=150k out of a batch of 100. Mouser sells these.

I used to buy 9.000mhz from Hosfelt, but they are all gone. These had Q=120k consistantly, so I didn't have to pick and choose. Maybe the'll show up again.

Here I thought I had struck a goldmine last summer when I bought boxes full of microwave FDM boards containing hundreds of 250hz and 3khz Motorola crystal filters. The 250hz units contained discrete crystals, but sadly their Q was in the 50k range. The whole filter would be good for CW since it is some linear-phase type or similar response.

The 3khz contain cascaded monolithic filters. Several friends are using these as roofing filters in ultra-high dynamic range receivers using H mode mixers, and quadrature hybrids. I believe the filters were tested in UK to have intercept greater than +50dbm. Again I think these are linear-phase also.

I believe all the filters are resonant at 5.2mhz or thereabout.

I am mentioning all this since all these boxes are taking up space in my closet, and it might be good to desolder the filters and sell them. But I'm not too thrilled about being in the mail order business.

Rob. N3FT

2572. Coax characteristics table at http://www.netcom.com/~wa2ise

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseE6C19M.7Cz@netcom.com>
Source record: 96578
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.scanners

I just put up a web page: http://www.netcom.com/~wa2ise/radios/coax.html
It's a table of coax impedances, attenuation, velocity factors, and max
voltage ratings. It's the same table I posted last year, just formatted
for web browsers. Enjoy.
73s

2573. Re: Leo jams cell phone guts into tipsy amplifier rendering unacceptable SPAM (c) 1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: CHRISTOPHER MCCALL <s004cnm@discover.wright.edu>
Message-ID: <Pine.SUN.3.93.970228155026.1629D-100000@sun002>
Source record: 96579

Great subject heading!!! Since its all rights reserved, copy write protected, Bob can I use it for t-shirts at Dayton??? I promise I won't boot leg. Everyone who is in on this stupid Leo SPAM/LID thing can purchase one, get drunk, meet in the Vandalia Holiday Inn parking lot and duke it out, whoever is left standing WINS. I'll officiate (use to umpire little league) Why should I upgrade? So I can listen to this crap on the air? NOT. I'm thinking of going up in freq. That way I can fry the SPAMMERS with 1.5 kw of 10 gHz; GET A LIFE FOLKS, go elmer, work public service, hold tests sessions. Stress, and anger create high blood pressure, and high bp shortens life, its your life do something with it. Yes I know, I've sunk to an new low; I'm spamming SPAMMERS...

P.S. Bob, let me know if I can use your idea. tnxs 73.

Chris McCall KB8YPO
145.110 Mhz Kettering Medical Center ARC
Dayton Oh.
(the 2mtr freq is for directions questions etc.. when yous guys come to town ;-)).

2574. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Andy Moss <andmoss@ibm.net>
Message-ID: <33179982.56A2@ibm.net>
Source record: 96580
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Burt Fisher wrote:

> You are welcome as is anyone to contact my students (dormouse1@juno.com
> or my daughter at aurora24@rocketmail.com) and ask them for your self.
> Foul language? I used ass, report me. You no doubt have seen the vile
> profanity used against me? When compared to the public at large I am
> indeed an ass but when compared to hams I am far superior than MOST.

Burt,

It's my opinion that you go looking for trouble. You know what they say
about looking for trouble? You find it every time!! Hee hee!

As far as feeling superior to most Amateurs. That's really nice!
I'm glad you feel that way.

I remember getting into it with you over on the Relaynet years ago. You
were giving me the gears for sending out a general message of thanks to
all that replied to one of my polls. At the time I didn't realize that
it meant so much to you. I still don't understand why!

I don't know what you are trying to prove. Your message isn't clear.
Who was it that said Communication without intelligence is pointless?

Cheers!

--
Andy Moss
"I often fantasize about my inability to daydream....."

2575. Re: WTB: 4-1000A CHIMNEY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: gene@eagle.csl.uiuc.edu
Message-ID: <gene.857174226@eagle.csl.uiuc.edu>
Source record: 96581

scott <acepilot@mwt.net> writes:

If you have any means, or know any tricks for glass cutting: .....
I had our glass-shop cut the neck and bottom of a 1-gal cider jug
at the appropriate places, and although I haven't used it yet, it appears
to be suitable (unless there could be a problem of it cracking because of
uneven heating).
>NIMSKI1 wrote:
>>
>> LOOKING FOR A 4-1000A GLASS CHIMNEY. E-MAIL ME AT NIMSKI1@AOL.COM OR
>> PHONE AT 508-222-1261 73'S STEVE W1SN

>If you can't find a used one, RF Parts in California has them (SK506) for
>(gulp!) $114.00. (619) 744-0700 or fax at (619) 744-1943.

>I have one, but will be using it on a 6M amplifier project.

>73, Scott, N0EDV

>--
>Gotta Fly or
>Gonna Die !
>--Ask me about my
> Aeronca Super Chief--
--

Internet, BITNET: gene@csl.uiuc.edu

2576. **HELP** Need help Un-Modding My TS-430

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: "Michael A. Fallavollita, Ph.D." <mikef@microtech.com>
Message-ID: <33177D90.4E10@microtech.com>
Source record: 96582
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

HELP*
I've got a new-to-me TS-430 that looks like it has had a number of mods done to it, and maybe some undone. I'd actually prefer it to work as designed; at least until I'm more familiar with it.

My biggest concern is that the VOX and Send/Recv switches have been somewhat bypassed when in CW mode. Even if the VOX is on manual and the standby is on Recv, when you hit the key you're on the air. I've noticed that when you switch the mode from SSB to CW the frequency display goes up by 800Hz.

I've opened up the radio to look for any obvious mods. Unfortunately, there are so many components on the bottom (solder side) of the RF board that I'm not sure where to start. The only definate thing I have to go on right now is that PD wire coming into connector 9, and the WRC wire coming into connector 10 have been cut.

I'd sure love to hear from someone that has some experience with these radios that wouldn't mind walking a newbee through some of this.

Thanks,

--
-- Mike Fallavollita
mikef@microtech.com
KE6FWK

2577. Re: Coax characteristics table at http://www.netcom.com/~wa2ise

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: Al Rooney <n2nkb@worldnet.att.net>
Message-ID: <3317D0AF.1F7E@worldnet.att.net>
Source record: 96583
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.scanners

Robert Casey wrote:
>
> I just put up a web page: http://www.netcom.com/~wa2ise/radios/coax.html
> It's a table of coax impedances, ...

Very handy chart Robert. Nice job. Thanks.
73 de Al Rooney N2NKB

2578. mono- to stereo...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: shearer@pluto.njcc.com
Message-ID: <33179DCB.9AA@pluto.njcc.com>
Source record: 96584

i have a scanner which only outputs reception in mono...
would it be possible to modify this to stereo?
i am not refering to jack output.
what might be involved?

2579. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-02-28 00:00:00 UTC
From: JOE RENTFROW <tiger1@bellatlantic.net>
Message-ID: <331782FD.5DD9@bellatlantic.net>
Source record: 96585
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Jeffrey Herman wrote:
>
> (I'm always suspicious of flames such as above when the author fails
> to include any of the remarks he's disagreeing with. It usually
> indicates he has no defense, so instead he insults.) What portion of
> Dana's statement do you take issue with, Bill? As I recall, Dana's
> concern with taking an amateur radio and using it out-of-band was
> in regard to the freq'y agility of such radios. It's a very valid
> concern.
>
> I've already pointed out why someone shouldn't use an amateur HT
> for fire service communications; its freq'y agility and non-resistance
> to the heat of fire were two main points that caused me concern
> (I had a portion of my helmet melt in one structure fire - can't
> imagine any amateur HT being able to survive such heat, but commer-
> cial radios *will* be able to withstand such temperatures).

Jeff,

I'm agree with everything you say except one point and valid it is.As far as an amateur HT not being able to withstand extreme temperature changes such as fire I can only say one thing.Being in the two-way business for almost 10 years I have seen many commerical versions not survive fire any better then a fireman carrying his personal amateur HT.Also the case on the COMMERCIAL Vertex VX-10 is identical to that of any Yaesu ft-10,40 or 50.I know, I've had them both apart.The ft-10 and VX-10 are identical except for programming in the micro.

2580. INFO REQ'D - ARRL handbook article 1977

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Philip N Butterfield <phil@bugsley.demon.co.uk>
Message-ID: <bJyaCCAVGBGzEwWt@bugsley.demon.co.uk>
Source record: 96445

On page 274 of ARRL handbook 1977 there is an article by WA1JZC (
presumably deceased or call lapsed as I cannot find it is the
directories) on a communication receiver with a digital frequency
readout. This article is preceeded with an article on a bandpass tuner.
Both of these articles have a Collins Xtal Filter type X455KF300
I am endevouring to trace the input / output impedence characteristics
for this filter as they perform best when correctly terminated.
Can anyone offer any assistance?
73
Phil
G4AAQ
--
Philip N Butterfield

2581. Re: Coax characteristics table at http://www.netcom.com/~wa2ise

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: bohnovic@worldnet.att.net
Message-ID: <33181a9c.60439959@netnews.worldnet.att.net>
Source record: 96446
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.scanners

wa2ise@netcom.com (Robert Casey) wrote:

>I just put up a web page: http://www.netcom.com/~wa2ise/radios/coax.html
>It's a table of coax impedances, attenuation, velocity factors, and max
>voltage ratings. It's the same table I posted last year, just formatted
>for web browsers. Enjoy.
>73s
Robert,
It would be easier to read if it did not have the "leaves" in the
background. Otherwise, great job!
73..de John/K8WJ (K8PXG from 18 Jun 59 to 12 Feb 97)
John/K8PXG in Pembroke Pines, FL

2582. Re: HEY! How about we knock off all the insults and arguments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0103970400190001@news.vcnet.com>
Source record: 96447
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

In article <5evj5g$t6t@sf18.dseg.ti.com>, k5dh@dlep1.itg.ti.com (THE Mustang Maniac) wrote:

> Okay, folks, enough is enough. PLEASE, let's end all of this petty
> arguing, griping, insulting, and personal attacks on each other.
...snip...
Or, in other words, garbage. The next time you are in a supermarket checkout, check out the tabloid headlines, Dean. There is no shortage of garbage. If you don't want some, YOU can choose not to put any in your grocery cart. The Internet has garbage. The choice of reading it is, quite fortunately, YOURS.

--
--Rich-- ag6k, 805-386-3734

2583. Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: vincebucc@aol.com
Message-ID: <19970301124800.HAA18201@ladder02.news.aol.com>
Source record: 96448

I am in need of installing a good ground rod system at my station. I have never used anything other than the electrical ground in house wiring, but with these newer solid-state, IC-impregnated radios, I think it is best to have a good earth ground, not to mention safety requirements also....

A friend has suggested that I use a piece of pipe, about 3-1/2 to 4 feet in lenght to hammer a rod into the ground. He has suggested that black Carbon Steel SKED 80 (preferred) or SKED 40 be used with a suitable cap at one end. The 2-inch diameter pipe is to be slid over the pipe to take the impact of hammering.

I am not familiar with the term SKED 80 to describe the pipe. I believe that it identifies the wall thickness, but am not sure.

Where might I locate a source for pipe of this type?
What kind of expense should I expect for this pipe? Is it available in short lengths?
Has anyone used this method to hammer in a ground rod?

Any other methods or hints?

tnx es 73s,
WA2RSX

2584. C.B. Radio Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: csp@techie.com
Message-ID: <5f8rbt$41@news.owt.com>
Source record: 96449

C.B. Radio modification manual covering over 200 [closer to 300]
different C.B. models.

Manual covers:
Increasing Transmit Power
Modulation Adjustments
Converting Clarifiers to Sliders
Channel Expansion
PLL information
Pre-Amp information and schematic
and More....

** Comes with a 1.44 Meg diskette [IBM format]
with PLL Pinouts, pinout viewer software.

$14.95 (plus $1.50 s&h)

CSP
P.O. Box 6352
Kennewick, WA 99336-0352

2585. Yaesu Digital Voice Recorder DVS-2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Mike Pfeiffer <k5wim@voyageronline.net>
Message-ID: <331845A7.7ED1@voyageronline.net>
Source record: 96450

Anyone have information on monifying this unit to increase the record time or other suggestions about it?

2586. Re: Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5f9cbj$51c@news1.mnsinc.com>
Source record: 96451

He should try the CWCP-5 kit - now THAT is a fun kit and affordable too!
5 watts of CW from TUBES and under $100!

See Electric Radio February issue or read about it at:

http://www.mnsinc.com/bry/hamfiles.htm

don.phelps@infoway.com (Don Phelps) whistled a happy tune like:

|> Rh> Subject: Amateur Radio Kits?
|> Rh> Organization: MindSpring Enterprises

|> Rh> Can anyone tell me who makes amateur, shortwave and/or UHF/VHF radio
|> Rh> kits and how to get in touch with them?

|> Rh> I'm just getting started in amateur radio and am thinking about
|> Rh> building the following:

|> Rh> CW transmitter or transceiver
|> Rh> Amateur transceiver
|> Rh> Shortwave receiver
|> Rh> Morse code practice kit

|> Hi Robert,
|> Start with the morse code practice kit, learn the code and
|> talk to us on the air. It's easier to get started buying
|> used equipment at flea markets and fixing it up.

|> There is a fair amout to build, just getting everything connected
|> up, even when you buy the pieces at the swap meets.
|> Such as your power supplies, antennas, etc.

|> Find an electronics store near you and ask where the closest
|> stores are that have these.

|> But in general, get yourself on the air first, before putting yourself
|> behind with a transceiver kit. There is no equivalent kit of the
|> quality of the old Heathkits because todays electronics technology
|> does not lend itself to cost effective kits.

|>73, Don N6MCE

|>... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
|>___ Blue Wave/386 v2.30 [NR]

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.

You MAY NOT use my email address for unsolicited Email!

2587. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5f9hl3$o6e@mtinsc04.worldnet.att.net>
Source record: 96452

Pipe "schedule" does define the wall thickness. Sched 40 is "typical"
water pressure pipe. Sched 80 is heavy wall.

Would strongly reccommend you go to a building or electrical supply
house and get "real" ground rods. They will be 1/2" diameter, 8 feet
long - either galvanized steel or copper clad. Also get the wire clamp
made to connect the ground wire (keep short as possible). Be sure to
put the clamp on the rod prior to driving in ground. Mushrooming of the
rod can keep the clamp from sliding on later.

Better grounding can be achieved by using multiple rods, fairly close
together (few feet) and bonding together.

I have driven into ground using stepladder and sledge hammer, but isn't
easy. A driver made from a piece of heavy pipe with closed end, slid
over (and slammed down on)the rod is easier. A sledge will be needed
for the last few feet.

Much, much easier is a heavy duty impact machine... Like an "electric
spade" or large "Hilti Drill". These are expensive, but if you can
borrow or rent one, it is worth it. Remove the "bid/spade" and slipe
the gnd rod in.... drives into most ground in minutes with no effort!

73, _Woody_

Vincebucc wrote:
>
> I am in need of installing a good ground rod system at my station. I have
> never used anything other than the electrical ground in house wiring, but
> with these newer solid-state, IC-impregnated radios, I think it is best to
> have a good earth ground, not to mention safety requirements also....
>
> A friend has suggested that I use a piece of pipe, about 3-1/2 to 4 feet
> in lenght to hammer a rod into the ground. He has suggested that black
> Carbon Steel SKED 80 (preferred) or SKED 40 be used with a suitable cap at
> one end. The 2-inch diameter pipe is to be slid over the pipe to take the
> impact of hammering.
>
> I am not familiar with the term SKED 80 to describe the pipe. I believe
> that it identifies the wall thickness, but am not sure.
>
> Where might I locate a source for pipe of this type?
> What kind of expense should I expect for this pipe? Is it available in
> short lengths?
> Has anyone used this method to hammer in a ground rod?
>

> Any other methods or hints?
>
> tnx es 73s,
> WA2RSX

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2588. Site updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: tadunlap@kellnet.com
Message-ID: <33187d2c.5297900@207.126.101.82>
Source record: 96453

I added a chat room to my North Central Ohio Skywarn webpage. Please visit the site and try it out. My intention is to get some experienced
spotters along with some novice spotters in the chat room so they can exchange info, ask questions, etc. Let me know if you like or dislike the
idea. Try it and let me know. Thanks.

http://www.qsl.net/kc8eds

Todd...
KC8EDS
tadunlap@kellnet.com
http://www.qsl.net/kc8eds

2589. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: ke4zv@radio.org
Message-ID: <857232678.19580@dejanews.com>
Source record: 96454

In article <19970301124800.HAA18201@ladder02.news.aol.com>,
vincebucc@aol.com (Vincebucc) wrote:
> I am in need of installing a good ground rod system at my station. I have
> never used anything other than the electrical ground in house wiring, but
> with these newer solid-state, IC-impregnated radios, I think it is best to
> have a good earth ground, not to mention safety requirements also....
>
> A friend has suggested that I use a piece of pipe, about 3-1/2 to 4 feet
> in lenght to hammer a rod into the ground. He has suggested that black
> Carbon Steel SKED 80 (preferred) or SKED 40 be used with a suitable cap at
> one end. The 2-inch diameter pipe is to be slid over the pipe to take the
> impact of hammering.
>
> I am not familiar with the term SKED 80 to describe the pipe. I believe
> that it identifies the wall thickness, but am not sure.

Pipe schedules are a pressure rating. In a given pipe material, higher
schedule ratings tend to correlate with heavier wall thickness.

> Where might I locate a source for pipe of this type?

Users of pressure pipe, such as steamfitters, would have it.

> What kind of expense should I expect for this pipe? Is it available in
> short lengths?

It is expensive, and it comes in 20 foot lengths. You could get someone to
cut you a short piece, or sell you a bit of scrap.

> Has anyone used this method to hammer in a ground rod?

I've used that method in very rocky soils. Weld a pair of handles to the
pipe, and pour it about a quarter full of lead. You want to end up
with a pipe about 3 feet long weighing about 20 pounds Slip the pipe
over the rod, and lift and drop, lift and drop until the rod is driven
into the ground. The lead fill adds weight, and provides a soft enough
driving surface not to mushroom the head of the rod.

> Any other methods or hints?

YES! There are much better methods of sinking a ground rod in most soils
than pounding it in. The method I usually use in clay soil is to dig a
hole about the size of a quart mason jar with a tile spade or posthole
digger where I want the rod. I pour water in the hole and push the rod
into the center of the hole as far as I can (usually only a couple
inches), and then make like I'm churning butter. Every foot or two,
remove the rod from the hole and add a bit of water. In less than 5

minutes, an 8 foot rod can be sunk this way with very little effort at all. Let the mud in the hole dry completely before backfilling the hole. It will sink back down the shaft and form an intimate seal to Earth with the rod.

This is the easiest and fastest method to set ground rods I know of short of using a hydraulic ram. In very rocky soils, you may need to pound a bit to break the rock impeding your progress. In less rocky soils, it is often easier to start over a bit to one side rather than trying to shatter the rock by pounding.

Gary

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2590. Re: INFO REQ'D - ARRL handbook article 1977

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc2661$d6fcb4a0$adc1e1ce@cstevens.usr.com>
Source record: 96455

-----BEGIN PGP SIGNED MESSAGE-----

Philip N Butterfield <phil@bugsley.demon.co.uk> wrote in article
<bJyaCCAVGBGzEwWt@bugsley.demon.co.uk>...
> On page 274 of ARRL handbook 1977 there is an article by WA1JZC (
> presumably deceased or call lapsed as I cannot find it is the
> directories) on a communication receiver with a digital frequency
> readout. This article is preceeded with an article on a bandpass tuner.
> Both of these articles have a Collins Xtal Filter type X455KF300
> I am endevouring to trace the input / output impedence characteristics
> for this filter as they perform best when correctly terminated.
> Can anyone offer any assistance?

Phil,

I don't have the data handy, but I believe you'll find that's a
mechanical filter, not a crystal filter.

I believe the Zin/Zout is about 2K || 30pF.

Check their web site at:

http://www.nb.rockwell.com/filter/ctmf.htm

for more info, including contact information ...

Carl - wa6vse
carl@ais.net

-----BEGIN PGP SIGNATURE-----
Version: 4.5

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2591. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33188fd6.11175690@netnews.worldnet.att.net>
Source record: 96456

But Rich, That's what you spend you life doing to others. On Sat, 01 Mar 1997 02:48:41 -0800, measures@mail.vcnet.com (R. L. Measures) wrote:

>In article <n7ws.266.003353F2@azstarnet.com>, n7ws@azstarnet.com (Wes >Stewart) wrote:
>snip...
>...and so it came to pass that what had be proffered as a pursuit of >science turned into a pusillanimous pursuit of slander.
>
>--
>--Rich-- ag6k, 805-386-3734

Rich,

I'm glad you finally realize what you have been doing. I thought we'd never reach agreement on anything.

Someone told me people see others as they really are, I guess it's true.

73 Tom

2592. Re: Re-engineering Henry amp from FM--->ATV HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3318725f.3631219@netnews.worldnet.att.net>
Source record: 96457

On Sat, 1 Mar 1997 08:22:11 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

>>With less than several times the RF generated base current standing in
>>the component or device shunting the base to ground, bias will move
>>all over the place with drive. The only devices over a peak power
>>level of ten watts or so that I've seen remain linear with a siple
>>divider are FET's.
>
>The bias voltage has to remain stable under maximum drive conditions,
>when the beta of the transistor may fall to as little as 10. With a
>passive (diode) bias regulator, the current that you need to be pushing
>down the divider chain will be not much less than the peak collector
>current in order to obtain good bias regulation.

>Obviously this isn't practical, so successful bipolar linear amplifiers
>use active regulators to obtain a stable bias voltage without wasting
>lots of supply current. See the Motorola Application Notes for examples
>of circuits.

A good test is to use a high value 1/8 watt resistor, perhaps 10k ohms
or so with a very short lead connected to the base.

You can watch the base voltage on the other end with a meter (or
better yeat a scope with a low pass filter on the input) as you apply
drive. The voltage must hold steady (within a few percent) as drive is
varied.

Ian and I are in total agreement. Bias current required in a
non-active regulated bias system, unless the transistor has VERY high
gain at full drive, often approaches the collector current !!!

For ATV or other linear applications with peak powers of more than a
few watts an active regulator is the ONLY way to go.

73 Tom

2593. Differential T tuners?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: dselwa@qualcomm.com
Message-ID: <5f9doq$c7e$1@thefuture.qualcomm.com>
Source record: 96458

I built a differential T tuner about 15 years ago and it seemed quite broadbanded. It is the only tuner I've ever built. I'm wondering if this design tuner is any more broadbanded that the average typical Pi tuner that is so popular?
Dennis
W6EH

2594. AC6V web page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <33188402.3078@aade.com>
Source record: 96459

I visited AC6V's web page and was impressed.
I wanted to put a link to it on my page but screwed it up somehow.
Anyone know this URL let me know
Neil

2595. Info on Bill Irwin of Antique Radio Components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Michael Hsu <mcwhsu@worldnet.att.net>
Message-ID: <33189190.18A5@worldnet.att.net>
Source record: 96460

Hi all,

If you know of or have dealt with Bill Irwin of Antique Radio Components in Northern California, please contact me. I am looking to find out more information about him. Many thanks.

My private email is: mcwhsu@worldnet.att.net

Regards, Michael

2596. Re: AC6V web page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: AC6V <AC6V@ix.netcom.com>
Message-ID: <33189478.1E0B@ix.netcom.com>
Source record: 96461

Neil Heckt wrote:
>
> I visited AC6V's web page and was impressed.
> I wanted to put a link to it on my page but screwed it up somehow.
> Anyone know this URL let me know
> Neil

Hi Neil, Thanks for the kind words on the page, hope it is helpful. It
is at the URL listed below.

73
Rod in San Diego

--
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Hark! For I Have Hurled My Words To The Far Reaches Of The Earth!
What King Of Old Could Do Thus?? -- AC6V (WAZ 10M SSB #118)

2597. Re: HEY! How about we knock off all the insults and arguments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5fa5fs$2u0@news.Hawaii.Edu>
Source record: 96462
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors

R. L. Measures <measures@mail.vcnet.com> wrote:
>Mustang Maniac (CB handle?) wrote:

>> Okay, folks, enough is enough. PLEASE, let's end all of this petty
>> arguing, griping, insulting, and personal attacks on each other.

>Or, in other words, garbage. The next time you are in a supermarket
>checkout, check out the tabloid headlines, Dean. There is no shortage of
>garbage. If you don't want some, YOU can choose not to put any in your
>grocery cart. The Internet has garbage. The choice of reading it is,
>quite fortunately, YOURS.

That's a terrible analogy, Mustang. It's more like every article that
comes across one's newsreader *does* end up in one's grocery cart,
and we have to pick it and toss it out. It's simple to say "Just
hit the N key" but consider the costs involved in transmission and
storage of the garbage. It's better to just use restraint.

Why did this topic appear in r.r.a.boatanchors? - haven't seen any
insults in here at all.

Jeff KH2PZ

P.S. Still looking for the 60s edition of the ARRL "How To Become
A Radio Amateur." Also looking for a Heath HG-10B VFO for my HW-16.

2598. Re: Best Frequency Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: daveaa1a@ssih.com
Message-ID: <5fa7rh$udl@xensei3.xensei.com>
Source record: 96463

> rkarlqu@scd.hp.com (Richard Karlquist) writes:
> In article <E6A316.62A@eskimo.com>, Steven Swift <novatech@eskimo.com> wrote:
> >William W Janssen <billj@9calweb.com> writes:
> >
> >>I think I am getting accuracy of about 10^-10. I have had
> >>trouble with phase delay changes in my receive equipment of about
> >>20 nanoseconds. It seems to be better now that I removed a tuned
> >>circuit from my antenna coupler.
> >
> >This is pretty good. You can get better with GPS with a little work.
> >Pretty easy to get 10e-11.
>
> >>Bill K7NOM
>
> The short term stability of GPS itself is only 5 x 10^-11. You have
> to average for a whole day to get down to 10^-11 and that only works
> well if your oscillator has low aging AND you measure the aging and
> factor it in. High end crystal oscillators typically age 10^-11
> per hour. The cream of the crop of these will age at least several
> parts in 10^11 per day. And of course for 10^-11 to mean much, the
> short term stability of your oscillator should be parts in 10^12, which
> only the best oscillators do. Finally, you would have to compare
> your standard against a cesium frequency standard (or maybe a very good
> rubidium that has just been calibrated) to be sure you have everything
> working at that level. I wouldn't describe that as "pretty easy".
>
> Rick Karlquist N6RK
> rkarlqu@scd.hp.com
>
>>>>
Hi Rick, Nawww this is good for what i want 10-8 or -9th and the source is free Loran C rightinto my scope.. The James Knight 5 mhz. Xtal time base doesn't seem to wander much after a few weeks on line.. I drive a HP clock and have yet to see the second change any yet..
I just free run against Loran C and do see some diurnal variation but it's still way good for BPSK on HF i think.. also lets me know just where im at on 10ghz.. Way within 100 hz but not god enuf yet for CCW..
Any line on better Xtal time base oven etc?? 73 de daveaa1a

2599. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <DGMhUKAcRJGzEw0N@lfheller.demon.co.uk>
Source record: 96464

In article <19970301124800.HAA18201@ladder02.news.aol.com>, Vincebucc
<vincebucc@aol.com> writes
>
>I am in need of installing a good ground rod system at my station. I have
>never used anything other than the electrical ground in house wiring, but
>with these newer solid-state, IC-impregnated radios, I think it is best to
>have a good earth ground, not to mention safety requirements also....
>
>A friend has suggested that I use a piece of pipe, about 3-1/2 to 4 feet
>in lenght to hammer a rod into the ground. He has suggested that black
>Carbon Steel SKED 80 (preferred) or SKED 40 be used with a suitable cap at
>one end. The 2-inch diameter pipe is to be slid over the pipe to take the
>impact of hammering.
>
>I am not familiar with the term SKED 80 to describe the pipe. I believe
>that it identifies the wall thickness, but am not sure.
>
>Where might I locate a source for pipe of this type?
>What kind of expense should I expect for this pipe? Is it available in
>short lengths?
>Has anyone used this method to hammer in a ground rod?
>
>Any other methods or hints?

I've seen copper-plated steel ground rods in a local electrical shop. I
think they were about 4' long. You can probably find something similar.

A method of getting ground rods into the ground that I saw mentioned
somewhere is to pour water into the hole. You hammer it in a bit, pour
in some water, wait for it to soak in, and keep repeating the process.
Apparently, it goes in very easily. I haven't tried it, myself.

Leon
--
Leon Heller, G1HSM
leon@lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home)
+44 (0) 1344 385556 (work)

2600. Re: Torriods and working out???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: rohrwerk@pconline.com
Message-ID: <5fa8aa$am1$1@bell.pconline.com>
Source record: 96465

Steve Simpson (Steve@chubs.DEmon.co.UK) wrote:
: Is their a computer program that let's you input some simple figures
: like wire size, type of torriod (eg T50-6) size of former etc, and works
: out how many turns you need for a given inductance?

: Steve "Chubby" Simpson

You can find all this data in the ARRL Handbook and some other homebrew reference sources. You have to know the A(L) value -- inductance per 100 turns or something like that -- then plug that and your desired inductance into the formula.

Computer program? Use your handy dandy spreadsheet. I have a big spreadsheet of computations in Excel 2.2 on my ancient Mac and all these calculations are a snap after some initial headscratching to enter the formulas. Even early versions of such software can do a "table lookup" function also, so you can have all the data entered once for a number of toroid types and sizes.

Good luck

John Seboldt K0JD
Minneapolis, MN

2601. Wind your own coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: aa5mt@gate.kc5aug.ampr.ORG
Message-ID: <290275@gate.kc5aug.ampr.org>
Source record: 96466

MFJ has a new reprint of Doug DeMaw's book,
Ferromagnetic Core Design & Application Handbook.

It is an excellent reference book. It has tables, charts,
materials, and resonably simple formulas. He has a fairly
wide range of real circuits using the information given.

It's easy to spot on the shelf - hot pink!

AA5MT
Tom Stone

2602. Re: Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5faaoo$l56$1@excalibur.flash.net>
Source record: 96467
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Come on guys.....edit those headers before replying. This is
filling up a lot of newsgroups that don't have anything to do
with the subject! It's easy! Just delete all the newsgroups
that you don't read or have nothing to do with what you are talking
about. This thread has no connection to little LEOs anymore!

Ken K5MBV

2603. Re: Wind your own coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5faag3$q0q@hpcvsnz.cv.hp.com>
Source record: 96468

Jan Axing (janax@li.icl.se) wrote:

: Quickies for air wound solenoid coils I'm using are:

: L=(0.008*d^2*n^2)/(3*d+9*l) single layer

: where d=average diameter
: l=length of coil
: a=radial thickness of winding (multilayer)
: n=# of turns

: All measures are in millimeters. For inches, replace 0.008 with 0.2032.
: The resultant L will pop out in microhenries. Average diameter is
: diameter to the center of the winding, for single layer it's simply
: inner diameter + wire diameter.

The one I've always seen, for inch measures and using r for radius
instead of d for diameter, is

L = (n*r)^2/(9r+10l)

Thought it would be interesting to see how this compared with what
Jan posted. His can be rearranged to:

L = (n*r)^2/(7.382*r+11.072*l)

The result is identical for a coil with l/r = 1.508, and within about 5%
for coils up to twice as long as their diameter; the formulas agree
within 10% for "infinitely" long coils. For short coils, they agree
within about 3% down to length equal to radius (rather a stubby coil),
and within 10% for length only 40% of radius (20% of diameter).

Comparing each with another much more complicated formula which I
believe to be more accurate, Jan's formula is closer for short
coils (l < r, approx.) and the "9r+10l" one is closer for longer
coils. But either should be just fine for normal amateur work.
Always expect to trim coils (or tune with variable caps) a bit in
applications where the value is critical, such as in tank
circuits...inductance drops in the presence of shielding, and
stray capacitance can mess you up.

I've seen things in ham magazines suggesting that these formulas
don't work well for small coils, things in the 5mm diameter range and
smaller. But physics tells us that if you scale all dimensions of
an air-core coil, the inductance will scale exactly linearly with
size, which is just what both those formulas give as a result. I
suspect any "errors" have to do with parasitics (like capacitance)
that weren't properly accounted for.

--
Cheers,
Tom
tomb@lsid.hp.com

2604. Looking for ladder or cohn program.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <3318BD4D.3C01@aeneas.net>
Source record: 96469

I'm needing a program for calcluating ladder and/or cohn crystal
filters. Is there any shareware or freeware programs available
via the internet? What about commerical programs?
Thanks in advance, Mark
mmans@aeneas.net

2605. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <3318BC83.5EA1@emily.net>
Source record: 96470

Instead of making your own driver out of schedule 80 pipe, you can go to a farm supply store (or a hardware store in rural areas) and pick up a steel fence post driver, probably for under 20 dollars. However, you still need to do the final bashing with a heavy-duty sledge because the fence post driver overlaps the ground rod by about 18 inches.

73 from Lyle, K0LR

2606. FS: Heath WX Stns!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Michael Kassay <mkassay@sympatico.ca>
Message-ID: <3318FA31.2506@sympatico.ca>
Source record: 96471
Cross-posted to:
rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.antenna,rec.radio.scanner

For Sale...
I have 2 Heathkit ID-5001 computerized weather stations
for sale.

The first unit is still in kit form. The second unit is built.

This station is capable of measuring wind speed, direction, temperature,
with optional
indoor/outdoor humidity sensors, RS-232, and rain guage.

The built unit has no sensors, and the kit is missing a couple minor
parts that can be obtained at any electronic store.. Either combine the
2 units to have one working, which means you have spare parts or
purchase the missing sensors, and have 2 working units..

The reason for selling is MOVING...need the bucks, otherwise they
would never leave the shack!

No reasonable offer refused...

--
* *
*
Michael Kassay - Barrie, Ontario, Canada.
VE3MKX
E-Mail -
MKassay@Sympatico.ca
Packet - VE3MKX @ VE3FJB.#con.on.can.noam

2607. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: chestert@pressroom.com
Message-ID: <331a9ec7.34925289@199.0.216.204>
Source record: 96472
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Fri, 28 Feb 1997 08:22:56 -0500, "Christopher Cox" <cobox@netexp.net>
wrote:

>The Hardline is good stuff, but its 75 Ohm. The drop line is not lowloss
>and is also 75 Ohm (you can have it!)
>
>Christopher Cox
>KC8FRJ
>TRA#4901
>
>Peter <gremlin@iaccess.com.au> wrote in article
><01bc2533$9faff540$a24a05cb@gremlin>...
>> In Australia Optus Cable Vision is rolling out a massive overhead cable
>> television and phone system. The system comprises optic fibre and coax.
>> Question-:
>> What are the caracteristics of the coax. impedance, loss etc.
>>
>> Regards
>>
>> Peter Miles
>> VK3YSF
>>
One of the things you can do with dual cable (75 ohm video) is use it as open
wire line. Simple feed the two center conductors and do nothing with the
shields of either cable. Advantage is you can have open wire line capability
without worry about it laying on the grond or touching some object. A friend
of mine uses it to feed his 40m yagi with a KW and it works fine.

Tom/W4BQF

Chester Alderman
W4BQF - Tom -
chestert@pressroom.com

2608. Re: Looking for ladder or cohn program.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <3318FE09.53B4@aade.com>
Source record: 96473

Mark Mansfield wrote:
>
> I'm needing a program for calcluating ladder and/or cohn crystal
> filters. Is there any shareware or freeware programs available
> via the internet? What about commerical programs?
> Thanks in advance, Mark
> mmans@aeneas.net
You can try out my filter design and analysis program
it designs crystal ladder filter, not cohn but butterworth or
chebyshev.

http://www.aade.com

click on filter design program.

Neil

2609. Re: WTB-Plate xfmr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: dnorris@k7no.com
Message-ID: <33178544.1789587@news.syspac.com>
Source record: 96586
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

jmul@microlink.net wrote:

>I am wanting a plate transformer, 115-230vac dual primary, 2600-3000vac
>secondary @ 1amp minimum. Also want oil filled capacitor 25-50uf 4kv.
>If you have an xfmr or capacitors near the values listed, I'd appreciate
>hearing from you. Thanks John

Building a TTL keyer, no doubt <g>

2610. Re: SideBand

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc25e2$a181b480$90c1e1ce@cstevens.usr.com>
Source record: 96587

'Grif' w. keith griffith <kgriffit@wolfenet.com> wrote in article
<33162484.60FB@wolfenet.com>...
> Somebody give me an understandable description of the Weaver method of
> generating single sideband? (Little or none calculus or above!)
>

Mix audio baseband with I and Q (0 and 90 degree phases)
of a tone that falls in the center of the source baseband spectral
response.

(i.e., for a 300 Hz -> 3kHz source signal, at 1650 Hz)

This produces a "folded-over" copy of the signal that extends from
DC to 1350 Hz (the signal of interest occupies ((3000-300)/2) Hz)
and an image further up in the baseband spectrum ... (assume good
rejection of direct feedthrough.)

Low pass filter both I and Q channels at ~1350 Hz to eliminate all
but the desired "folded over" copy of the desired signal energy.

Mix both I and Q baseband signals with I and Q of a *channel-center* RF
or IF carrier.

Sum the outputs of the mix in the preceeding sentence. The phasing
of the I and Q carriers in the two mixes determines whether the summed
signal is "upper" or "lower" sideband ... I use the "quotes" because,
unlike other methods, the suppressed carrier is not positioned above
or below the "sideband" but in the exact center of it ... with this method,
both the "upper" and "lower" sidebands occupy *exactly the same*
spectrum. This provides the sytematic advantage that imperfect
suppression of the undesired sideband does not splatter the adjacent
channel, but only causes a modest increase in the apparent level of
distortion in your recovered signal.

If your mailer supports MIME attachments, I can send you a block
diagram.

I own a patent on an extension of Weaver's technique which
adds to the architecture in a way that allows the carrier to re-inserted
in a controlled fashion to be used as a "pilot" and provides a fully
"feedforward" AGC/AFC capability that allows the companion receiver
architecture to effectively regenerate "faded" signals to the "unfaded"
state, removing the adverse effects of the multipath channel and
allowing SSB-like techniques to be applied in the mobile multipath
environment well into the low microwave region.

Of further benefit is the fact that the same architecture also permits
full, backward-compatible interoperability with FM and can "do"
a number of digital modulation modes as well ... also with the
inherent correction for the multipath channel impairments which
typically degrade BERs to undesirable levels ... and at far higher
data rates than previously practical in mobile systems ... a major benefit.

Ooops ... my last two paragraphs are beginning to wander a bit beyond
your original question, but I hope I've been helpful.

73,
Carl - wa6vse
carl@ais.net

2611. F.S. - Tubes, radios & much misc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970301015901.UAA11219@ladder02.news.aol.com>
Source record: 96588

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #201-T.

2612. Re: Re-engineering Henry amp from FM--->ATV HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33177e64.33868416@netnews.worldnet.att.net>
Source record: 96589

On 24 Feb 1997 04:34:05 GMT, norman <norsan@bright.net> wrote:

>First the amp, if its for FM is operating class c, to make it linear (AB)
>you need to foward bias the amp stages. This can be done by raising the
>base above ground by .7 volts. This can be done with 1 diode drop and a
>resistor divider (10 to 100 ohms). I have done this with a Henry 100
>watt on UHF. For ATV the amp must be very linear--a foward bias of 50 to
>100 ma should be fine.

That depends on the RF generated base current of the transistor. If
the base current is 10 mA at full drive, 100 mA of standing current in
a shunt device connected directly from the base to ground may be
enough.

With less than several times the RF generated base current standing in
the component or device shunting the base to ground, bias will move
all over the place with drive. The only devices over a peak power
level of ten watts or so that I've seen remain linear with a siple
divider are FET's.

Just because the PA is biased in linearity at zero drive does not mean
it stays there, especially with high peak to average powers like fast
scan TV.

73 Tom

2613. RE:HW-8 MAUAL -FOUND

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: nimski1@aol.com
Message-ID: <19970301031400.WAA16982@ladder02.news.aol.com>
Source record: 96590

THANKS FOR THE HELP ON LOCATING A HW-8 MANUAL, A SOURCE HAS BEEN FOUND.
73'S STEVE W1SN

2614. UHF Hybrid SHW1376-2 Need help...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: Christophe Suarez <f5pgp@babel.asi.fr>
Message-ID: <3317D12C.6BB2@babel.asi.fr>
Source record: 96591

Hello,

I've got a SHW1376-2 440 Mhz hybrid amplifier (MOTOROLA) but I still need the data sheet or some infos on how to connect it. Help is welcome...

73 de Chris.

--

****
* Suarez Christophe *
* Email f5pgp@babel.asi.fr *
* Web http://www.asi.fr/~f5pgp/ *
* Packet radio F5PGP@F6BIG.FRHA.FRA.EU *
* DX Cluster F6KDF 73 ! *
****

2615. Re: Re-engineering Henry amp from FM--->ATV HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <GyLyGEAzc+FzEw$R@ifwtech.demon.co.uk>
Source record: 96592

Charles Thomas Rauch wrote:
>On 24 Feb 1997 04:34:05 GMT, norman <norsan@bright.net> wrote:
>
>>First the amp, if its for FM is operating class c, to make it linear (AB)
>>you need to foward bias the amp stages. This can be done by raising the
>>base above ground by .7 volts. This can be done with 1 diode drop and a
>>resistor divider (10 to 100 ohms). I have done this with a Henry 100
>>watt on UHF. For ATV the amp must be very linear--a foward bias of 50 to
>>100 ma should be fine.
>
>That depends on the RF generated base current of the transistor. If
>the base current is 10 mA at full drive, 100 mA of standing current in
>a shunt device connected directly from the base to ground may be
>enough.
>
>With less than several times the RF generated base current standing in
>the component or device shunting the base to ground, bias will move
>all over the place with drive. The only devices over a peak power
>level of ten watts or so that I've seen remain linear with a siple
>divider are FET's.

The bias voltage has to remain stable under maximum drive conditions,
when the beta of the transistor may fall to as little as 10. With a
passive (diode) bias regulator, the current that you need to be pushing
down the divider chain will be not much less than the peak collector
current in order to obtain good bias regulation.

Obviously this isn't practical, so successful bipolar linear amplifiers
use active regulators to obtain a stable bias voltage without wasting
lots of supply current. See the Motorola Application Notes for examples
of circuits.

>
>Just because the PA is biased in linearity at zero drive does not mean
>it stays there, especially with high peak to average powers like fast
>scan TV.

Absolutely. The bad reputation of bipolar "leenyears" is mostly due to
poor bias regulation... well, maybe that cause comes second after gross
overdrive!

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2616. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-01 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0103970248410001@news.vcnet.com>
Source record: 96593

In article <n7ws.266.003353F2@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) wrote:
snip...
...and so it came to pass that what had be proffered as a pursuit of science turned into a pusillanimous pursuit of slander.

--
--Rich-- ag6k, 805-386-3734

2617. Wanted Ant. elements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: "Richard F. Gillette" <r.f.gillette@ieee.org>
Message-ID: <3319D620.3F8B@ieee.org>
Source record: 96395

For a club project we are looking for a source of portable radio
collapsible antenna elements. Must extend to 19", collapse to
the smaller the better (or fold 90 degrees when collapsed). When I
did not need same they were all over the surplus market, but
I do not remember who had them! Thanks for any help. EX W9RSU
--
Richard F. Gillette PE, W9PE, Board Member, Harper CC \\////
RF gillette inc. PO Box 1605, Palatine, IL 60078-1605 (oo)
r.f.gillette@ieee.org, v)847-526-2626, f)847-526-2944 ooOO=={}==OOoo=

2618. HF Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: "Christian M. Arnaut Sr." <acetech@gatecom.com>
Message-ID: <01bc2745$ab5c2260$ab1157c6@acetech.gatecom.com>
Source record: 96396
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Several years ago 73 ran an article regarding how to rewind coils on a
Radio Shack CB antenna. The article showed how to rewind 10, 20, 40 & 80
meters. Does anyone have this article still???
I am interested in just the chart of wire sizes and number of turns.
Thanks in advance for any help you can give.

Chris Arnaut
N8TGC
acetech@gatecom.com

2619. Career Opportunity

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: "Maha Communications. Inc." <williamc@maha-comm.com>
Message-ID: <5fdm0v$8um@bolivia.earthlink.net>
Source record: 96397

Dear Friends,

Maha Communications is a rapid growing company, and we are looking for
sales specialist!

1. Sales Specialist
Speak Fluent English
Some technical background of two-way/ham radio
Willing to take the challenge
Speak/Write Spanish (OPTIONAL)

Our company production lines include: Battery Pack,
Speaker/microphone,
R.F. Amplifier, Antenna, and accessories. Please visit
http://www.maha-comm.com/ for detail information on our products.

We are located at Brea, Southern California, in Orange County. If you
are interested in this job, please send e-mail to sales@maha-comm.com

2620. Career Opportunity

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: William Chueh <williamc@maha-comm.com>
Message-ID: <5fe00r$8ek@argentina.earthlink.net>
Source record: 96398

Dear Friends,

Maha Communications is a rapid growing company, and we are looking for
sales specialist!

1. Sales Specialist
Speak Fluent English
Some technical background of two-way/ham radio
Willing to take the challenge
Speak/Write Spanish (OPTIONAL)

Our company production lines include: Battery Pack,
Speaker/microphone,
R.F. Amplifier, Antenna, and accessories. Please visit
http://www.maha-comm.com/ for detail information on our products.

We are located at Brea, Southern California, in Orange County. If you
are interested in this job, please send e-mail to sales@maha-comm.com

2621. Career Opportunity

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: William Chueh <williamc@maha-comm.com>
Message-ID: <5fe00i$8ac@argentina.earthlink.net>
Source record: 96399

Dear Friends,

Maha Communications is a rapid growing company, and we are looking for
sales specialist!

1. Sales Specialist
Speak Fluent English
Some technical background of two-way/ham radio
Willing to take the challenge
Speak/Write Spanish (OPTIONAL)

Our company production lines include: Battery Pack,
Speaker/microphone,
R.F. Amplifier, Antenna, and accessories. Please visit
http://www.maha-comm.com/ for detail information on our products.

We are located at Brea, Southern California, in Orange County. If you
are interested in this job, please send e-mail to sales@maha-comm.com

2622. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: gsparks@ix.netcom.com
Message-ID: <3319ebdf.5240339@nntp.ix.netcom.com>
Source record: 96400

On 1 Mar 1997 12:48:43 GMT, vincebucc@aol.com (Vincebucc) wrote:

>
>I am in need of installing a good ground rod system at my station. I have
>never used anything other than the electrical ground in house wiring, but
>with these newer solid-state, IC-impregnated radios, I think it is best to
>have a good earth ground, not to mention safety requirements also....
>
>A friend has suggested that I use a piece of pipe, about 3-1/2 to 4 feet
>in lenght to hammer a rod into the ground. He has suggested that black
>Carbon Steel SKED 80 (preferred) or SKED 40 be used with a suitable cap at
>one end. The 2-inch diameter pipe is to be slid over the pipe to take the
>impact of hammering.
>
>I am not familiar with the term SKED 80 to describe the pipe. I believe
>that it identifies the wall thickness, but am not sure.
>
>Where might I locate a source for pipe of this type?
>What kind of expense should I expect for this pipe? Is it available in
>short lengths?
>Has anyone used this method to hammer in a ground rod?
>
>Any other methods or hints?
>
>tnx es 73s,
>WA2RSX
Vince,

I have used the method Gary spoke of by working the pipe in with
water, it works very well, don't force it and get it stuck, take it
easy and you will be able to get it down quite well. The other
suggestions are good as well, especially buying ground rods that are
copper clad. I do not recommend clamps though, use heavy copper braid
and braise it to the rods with a torch. I discussed this with an ex
military explosives expert, and he recommended 8 rods 1 meter apart in
a rectangle, all braised with copper pipe between them, and then 3/4"
copper pipe to the shack. He claimed incredible increases in signal
strenght and reduced noise with this setup. He also claimed with
using the copper clad rod, and braising the connectorsand he has seen
his old installations still blow circuit breakers of generators
connected to two systems (the method he used to test the ground) with
all of the steel rod rusted away and just the clad still in the
ground.

His theory is placing the rods in a rectangle or circle if you have the real estate, emulate a cage antenna in the ground, increasing the bandwidth and efficiency.

Good Luck,

Glenn Sparks KI5GY

2623. Audio TS440 on ssb?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: George <kilowatt@jadeinc.com>
Message-ID: <01bc2707$5f0a5be0$afe01ece@george>
Source record: 96401
Cross-posted to: rec.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Just got a ts440s and have been told the ssb audio is low. FM and AM
appear to supply sufficent drive, whils the SSB clarity sounds like an
early modle HT with the same mikes as in the FM/AM tests?
I can't seem to locate the internal ADJUStMENTS any help would be really
appreicated.

73's
George

2624. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <331A1069.C09@earthlink.net>
Source record: 96402
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi Tony,
you are correct....there IS no TYPE ACCEPTANCE for amateur gear other
than Part 15 for the rcvrs....IF MR Gasta could read along, I point him
and others (Phil, YOU need to read this also) to Page 12-6 of the ARRL
"FCC RULE BOOK" 10th edition 1st printing (copyrighted ARRL 1995)...
And I QUOTE:

"Like other radio services, amateur equipment must meet certain
standards.
Unlike other services, however, most amateur equipment does not have to
be TYPE ACCEPTED. Type acceptance is an equipment authorization granted
by the FCC, based on equipment-measurement data submitted by the
applicant...."

and on pages 12-7 & 8:

"There is one type of amateur equipment that does require type
acceptance. In 1978, the FCC banned the manufacture and marketing of any
external radio-frequency power amplifier or amplifier kit that is capable
of operating on any frequency below 144 Mhz UNLESS the FCC has issed a
grant of type acceptance for that model amplifier."

UNQUOTE

73
Chris
WB5ITT
ARRL Technical Specialist North Texas
FCC Commercial PG-9-5322 (1st licensed 1974)
20+ yrs in two way land mobile, telecommunications, broadcast fields

Anthony R. Gold wrote:
>
> I accept your words without question. However I repeat my previous
> allegation that radio amateurs are *not* required to use any type
> accepted radios, and specfically I continue to insist that the
> Motorola sets deigned for other services are perfectly legal for use
> in the amateur service, contrary to what had been stated previously
> in this thread.
>
> Regards,
> --
> Tony - G3SKR / W2TG

2625. Re: PA lowpass filters as matching networks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: Jon Jenkins <academic@onthenet.com.au>
Message-ID: <33199307.542C@onthenet.com.au>
Source record: 96474

John Seboldt wrote:
...a very interesting story.

Perhaps a good RF simulator could have helped here.

Jon

--

Name: Dr Jon Jenkins
Org: Academic Technologies Bongaree Rd,
Voice/Fax: 61-7-55-905-008 Terranora,
Inet: academic@onthenet.com.au NSW, AUSTRALIA 2486
Web: http://www.onthenet.com.au/~academic

Son(3): "Daddy, why did God put the dinosaurs here first ?"
Daughter(6):"To make it interesting for us!"...think about it !!

2626. Re: Haw do I calculate a coil for 100 Mhz ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: Jon Jenkins <academic@onthenet.com.au>
Message-ID: <3319939F.F1D@onthenet.com.au>
Source record: 96475

Douglas "Lonely Planet Boy" Shawhan wrote:
>
> On Sat, 22 Feb 1997, Jan Axing wrote:
> > > Can somone calculate for me an coil at 50 Ohm at 100 Mhz.
> > >
> > > What diameter, and haw many turns, and thikness of the wire ?
> >
> > I suppose you want a coil whose reactance is 50 ohm at 100 MHz.
> > That will be around 80 nH of inductance. Try 5 turns of 0.7 mm
> > wire with 5 mm inner diameter and just over 7 mm long.
> > ---
> > Jan, SM5GNN
> > Linkoping, Sweden

Have a look at the Web site below. RF does all sorts
of inductors.

Jon

--

Name: Dr Jon Jenkins
Org: Academic Technologies Bongaree Rd,
Voice/Fax: 61-7-55-905-008 Terranora,
Inet: academic@onthenet.com.au NSW, AUSTRALIA 2486
Web: http://www.onthenet.com.au/~academic

Son(3): "Daddy, why did God put the dinosaurs here first ?"
Daughter(6):"To make it interesting for us!"...think about it !!

2627. FS: Electronic Books

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: ekugrad@mindspring.com
Message-ID: <5fa3bd$vla@camel1.mindspring.com>
Source record: 96476

Electronic Switching Theory and circuts
by Beuscher, Budlong, Haverty, Waldbaum
1971 Van Nostrand &Reinhold Co.
369 pages
Excellent condition
$15 shipped

Electrial Engineering Laboratory Experiments
by Richer and Tucker
1934 McGraw Hill
404 Pages
Good condition Notes written on a few pages
$13 shipped

Complete Guide to Reading Schematic Diagrams
by John Douglas-Young
1972 Parker Publishing Co.
264 pages spiral bound
Very good condition
$13 shipped

Reliable Electronic Assembly Production
by C. E Jowett
1970 Tab books
185 pages
Excellent condition
$10 shipped

Electronic Puzzles and Games
by Matthew Mandl
1972 Tab books
127 pages
Very Good condition
$5 shipped

Electronic Hobbyists Handbook
by Rufus Turner
1970 Tab books
160 Pages
Very Good Condition
$5 shipped

2628. Re: The guts of the typical ham.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5fans3iob1@excalibur.flash.net>
Source record: 96477
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

What would it take to get you AOL CB Codefree types to edit
your headers so you aren't SPAMing all these newsgroups? @#$^(%* & phooey
Ken K5MBV

2629. WTB RF Choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: kb7ww@chatusa.com
Message-ID: <5fan99$f7f@lex.zippo.com>
Source record: 96478

Wanted: National R-1000U or equiv

KB7WW@SignalONE.com

2630. Re: Ham-Homebrew Digest V97 #145

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: rjulian492@juno.COM
Message-ID: <19970301.222825.4303.20.RJulian492@juno.com>
Source record: 96479

ok. i'll bite. what are spammers?
ron n0oef the FNG.

2631. Re: Differential T tuners?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33192068.44601767@netnews.worldnet.att.net>
Source record: 96480

On 1 Mar 1997 14:16:58 GMT, dselwa@qualcomm.com (Dennis Selwa) wrote:

> I built a differential T tuner about 15 years ago and it seemed quite
>broadbanded. It is the only tuner I've ever built. I'm wondering if this
> design tuner is any more broadbanded that the average typical Pi tuner
>that is so popular?
> Dennis
> W6EH

What type and value components did you use Dennis?

73 Tom

2632. Lampkin 107C - Manual ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: kd4qhh@gate.net
Message-ID: <3319265f.4330122@news.gate.net>
Source record: 96481

H i Tom here...

I have a Lampkin 107C Service monitor, need a copy of the operators / service manual...? Unit works but could be more useful with full documentation... Tnx De KD4QHH

73'

2633. Need 1/4" metal shaft coupler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970301183200.NAA10093@ladder02.news.aol.com>
Source record: 96482

I need a metal body shaft splice for 1/4-inch shafts. This is to repair
a SX-28 receiver with a broken off tuning shaft. I need to splice in a
new
section of 1/4-inch shaft to repair this classic! I have seen these
splices
at flea-markets. I need a solid splice -- the flexiable shaft couplers
will
not work properly.

Please check your junque boxes!!!
Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

2634. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: rapuppa@lightspeed.net
Message-ID: <331949bf.12826283@news.lightspeed.net>
Source record: 96483
Body handling: HTML body converted to readable text

On 1 Mar 1997 12:48:43 GMT, vincebucc@aol.com (Vincebucc) wrote:

<<
<>if using pipe you might try mashing the end down
>>"the end that goes in first" and leaving a small opening
>>say less than 1/2 I.D. of pipe and hooking a hose to the
>>top end and using it as kind of a water powered post hole digger?
>>start a hole with a spade or trowell and give it a go just a thought??
>>goodluck 73 rapuppa

2635. Re: Wind your own coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <VI2WYDAKOUGzEwHn@ifwtech.demon.co.uk>
Source record: 96484

Tom Bruhns wrote:
>Comparing each with another much more complicated formula which I
>believe to be more accurate, Jan's formula is closer for short
>coils (l < r, approx.) and the "9r+10l" one is closer for longer
>coils. But either should be just fine for normal amateur work.

This is certainly true for coils used on HF, typically of the order of microhenries.

>Always expect to trim coils (or tune with variable caps) a bit in
>applications where the value is critical, such as in tank
>circuits...inductance drops in the presence of shielding, and
>stray capacitance can mess you up.
>
Good advice

>I've seen things in ham magazines suggesting that these formulas
>don't work well for small coils, things in the 5mm diameter range and
>smaller. But physics tells us that if you scale all dimensions of
>an air-core coil, the inductance will scale exactly linearly with
>size, which is just what both those formulas give as a result. I
>suspect any "errors" have to do with parasitics (like capacitance)
>that weren't properly accounted for.

What Tom says is true - the formula should scale exactly to any size, but only if ALL aspects of the coil are scaled: winding diameter, length and wire diameter. It's the last of these which can be mechanically difficult to scale, and often isn't.

One parameter which may change due to incorrect scaling is the Q - but not always for the worse. W7XC published an article in QST which showed that thicker wire doesn't always give a lower Q; for any diameter and length of close-wound coil there is an optimum wire gauge.

The other area where the traditional formula breaks down is in coils of a few tens or hundreds of nanohenries - the kind you might want to use in VHF/UHF lowpass filters, for example. These coils tend to have very few turns - often two or less, in a kind of long spiral - and leads that are a significant fraction of the total length of wire. Such coils behave partly like inductors and partly like transmission lines if mounted above a groundplane (as they usually are). It's very difficult to measure the inductances of these tiny coils, except maybe in a test oscillator, and even then you won't have a pure inductance.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2636. Re: Looking for ladder or cohn program.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <Z5vXrGASIWGzEwIA@lfheller.demon.co.uk>
Source record: 96485

In article <3318BD4D.3C01@aeneas.net>, Mark Mansfield <mmans@aeneas.net>
writes
>I'm needing a program for calcluating ladder and/or cohn crystal
>filters. Is there any shareware or freeware programs available
>via the internet? What about commerical programs?
>Thanks in advance, Mark
>mmans@aeneas.net

You can model them very easily using Spice, including the free
educational version of PSpice. It doesn't help with the initial design,
of course.

Leon
--
Leon Heller, G1HSM
leon@lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home)
+44 (0) 1344 385556 (work)

2637. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: Brosh <brosh@matnet.com>
Message-ID: <3318C416.16C7@matnet.com>
Source record: 96486
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Peter wrote:
>
> In Australia Optus Cable Vision is rolling out a massive overhead cable
> television and phone system. The system comprises optic fibre and coax.
> Question-:
> What are the caracteristics of the coax. impedance, loss etc.
>
> Regards
>
> Peter Miles
> VK3YSF
Cable TV coax is 75 ohm, at least here in the USA. It actually can be used to feed dipoles, but I like it for making dipoles and loops-cut it to the usual length for your band, minus about 10% for the lower velocity factor, break the braid in the middle for the connection to the feed line, and short the center conductor to the braid at the ends. For loop antennas, use a single piece cut to length, break the braid at one corner for connecting the feed line, and short the center conductor together at the same spot. It also is very useful for making impedance matching stubbs, I use the formula 246/f in Mhz, x .72 for foam core or .66 for solid core, which will match that coaxial loop to 50 ohm feed line. I use a coaxial loop with the 75 ohm matching stub on 20 meters, SWR less than 1.8 accross the band, and less than 1.5 on 10 meters, and have had great success with it. If you can get it cheap, don't be afraid to pick some up and experiment-just make certain that you have enough to complete your project with a single piece, as it does not tolerate being spliced.
73's es CUL de Chris WL7PV

2638. Help 20meter Q amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: DENNYV <DENNYV@clarityconnect.com>
Message-ID: <3319F106.72F8@clarityconnect.com>
Source record: 96487

I have just built a Ramsey 20 watt amp for 20 meters heres my problem: I get power out of the amp o.k but when I modulate the radio the T/R relay chatters in response to the modulation. The version of the AMP is 1.5 and was kitted in 1994 does anyone know of an update or upgrade to the kit. I have found the ramsey home page but have found nothing on this problem. I would like to get this running it is to be used with a 20 meter white mountain kit ANY IDEAS? 73 Denny AD3O

2639. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: "William A. Wetzel" <n6rky@pacbell.net>
Message-ID: <3319BC67.5CE1@pacbell.net>
Source record: 96488
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Jeffrey Herman wrote:
> You're sore because we've presented some valid reasons (aside from
> the legal issue) for not using an amateur radio for out-of-band
> service. Don't be sore - just open your wallet and *buy* the proper
> radio for your needs.
>
> Jeff KH2PZ (former fireman *and* former Coast Guard radio officer)

Jeff,

My statements were that modifying amateur radio equipment was and is poor engineering practice. That means that I am against it. The legal issue is not withstanding. If experimentation is the reason; then it is a good way to learn. BUT IT DOES NOT MEAN IT IS ACCEPTABLE FOR THAT SERVICE!

As a "radio tweaker", which Dana has called me... I know better to take a ham rig and substitute it for PROPER EQUIPMENT.
--
William A. Wetzel
N6RKY@PACBELL.NET
N6RKY@JUNO.COM

2640. FS: Kenwood YK-455C-1 500Hz Mech.Filter for Ts140/680

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <3319c01f.4113450@news.interbusiness.it>
Source record: 96489
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 80 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

2641. Re: INFO REQ'D - ARRL handbook article 1977

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970302125521.2837A-100000@Stratus.CAM.ORG>
Source record: 96490

No. Both the band-pass tuner and the receiver have both SSB and CW
filters. In the receiver, the CW filter is specified as X455KF300,
and is referred to as a crystal filter. The band-pass adapter doesn't
list filter types, but the called for bandwidths are the same as in
the receiver.

Unless someone is copying the exact circuit, in which case just copy and
not worry about the specs, it is a better choice to get the exact
information from the manufacturer. COnsidering that a lot of circuit
copying has gone on over the years in amateur radio, with each subsequent
person changing something to fit the parts at hand, you never know how
close to the truth the actual circuit is. And both this bandpass
adapter and receiver have extra circuitry for switching between the
filters, which ads to the confusion.

Michael VE2BVW

On 1 Mar 1997, Carl R. Stevenson wrote:

> -----BEGIN PGP SIGNED MESSAGE-----
>
> Philip N Butterfield <phil@bugsley.demon.co.uk> wrote in article
> <bJyaCCAVGBGzEwWt@bugsley.demon.co.uk>...
> > On page 274 of ARRL handbook 1977 there is an article by WA1JZC (
> > presumably deceased or call lapsed as I cannot find it is the
> > directories) on a communication receiver with a digital frequency
> > readout. This article is preceeded with an article on a bandpass tuner.
> > Both of these articles have a Collins Xtal Filter type X455KF300
> > I am endevouring to trace the input / output impedence characteristics
> > for this filter as they perform best when correctly terminated.
> > Can anyone offer any assistance?
>
> Phil,
>
> I don't have the data handy, but I believe you'll find that's a
> *mechanical* filter, not a crystal filter.
>
> I believe the Zin/Zout is about 2K || 30pF.
>
> Check their web site at:
>
> http://www.nb.rockwell.com/filter/ctmf.htm
>
> for more info, including contact information ...
>

> Carl - wa6vse
> carl@ais.net
>
> -----BEGIN PGP SIGNATURE-----
> Version: 4.5
>
> iQCVAwUBMxhgQuIP1XFmaCFVAQFUQQP/baakr/On+oa/WjtIvLvpJqtmSfxVbz2B
> l96cMtYNVXqy/8u4XK1sGmo1o+oP5T+v39w4SUKdTNA3mXlJPZWsivpYUQioZues
> tZtkfLRaXfdVykCQqVsGE/Rvzk51oaQ7msqFX3OMFGXG1jmBVuWfS2+pwk41RtOg
> ng7WbwOkn+s=
> =4ehy
> -----END PGP SIGNATURE-----
>
>
>

2642. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5fckka$bjj@abyss.West.Sun.COM>
Source record: 96491
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <3319BC67.5CE1@pacbell.net>,
William A. Wetzel <n6rky@pacbell.net> wrote:
>Jeffrey Herman wrote:
>> You're sore because we've presented some valid reasons (aside from
>> the legal issue) for not using an amateur radio for out-of-band
>> service. Don't be sore - just open your wallet and *buy* the proper
>> radio for your needs.
>>
>> Jeff KH2PZ (former fireman *and* former Coast Guard radio officer)
>
>Jeff,
>
>My statements were that modifying amateur radio equipment was and is poor
>engineering practice. That means that I am against it. The legal issue is
>not withstanding. If experimentation is the reason; then it is a good way
>to learn. BUT IT DOES NOT MEAN IT IS ACCEPTABLE FOR THAT SERVICE!

You're just soooo stubborn, William. You're saying it is *always*
poor technical practice to use a modified amateur radio in non-amateur
service. You're just incapable of accepting evidence to the contrary,
instead launching into personal attacks. There are numerous examples
of commercial gear made by Japanese manufacturers that share RF decks
with amateur radios. The *same* RF deck. Technically, then, your
argument has a hole in it.

Legally, a non-type accepted radio may not be used in a service
requiring type acceptance. Period.

None of your insults and patronizing explanations of RF filters
will change the truth.

>As a "radio tweaker", which Dana has called me... I know better to take a
>ham rig and substitute it for PROPER EQUIPMENT.

Well, that's just funny. As an "incompetent engineer", as Wetzel has
called me, I know that commercial gear is often superior to
amateur gear - which is why I've been using Motorolas and GEs in
amateur service for a number of years.

Based on the private email I've received, I believe I can safely ignore
your personal attacks. I've been assured that your attacks have hurt
your credibility rather than mine.

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *

```
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *
```

2643. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: "Chad H. Phillips" <chadhp@iai.i-america.net>
Message-ID: <01bc274a$83e027e0$20d4e4ce@spider>
Source record: 96492

Vincebucc <vincebucc@aol.com> wrote in article
<19970301124800.HAA18201@ladder02.news.aol.com>...

> I am in need of installing a good ground rod system at my station. I
have
> never used anything other than the electrical ground in house wiring, but
> with these newer solid-state, IC-impregnated radios, I think it is best
to
> have a good earth ground, not to mention safety requirements also....
> A friend has suggested that I use a piece of pipe... Carbon Steel SKED 80
(preferred) or SKED 40 be used with a suitable cap at one end. The 2-inch
diameter pipe is to be slid over the pipe to take the impact of hammering.
> I am not familiar with the term SKED 80 to describe the pipe. I believe
> that it identifies the wall thickness, but am not sure.
> tnx es 73s,
> WA2RSX

You're right about the wall thickness. Schedule 40 pipe is the most commonly used thickness- anything in your home is probably sch40. Schedule 80 is thicker and used for higher pressure applications like steam and hydraulics. Threads are the same between schedules. You will be lucky if your local plumbing supplier will sell you less than a 10 or 20 foot "stick" of either schedule, but most hardware stores stock sch40 galvanized "nipples" (pieces of pipe, threaded on both ends) in various lengths. Assuming your ground rod is a standard 5/8" diameter, anything from 3/4" to 2" pipe will work. The bigger sizes will give more impact for difficult soils. A 2 to 3' sch40 pipe will make a fine slide hammer, but sch40 caps are cast iron and will break. Use a steel coupling, called a "merchant coupling" in sch40, and a schedule 80 (steel) plug to get the most solid closure on one end of your pipe. The slide hammer alone works best starting the rod. When the top gets down to a comfortable level, use a small sledgehammer on the pipe cap. When the pipe touches ground, hit the rod directly.

Incidentally, the ground in your house wiring should already be a true earth ground, tied to an 8-foot ground rod or other grounding electrode system. The neutral side of your 120v system should also be bonded to this ground at your main service panel. This grounding system should be more than ample for safety considerations. On the other hand, I can imagine that there may be certain benefits to some sort of isolated station ground (for radio equipment only), especially isolation from RF interference and lightning. I would be interested to know what sort of system you work out, and how it works for you.

2644. Re: DTMF decoder ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: Christophe Suarez <f5pgp@babel.asi.fr>
Message-ID: <3319CF0F.182C@babel.asi.fr>
Source record: 96493

ah8341@eclipse.co.uk wrote:
>
> nprogres@aol.com (NPROGRES) wrote:
>
>Anyone know where I might find info on building a DTMF decoder that
could
>be connected to a radio or scanner ? Thanks.

Hello,

I've made the DTMF decoder described in the ARRL hanbook. It works
perfectly.
I had no problems to find the components here in France. This is the
ideal
solution (although old tech now...) for a remote control...

73

--
****
* Suarez Christophe *
* Email f5pgp@babel.asi.fr *
* Web http://www.asi.fr/~f5pgp/ *
* Packet radio F5PGP@F6BIG.FRHA.FRA.EU *
* DX Cluster F6KDF 73 ! *
****

2645. VHF SWR meter boards (QST Feb 97) available

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-02 00:00:00 UTC
From: Bill VanRemmen <billy@frontiernet.net>
Message-ID: <331A0B4B.1DD2@frontiernet.net>
Source record: 96494

I have received several e-mail inquiries about boards for my "Pocket-Size, Direct-Reading, VHF SWR Meter" article in QST (Feb 97, pg 33). I will be etching some for sale and am asking $5.00 each. E-mail me if you are interested and I'll send you my address for ordering.

At this time, I will have to send them out un-drilled and un-cut unless I am able to find the correct tools. I don't have access to the ones that I used for the prototypes.

--

-Bill VanRemmen, KA2WFJ
billy@frontiernet.net
http://www.frontiernet.net/~billy/

My opinions. No one in their right mind would claim otherwise.
==========
"Experience should teach us to be most on our guard to protect liberty when the government's purposes are beneficient . . . the greatest dangers to liberty lurk in insidious encroachment by men of zeal, well meaning but without understanding."
Justice Louis Brandeis
Olmstead vs. United States,
United States Supreme Court, 1928
==========

2646. NEW C.I.C. CHAPTER 10-10 INTERNATIONAL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: rcnoll@ix.netcom.com
Message-ID: <5fd4hd$jpm@dfw-ixnews9.ix.netcom.com>
Source record: 96403

Join in the New CHANNEL ISLANDS CHAPTER Of 10-10 INTERNATIONAL NET
INCORPORATED. Net Meets EVERY WEDNESDAY on 28.400MHz: 1800-2000 &
0200-0400 U.T.C. Every Wednesday. Info-rcnoll@ix.netcom.com.
--
Ralph C. Noll | Retired | KD6BYI

2647. Bioelectrifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: thom@newshost.li.net
Message-ID: <5fd5c7$djc@linet06.li.net>
Source record: 96404
Cross-posted to: rec.radio.amateur.homebrew,ham.radio.amateur.misc

Hi and thanks in advance for your help.

I was reading a back issue of 73 magazine (May 1996) and came across an article about building the "Bioelctrifier".

I was wondering if anyone has had any experience with this or knows where I can find out more about it

Thanks again.

Please e-mail me direct as I don't get a chance to check in on this newsgroup as often as I'd like.

Tom
WB2QDG

thom@li.net

2648. Re: Spectrum Analyser for Rigs with PC interface.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: dthimm@unix.newnorth.net
Message-ID: <331a2220.16836242@news.newnorth.net>
Source record: 96405

On Sat, 22 Feb 1997 16:41:33 GMT, dthimm@unix.newnorth.net (Dan T.)
wrote:

>
>
>I wrote a program several years ago for the C-64 to make my Yaesu 757
>serve as a "Spectrum Analyser" for contesting. I recently converted
>it into a windows based program.
>
>Anyway, I am wondering if anyone would be interested in such a
>program. (Either the original C-64 program or the WIndows program)
>
>Also, if this interests you and you don't have a Yaesu, but do have
>a computer interface to the rig, let me know and I can probably adapt
>this program to your rig too.
>
>If there is a reasonable amount of interest, I will make it available
>as a downloadable file on my website.
>
Thank you for all of the responses and help with data sheets on all of
the different computer controllable rigs. I will have the YAESU
FT-757 GX interface available on my webpage around the first of
May. (Earlier If I can). The other rigs will be forthcoming.

Thanks again for your responses and support.

Dan T. (N9IPV)

Robots, Rockets and More!
http://unix.newnorth.net/~dthimm

2649. Find The Best Ham Radio News Stories @ www.sarrio.com

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: wb6siv@telis.org
Message-ID: <wb6siv-0203971750300001@host27.cyberg8t.com>
Source record: 96406

I have searched for the best ham radio news stories. These stories are now available for you to read at http//www.sarrio.com. There are articles covering ham products, antenna construction,the Ham Skywaring System, and boating with ham radio, just to name a few. You are welcome to come over and brouse the many articles I have on site. 73's Ray
--
The Raymond Sarrio Co. a full feature Ham Radio Storefront and web site developer. Located at http://www.sarrio.com.

In association with Brillar Enterprises http://win-win.com/brillar provider of discount CD-Roms!

2650. Re: Need 1/4" metal shaft coupler

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: cooperjim@aol.com
Message-ID: <19970303022400.VAA03232@ladder02.news.aol.com>
Source record: 96407

Hi Peter

Have you considered making your own couplers?
I have made a number of shaft couplers by taking a length of scrap hex aluminum bar, cutting a reasonable length, drilling down the length and adding tapped holes at each end. The hex bar is easier to drill the taps in than would be a round bar.
It can also be used to couple two shafts of different sizes by drilling the smaller the full lenght, then drilling the larger half the length using the smaller hole as a pilot.
I used only a hand drill. If you drill a hole the length of the piece, the shafts will align to the hole and if there is any run-out, it will not affect the alignment. There will be some 'wobble' in the coupler but it still works fine.
I assume that you are trying to get the SX-28 working and not necessarily in restored condition. I used one and found it to be one of the more pleasant rigs to use, perhaps because it was the first 'good' receiver I managed to get my hands on. hi.

Good Luck
Jim Cooper NE6O
CooperJim@aol.com

2651. Kenwood TS-430S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: sos@transport.com
Message-ID: <331a4b0e.84813504@news.transport.com>
Source record: 96408

Any suggestions where to look for mod's to my Kenwood TS-420S?

2652. Try this....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: cnewell937@aol.com
Message-ID: <19970303023800.VAA04228@ladder02.news.aol.com>
Source record: 96409

Dear Friend,
Five minutes and five dollars can change your life!!!THIS IS THE FAIREST, MOST HONEST WAY I KNOW TO SHARE THE WEALTH! Would you like to make thousands of dollars, quickly, legally, with NOCATCH? Then keep reading..... please take five minutes to read thisarticle; it will change your life, just like it did mine. It's true! You can make up to, or over, $50,000.00 in 4 - 6 weeks; maybe sooner! I SWEAR I'M NOT LYING TO YOU, AND THIS IS NOT A SCAM! If you're interested, keep reading; if you're not, I apologize forwasting your time.

Here we go. A little while back, I was browsing through these newsgroups, just like you are now, and came across an article similar to this that said you could make thousands of dollars in weeks, with only an initial investment of $5.00!! So, I thought, "Yeah, right, must be a scam", but, I was curious, like most of us are, and kept reading. Anyway, it said that you send $1.00 to each of the five names and addresses stated in the article. You then place your own name and address in the article at the bottom of the list at #5, and post the article in at least 200 newsgroups, (there are thousands). No catch, that was it! So after thinking it over, talking to a few people first, I tried it.I figured what have I got to lose except for 5 stamps, and $5.00, right? Well, guess what....within 7 days, I started getting money in the mail! I was shocked! I still figured it would end soon, and didn't give it another thought. But then money kept coming in , tripling in size and multipying by 10 - 20 times the amount that I got the first week! In my first week I made about 20 - 30 dollars. But, by the end of the second week, I had made a total of over $1000.00!!!! In the third week, I had over $10,000.00, and its still growing. This is my fourth week, and I've made about $42,000.00 TOTAL, and the money is still coming in.....Let me tell you how this works, and most importantly, WHY it works, also, make sure you print a copy of the article NOW, so you get the information off of it, and begin making money.The process is very simple, and it consists of 3 EASY steps:

STEP 1: Get 5 separate pieces of paper and write the following on each sheet of paper...."PLEASE PUT ME ON YOUR MAILING LIST", and then write your NAME AND ADDRESS. Get five $1.00 bills and place ONE inside each piece of paper that you just wrote on. Fold each paper so the bill will not be seen in the envelope, (otherwise, nosey people who like to steal envelopes with money in it won't get yours). Put one paper inside each envelope, and seal it. Do the same for all five. You should now have 5 envelopes, sealed, EACH with a piece of paper AND a $1.00 bill, stuffed inside of the paper. Make sure those words that were stated above, are written on each paper. What you are

doing is creating a service; this is PERFECTLY LEGAL. Now then, mail the 5 envelopes, with the paper and $1.00 bill in each, to the following 5 addresses:

1. J. Krakowiak , 1112 W. Broadway #1, Anaheim, Ca 928053.

2. J. Sides, Lamar Box 1, South Plains College, 1401 S. College Ave.,Levelland, TX 79336

3. Areg Mkrian, 15 Alma Ave. Belmont, MA 02178-4404

4. A Karns, 4000 NW 53rd, Oklahoma City, OK, 73112

5. C. Newell 480 Capisic Street, Portland, ME 04102

STEP 2: Now take the #1 name off the list that you see above, move the other 4 names up, (5 becoming 4, 4 becoming 3, etc.), and put YOURNAME as number 5 on the list. You can slightly alter this article ifyou need to; editing what you need to edit.

STEP 3: Post your amended article, (with your name at #5), to at least 200 newsgroups, (There are close to 19,000 of them). HOW TO DO THIS:If you are using Netscape 3.0, do EXACTLY the following:
1) Click on any newsgroup, like normal, THEN click on 'TO NEWS',which as on the far left when you're in the newsgroup page. This will bring up a box to type a message in.
2) Leave the newsgroup box like it is. CHANGE the subject box to something flashy, like, "NEED CASH $$$ READ HERE $$$" or "FAST CASH"!!
3) Tab once, and you should be ready to type. Now, re-type, (onlyonce), this WHOLE ARTICLE WORD FOR WORD, except to insert your name at#5, and to remove #1 off the list; plus any other small changes youthink you need to make. Keep most of it the same!!
4) When you're done typing the WHOLE article, click on FILE in THISBOX, right above send, not where it says Netscape News On The FirstBox. Click on SAVE AS when you're under FILE. Save your article as a text file to your C: or A: drive. DO NOT SEND OR POST YOUR ARTICLE UNTIL YOU DO THIS. Once saved, move on to number 5 below.
5) If you still have all of your text, send, or post, to this news group, now, by just clicking send; which is located below FILE, and right above Cc:.
6) Here's where you're going to post all 200. OK, click on any newsgroup, then click on 'TO NEWS', again, in the top left corner. Leave theNEWSGROUPS BOX alone. Again, put a flashy subject title in the SUBJECT BOX. Hit TAB once you're in the body of the message, and then click on ATTACHMENTS, which is below the SUBJECT BOX. You will get another box to come up. Click on ATTACH FILE, then find YOUR file that you saved; click once on the file, and then click 'OPEN'. Now click on OK. If you did this right, you should be able to see your file name in the attachments box, and it will be shaded green.If you use IE EXPLORER, it's just as easy......HOLDING DOWN THE LEFT BUTTON, HIGHLIGHT THIS ARTICLE. THEN PRINT THIS ARTICLE FOR YOURRECORDS TO HAVE THE NAMES OF THOSE YOU WILL BE SENDING $1.00 TO. NEXT, GO TO THE

NEWSGROUPS AND PRESS "POST AN ARTICLE". A WINDOWWILL OPEN. TYPE YOUR HEADLINE IN THE SUBJECT AREA AND THEN CLICK INTHE LARGE WINDOW BELOW. PRESS "CRTL" AND THEN "V", AND THE ARTICLE WILLBE PLACED IN THE WINDOW. IF YOU WANT TO EDIT THE ARTICLE, DO SO, AND THEN HIGHLIGHT AND COPY IT AGAIN. NOW EVERY TIME YOU POST THE ARTICLE IN A NEWNEWSGROUP, ALL YOU HAVE TO DO IS REPEAT "CRTL" AND "V" AND PRESS POST.
7) That's it. Each time you do this, all you have to do is type in a different newsgroup, so that way, it posts to 200 different newsgroups. You see? Now you just have 199 to go!!! (Don't worry, eac hone takesabout 30 seconds; once you get used to it). REMEMBER ..200 IS THE MINIMUM. The more you post, the more money you'll make.AND THAT'S IT!!!! THOSE ARE THE ONLY 3 STEPS THERE ARE!!! You are now in the mail order business, and will start receiving $1.00 envelopes from various people, all over the world, within days.(HINT: THE MORE NEWSGROUPS YOU POST TO, THE MORE MONEY YOU WILLMAKE!). You may want to rent a PO Box, eventually, because of all the mail. If you wish to stay anonymous, you can come up with a name, suchas "manager" or"investor". Just make sure all the addresses are CORRECT, please! LET ME TELL YOU WHY THIS SYSTEMS WORKS!! Out of every 200 postings, let's say I ONLY receive 5 replies, (this is actually VERY LOW). So, I made $5.00 with my name at #5. Now then,each person who just sent me $1.00 makes, say, only 200 postings, now with your name at number 4, WHICH IS A TOTAL OF 1000 POSTINGS, not including yours too. 50 people send you $1.00 now; that's $50.00 you just made! Now then, your new 50 agents post 200 each with YOUR NAME AT NUMBER 3, or10,000 postings, (50 X 200). Average return is 500 at $1.00 each, which is $500.00! They make 200 postings, which is 5000 returns at $1.00 each,which is $5000.00!! And finally, 5000 people make 200 postings each,with YOUR NAME AT NUMBER 1. YOU NOW GET A RETURN OF $50,000.00 BEFOREYOUR NAME DROPS OFF THE LIST!! AND THAT'S IF EVERYONE MAKES ONLY 200 POSTINGS, AND IF ONLY A SMALL % PEOPLE RESPOND!!!When your name is no longer on the list, you just take the latest posting that is appearing in the newsgroups, and SEND OUT ANOTHER $5.00 to THE NAMES ON THE LIST, PUTTING YOUR NAME AT #5 AGAIN, AND START POSTING AGAIN!! The thing to remember is, do you realize that THOUSANDS OF PEOPLE ALL OVER THE WORLD ARE JOINING THE INTERNET AND ARE READING THESE ARTICLES EVERY DAY!! JUST LIKE YOU ARE RIGHT NOW!!! So, can you afford $5.00 and see if it really works? I think so.......People have said, "What if the plan is played out and no one sends you the money?" So what! What are the chances of that happening when there are TONS OF NEW, HONEST USERS AND NEW, HONEST PEOPLE joining theInternet and Newsgroups everyday? and, are willing to give it a try? Estimates are at 20,000 to 50,000 new users, each and every day!! Remember, play FAIRLY and HONESTLY and this WILL WORK, I PROMISE YOU!! You just have to behonest. Make sure you print this article out, RIGHT NOW, also, try to keep a list of everyone that sends you money, and always keep an eye on the newsgroups to make sure everyone is playing fairly. REMEMBER: HONESTY IS THE BEST POLICY!! YOU DON'T NEED TO CHEAT THE BASIC IDEA TO MAKE MONEY! GOOD LUCK TO ALL, AND PLEASE, PLAY FAIRLY; YOU WILL REAP THE HUGE REWARDS FROM

THIS.....WHICH IS TONS OF CASH!!! ****By the way, if you try to deceive people by posting the messages with your name on the list, and by not sending the money to the people already on the list, you will not get much. Someone I talked to knew someone who did that, and he only made $150.00; and that was after seven or eight weeks!! Then, he sent the 5 $1.00 bills; people addedhim to their lists, and in 4 - 5 weeks, he had over $10,000.00. THIS IS THE FAIREST, AND MOST HONEST, WAY I HAVE EVER SEEN TO SHARE THE WEALTH OF THE WORLD WITHOUT COSTING ANYTHING BUT OUR TIME! GOOD LUCK, AND HAVE FUN!!!!

2653. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: jon27787@aol.com
Message-ID: <19970302212000.QAA13465@ladder02.news.aol.com>
Source record: 96410

I ues it for all my scanners. It works GREAT.
Can't beat it for receve on a scanner due to its better shielding.

2654. HV variable capacitors ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: morel.GRunberg@telrad.co.IL
Message-ID: <c=US%a=_%p=TELRAD%l=MISMAIL-970303093318Z-72@mismail.MIS.ELEX.CO.IL>
Source record: 96411

I'm looking for a source in a U.S. for two air variable capacitors
(200-300pF@5-7KVdc) like the capacitors used in the old Heathkit
2KW Antenna tuners or similar.
Does someone know who buyed the Heathkit components & parts stocks
when they closed the bussiness few years ago ?
Who is selling now Cardwell RF parts in U.S. ?

73 de Morel, 4X1AD

2655. logarithmic speech processor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <331ADF96.4888@crpl.cedar-rapids.lib.ia.us>
Source record: 96412

This note refers to my article on a logarithmic speech processor in the Winter edition of Communications Quarterly.

In order to use a low impedance dynamic microphone, with a lower level of audio volts than a high impedance dynamic mic, two circuit changes can be made. I tested these changes using a Radio Shack 33-3005 mic and also 33-984 (dual hi/low Z) mic.

In the Microphone amplifier circuit, solder a 1K resistor across R4. This increases the gain of the mic amplifier. Solder a 1.0 uF capacitor across C3. This preserves the frequency response of this stage. Connect a 680 ohm resistor at the mic jack, across the audio line. This terminates the microphone properly.

It is also possible to install a lo-Z to hi-Z miniature transformer instead of the R and C changes. I tested this also. These are available from various sources. Radio Shack has the 274-016 adapter.

Bill W0IYH

2656. Winding coils...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: wb4iuy@ipass.NET
Message-ID: <199703031416.JAA15588@passport.ipass.net>
Source record: 96413

>From: tomb@lsid.hp.com (Tom Bruhns)
>Subject: Wind your own coils
>>Jan Axing (janax@li.icl.se) wrote:
>>: Quickies for air wound solenoid coils I'm using are:
>>: L=(0.008*d^2*n^2)/(3*d+9*l) single layer
>The one I've always seen, for inch measures and using r for radius
>instead of d for diameter, is
> L = (n*r)^2/(9r+10l)

Just for grins, you might try Tunekit2.0 by Max Froding. I have a copy of it
for download from menu #2 at http://www.ipass.net/~teara/

73,
Dave Hockaday WB4IUY
wb4iuy@ipass.net
WB4IUY@W4RAL.#RTP.NC.USA.NOAM

http://www.ipass.net/~hockaday/
http://www.ipass.net/~wb4iuy/
http://www.ipass.net/~teara/
http://www.geocities.com/TheTropics/3349/
http://www.RTPnet.org/~fcarc/
http://www.RTPnet.org/~rdrc/

2657. 1691 Mhz Downconverter Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: rah72550@aol.com
Message-ID: <19970303141800.JAA10036@ladder02.news.aol.com>
Source record: 96414

I am looking for plans or source for building my own 1691Mhz downcoverter instead of buying one. If anyone could point me in the right direction it would
be helpfull. I have the ARRL hanbook, Weather Satellite Hanbook, and the UHF/Microwave projects book but no downconverter info for this frequency.

2658. SHF prescalar

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: Allen Wallace <allen_wallace@powertalk.dtint.com>
Message-ID: <331aeefd.0@news.itsnet.com>
Source record: 96415

I want to build a 2 GHZ prescalar for my frequency counter. Can anyone point me to a popular chip or construction article? Most of the prescalars I see are under 1 GHZ.

73, Allen Wallace N7CGH

2659. 902-928 MHz ISM band stuff for Amateurs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: tkomljan@mobility.COM
Message-ID: <1997Mar03.104800.1540.20178@mailgate02.mobility.com>
Source record: 96416

Regarding a 900 MHz Sony cordless phone, Richard wrote:
>
> The RF board has 9 conection.
>
>1 - +B 9 VDC
>2 - GND
>3 - AUDIO output
>4 - SQUELCH output
>5 - VFO inable
>6 - data in
>7 - clk in
>8 - PTT
>9 - transmit audio
>
>
>This board is on a PC board the can be easily removed. It is SMALL!!!
>The conection can be easily made by a inline socket.
>
>You will need to build your own uP. I will be using a PIC. When I
>get the to this project I will shared my code with you.
>
>73 de KB8RLN.
>
>
Myself and others are curious about what you come up with.... Good Luck!

Additional info about another device....

Here is some other info on the "V-Link" walkie talkies now showing up in =
WalMart stores...
We called the 1-800 number on the product literature.... "Do you have any =
more information on the V-link?". The reply was: "No we don't, but we can =
=
provide you info on some of our other toys". The company is YES! =
Entertainment Corporation, in California, (800)222-9376. The phone is made =
=
up in the ad to look like a cellphone... Caller ID, Voice Mail, Party Line, =
Private Calls, Beep/Vibrate for incoming calls..... Tony K
---
copied from other internet sources....

V-Link Phones

From rheisner@worldnet.att.netSun Dec 8 19:22:16 1996

916.8750 Calling Channel 1 (Main/Home Frequency)
915.8625 Calling Channel 2
915.0000 Calling Channel 3
914.0875 Calling Channel 4
913.3375 Calling Channel 5
912.0000 Calling Channel 6
910.9125 Calling Channel 7
910.2375 Calling Channel 8
909.3375 Calling Channel 9
908.5000 Calling Channel 10
907.6625 Calling Channel 11
907.0000 Calling Channel 12
906.3375 Calling Channel 13
905.6625 Calling Channel 14
904.5000 Calling Channel 15
904.0000 Calling Channel 16
903.4875 Calling Channel 17
903.0000 Calling Channel 18
902.5000 Calling Channel 19

From sdonnell@ultranet.nh.comSun Dec 1 18:02:53 1996

The V-Link phones as they are called are a very interesting form of "kiddie talkie". I suspect these could be intended to compete directly with UHF FRS radios. We got one the other day and played with it quite a bit. Yes, 916.875 MHz is their calling/standby freq. They also have 15 other channels on freqs all the way down to 903.48 Mhz that they use on an as needed basis for "private" links and depending on other users/interference on the other CHs. They use good ol analog Wide FM (25 KHz deviation) for voice transmission. CTCSS/DCS is not used for selective(private) calling. Instead, they have a high speed digital ANI code burst that is sent at the beginning of an initaial transmission and anytime the CH remanins inactive for 10 seconds or so. The ANI data burst is apparently how the units instruct others as to what freq to switch to for private conversations.Hardly all too private though...One cute feature they have is digital voice storage, to save messages when the user is not available. I wonder if these might become popualr with certain drug gangs...

The transmit power level from the V-Link is only about .2 milliwatts, so I can't say they the reported "3 blocks" range is not streching it a bit far. Being a licensed Amateur, I have the option of removing the hardwired antenna and replacing it with an SMA receptical to permit attaching it to better antennas and or amplifiers
73s DE WA1YKL

2660. Re: INFO REQ'D - ARRL handbook article 1977

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: Philip N Butterfield <phil@bugsley.demon.co.uk>
Message-ID: <RJSYCCAWMxGzEwWH@bugsley.demon.co.uk>
Source record: 96417

In article <01bc2661$d6fcb4a0$adc1e1ce@cstevens.usr.com>, "Carl R.
Stevenson" <carl@ais.net> writes
>
>Philip N Butterfield <phil@bugsley.demon.co.uk> wrote in article
><bJyaCCAVGBGzEwWt@bugsley.demon.co.uk>...
>> On page 274 of ARRL handbook 1977 there is an article by WA1JZC (
>> presumably deceased or call lapsed as I cannot find it is the
>> directories) on a communication receiver with a digital frequency
>> readout. This article is preceeded with an article on a bandpass tuner.
>> Both of these articles have a Collins Xtal Filter type X455KF300
>> I am endevouring to trace the input / output impedence characteristics
>> for this filter as they perform best when correctly terminated.
>> Can anyone offer any assistance?
>
>Phil,
>
>I don't have the data handy, but I believe you'll find that's a
>*mechanical* filter, not a crystal filter.
>
>I believe the Zin/Zout is about 2K || 30pF.
>
>Check their web site at:
>
>http://www.nb.rockwell.com/filter/ctmf.htm
>
>for more info, including contact information ...
>
>Carl - wa6vse
>carl@ais.net
>
>
Carl

It is MOST DEFINITELY NOT a Mechanical Filter.
It has CRYSTAL FILTER written on the ID label !!!
This filter is the same one refered to in the handbook.
It is the same physical size as a mechanical filter and appears
pin compatible.
If anyone could advise the date of the original QST article please.
If anyone has a copy of the full QST article, who are the suppliers
refered to for sourcing the filter and are they still in business?
This is a bit like detective work.
Who will fit the final bit in the puzzle?
To remind anyone trying to assist, the original question is:

What are the I/P & O/P impedences for a Collins XTAL filter type no
X455KF300 Part No 526 7073 020
Thank you to everyone who has contributed so far.
73 de phil G4AAQ
--
Philip N Butterfield

2661. Re: Best Frequency Standard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5ff3qa$p6i@hpscit.sc.hp.com>
Source record: 96418

In article <5fa7rh$udl@xensei3.xensei.com>, <daveaa1a@ssih.com> wrote:
>>
>Hi Rick, Nawww this is good for what i want 10-8 or -9th and the source is free Loran C
>rightinto my scope.. The James Knight 5 mhz. Xtal time base doesn't seem to wander much
>after a few weeks on line.. I drive a HP clock and have yet to see the second change any
yet..
>I just free run against Loran C and do see some diurnal variation but it's still way good
>for BPSK on HF i think.. also lets me know just where im at on 10ghz.. Way within 100 hz
>but not god enuf yet for CCW..
>Any line on better Xtal time base oven etc?? 73 de daveaa1a

There are two main issues: aging and tempco/humidity. The 10811 oscillators we make at the HP Santa Clara Division age about 10^-8 per year. You can improve this 1 or 2 orders of magnitude by measuring the aging against a reference such as Loran C and then feed a slow ramp voltage into the EFC (electronic frequency control) to cancel it out. Tempco is probably not much of an issue in a ham shack where the temperature doesn't vary much. However, you might consider putting your oscillator inside a secondary oven. Also, put a backup battery on your oscillator so that runs continuously, even through power failures. Never power down a crystal oscillator (or turn off the oven) if you can help it. Finally, if your JK oscillator is not hermetically sealed, it may be sensitive to humidity. If so, you can fix that if you want to go to the trouble of hermetically sealing it.

Rick Karlquist N6RK
HP Santa Clara Division
rkarlqu@scd.hp.com

2662. Salma Hayek, Jenny McCarthy & more..!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: the@nudestarz.com
Message-ID: <5ff1eh$aul@chile.earthlink.net>
Source record: 96419

-(10,000 pictures of beautiful hot sexy Celebrities CD-ROM - ME#3)-
Questions? CALL US! The number is listed on our website:
http://www.nude-celebs.com

Just SOME of the features-ME3 CDROM:

600+ pictures of Cindy Crawford
400+ pics of Pamela Anderson
250+ pics of Elle Macpherson
200+ pics of Christina Applegate
200+ pics of Alicia Silverstone -==< 10,000 CELEBRITIES!! >==-
200+ pics of Mariah Carey
200+ pics of Sandra Bullock
150+ pics of Liv Tyler, young star
130+ pics of Niki Taylor
130+ pics of Kate Moss!!! For a list of ALL files on the CD
100+ pics of Madchen Amick goto www.nude-celebs.com
100+ pics of Racquel Darrian - *WOW*
80+ pics of hot model Jenny McCarthy! (Nudity!)
80+ pics of Paulina Poriskova, sexy supermodel!
70+ pics of Bridget Hall, supermodel!
50+ pics of TRACI LORDS, yes! ***6 Celeb CDs in One!***
50+ pics of Daisy Fuentes, hot spanish VJ
50+ pics of Salma Hayek, sexy latina actress! ORDER LINE!
50+ pics of Teri Hatcher 1-757-484-7538
* 4000+ pics of other NUDE stars
* 4000+ pics of PG-13 rated celebrity poses
* 10,000+ pictures total, thats TEN thousand!
* Graphics viewing software for Windows3.1/DOS/Win95
* CD is BBS ready, with descriptions of files! And its Mac readable!
* Many more features and pictures of stars!
* NO AMATURE MODELS! - ONLY Celebs!

This CD represents high quality work. Here is the pricing:
$$$ $34 each (plus $2 shipping, $5 shipping outside USA) $$$

(For MORE information on content goto http://www.nude-celebs.com/
or call 757-484-7538 in USA to order via phone!
EMAIL: nudecelebs@nude-celebs.com

Other information:
* Packed in white shipper: No signs of nudity (Wife protection plan!)
* There are over 10,000, that's TEN THOUSAND FILES, on ME#3 alone!
* All pictures are high quality at least 640x480!
* Directories on disc are arranged for ease of use!
* Graphics viewing software for Windows/DOS/Win95

* CD is ISO-9660 and Macintosh readable in POWERMACs only
* It's truly BBS-ready with detailed descriptions of all files!
* ME#3 will save you -ALOT- of download/searching TIME & MONEY!
* Sysops! - Has a files.bbs conversion program for different formats!

This CD represents high quality work. Here is the pricing:
$$$ $34 each (plus $2 shipping, $5 shipping outside USA) $$$

(*) For FAST, reliable results goto http://www.nude-celebs
And fill out a order there. We take all methods of payment.

(*) AOL USERS: You must use AOL 3.0 Web Browser or HIGHER to order at our automated web site, otherwise request an order form via email.

(*) Or call 757-484-7538 to order via credit card over the phone!

(*) Or if your into free cheerleader pictures visit our Naughty Cheerleaders site at http://www.nude-celebs.com/redhot/cheer.html

(*) If you can not access the World Wide Web and would like an ORDER FORM sent to you by email, reply to this message at:
nudecelebs@nude-celebs.com
If you have any further questions feel free to email us!

Qualifications: You must be OVER 18 & live somewhere in this UNIVERSE!
Please remember, Foreign orders are $5 for shipping instead of $2

(*) Wholesale/Dealer/Bulk information/prices available upon request.

ME#3 ..'~ T.H.E. Software ~'..

2663. FS: Kenwood YK-455C-1 500Hz Filter for Ts140/680

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <331b1ba8.862305@news.interbusiness.it>
Source record: 96420
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 80 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

2664. Re: mono- to stereo...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: Clifford Buttschardt <cbuttsch@slonet.org>
Message-ID: <Pine.GSO.3.95.970303105232.2871E-100000@oso.slonet.org>
Source record: 96421

The easiest way to allow both stereo and mono plug to be used is to mount a stereo panel socket in the radio. The tip and and ring are then connected to the audio source through ten ohms resistors. If a stereo plug is used the ten ohm resistors are in series with each output. If a mono plus is inserted then one of the resistors will be in series and the other in parallel. Either way some audio will be produced. Cliff Buttschardt K7RR

On Fri, 28 Feb 1997 shearer@pluto.njcc.com wrote:

> i have a scanner which only outputs reception in mono...
> would it be possible to modify this to stereo?
> i am not refering to jack output.
> what might be involved?
>
>

2665. Cheaper MHW591 for MFJ-259 pre-amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: comas@nys01c-303.fir.fbc.com
Message-ID: <COMAS.97Mar3152639@nys01c-303.fir.fbc.com>
Source record: 96422

I have problems with my MFJ-259's frequency counter not being sensitive enough. A recent QST article described using a MHW591 wideband linear amplifier as pre-amp for the MFJ-259 frequency counter. The article mentions using a cheaper, less gain, component but didn't mention a part number. Does any one know of replacement part? The MHW591 covers 1 - 200 Mhz at 35dB for about $50.00 and requires 2 external parts and 13VDC. I was looking for one at about $20.00 with about 15dB gain.

Andrew
--
Andrew Comas
Solutions Architect
Treasury Systems
Credit Suisse First Boston New York
andrew.comas@ska.com

2666. Re: need advice on home made high voltage cap's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: rburden@student.ecel.uwa.edu.au
Message-ID: <5ffm6pevc1@enyo.uwa.edu.au>
Source record: 96423

"Peter Shintani" <shintani@tv.sony.co.jp> wrote:

>Hi:
> I am interested in making some very high voltage caps for a loop antenna.
<snip>

I have thought of doing something similar, but using double sided PCB for
low power transmitting on a fixed frequency.

As an alternative I havethought of using two single sided pcb's, one with
the copper material divided electrically into 2 pieces, the second piece
movable over the divided piece forming a split stator capacitor. But early
attempts have not been overwhelmingly successful.

Regards,
Richard

Richard VK6FKB
"Nothing better than home-brew"

2667. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5ff67e$66i@hplms2.hpl.hp.com>
Source record: 96424
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5f2tpc$lhk@news.hawaii.edu>,
Jeffrey Herman <jeffreyh@Hawaii.Edu> wrote:
>
>I've already pointed out why someone shouldn't use an amateur HT
>for fire service communications; its freq'y agility and non-resistance
>to the heat of fire were two main points that caused me concern
>(I had a portion of my helmet melt in one structure fire - can't
>imagine any amateur HT being able to survive such heat, but commer-
>cial radios *will* be able to withstand such temperatures).
>

Jeff, your blanket statement "...commercial radios *will* be able to
withstand such temperatures" is not necessarily correct. Certainly, some
will, but come won't. For instance, Yaesu markets their VX-10 radio for
police and fire use and except for the CPU and programming, its identical
to their FT-10,11,50 radios. Continuing, Radio Shack sells 'commercial
radios' that would probably melt in the sun!

2668. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: psoper@encore.com
Message-ID: <E6HCr6.B9r@encore.com>
Source record: 96425

"Chad H. Phillips" <chadhp@iai.i-america.net> writes:

>Incidentally, the ground in your house wiring should already be a true
>earth ground, tied to an 8-foot ground rod or other grounding electrode
>system. The neutral side of your 120v system should also be bonded to this
>ground at your main service panel. This grounding system should be more
>than ample for safety considerations. On the other hand, I can imagine that
>there may be certain benefits to some sort of isolated station ground (for
>radio equipment only), especially isolation from RF interference and
>lightning. I would be interested to know what sort of system you work out,
>and how it works for you.

If what you have in mind is a separate ground rod that is not bonded back
to the service panel ground, that's an NEC violation and a severe safety
hazard in the presence of a lightning strike.

Regards,
Pete
KS4XG (six ground rods, 200 feet of #6)

2669. Johnson UHF Mods & programing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-03 00:00:00 UTC
From: "Bruce J. Bergen" <bbergen@xmission.com>
Message-ID: <331B9CBB.3EBA@xmission.com>
Source record: 96426

I recently obtained and EF Johnson SDL-6000 series (model 6065-832)
mobile UHF xciver which I would like to see if I can modify or program
to the 70 cm band. The information I have indicates that it is
programable in the 450-512 band.

Any suggestions

Bruce - KI7OM

2670. Signal One CX-11A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970304181301.NAA22218@ladder01.news.aol.com>
Source record: 96346

Somebody with a manual, xerox me a copy of the schematic for the PTO.
Seems to have fallen out of my manual. I'll either pay you for it, or show
you how to stop it from drifting, your choice.

Harold E. Johnson W4ZCB
115 Kindy Forest Drive
Hendersonville, NC 28739

2671. Winding coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: wb4iuy@ipass.NET
Message-ID: <199703041649.LAA19779@passport.ipass.net>
Source record: 96347

For those of you homebrewing circuits and needing a program for lowpass, highpass, and bandpass filters as well as coil winding/design, try "TuneKit2". It's a shareware program I have available from my page at http://www.ipass.net/~teara/ in menu #2.

I didn't write the program and am in no way connected with the author... just a satisfied user.

73,
Dave Hockaday WB4IUY
wb4iuy@ipass.net
WB4IUY@W4RAL.#RTP.NC.USA.NOAM

http://www.ipass.net/~hockaday/
http://www.ipass.net/~wb4iuy/
http://www.ipass.net/~teara/
http://www.geocities.com/TheTropics/3349/
http://www.RTPnet.org/~fcarc/
http://www.RTPnet.org/~rdrc/

2672. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0403971309370001@news.vcnet.com>
Source record: 96348

In article <19970301124800.HAA18201@ladder02.news.aol.com>,
vincebucc@aol.com (Vincebucc) wrote:

> I am in need of installing a good ground rod system at my station. I have
> never used anything other than the electrical ground in house wiring, but
> with these newer solid-state, IC-impregnated radios, I think it is best to
> have a good earth ground, not to mention safety requirements also....
>
> A friend has suggested that I use a piece of pipe, about 3-1/2 to 4 feet
> in lenght to hammer a rod into the ground. He has suggested that black
> Carbon Steel SKED 80 (preferred) or SKED 40 be used with a suitable cap at
> one end. The 2-inch diameter pipe is to be slid over the pipe to take the
> impact of hammering.
>
> I am not familiar with the term SKED 80 to describe the pipe. I believe
> that it identifies the wall thickness, but am not sure.
>
> Where might I locate a source for pipe of this type?
> What kind of expense should I expect for this pipe? Is it available in
> short lengths?
> Has anyone used this method to hammer in a ground rod?
>
> Any other methods or hints?
>
> tnx es 73s,
> WA2RSX

If you are looking for an RF-ground, Vince, driving a conductor deeper
than a foot or so into the earth is a folly since HF and MF currents travel
on the surface. IMO, a decent 'ground' can be had by burying a standard
ten-foot length of 3/4" copper water pipe horizontally, just below the
surface. For long life, the electrical connection to the buried copper
pipe should be made with 95-Sn/5-Ag silver-solder, which is eutectic at 430
deg. F, and is not as subject to errosion as is ordinary Sn-Pb 'electronic'
solder.

--
--Rich-- ag6k, 805-386-3734

2673. Elenco Function Generators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: Tom Lewis <ab5ck@flash.net>
Message-ID: <01bc28e5$e994dbc0$c9c2c2d0@ab5ck.flash.net>
Source record: 96349

Subject: Requesting comments - Elenco Function Generator.

I have been thinking about purchasing a new Elenco Function Generator (model GF-8026). I was wondering if anyone has comments comments (good or bad) regarding this generator or other Elenco products. All comments are appreciated.

Please email comments direct.

73!
Tom Lewis - AB5CK
Doppler Technology - Radio Direction Finding
http://www.flash.net/~ab5ck

2674. Need Circuit please ... QRP power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: mdwatt@usit.net
Message-ID: <3320981b.63046350@news.usit.net>
Source record: 96350

I would like to build a power meter with a combined dummy load for my QRP station. I have 2 200uA meters, and would like to use one to display forward, one reflected (continuous), with no "calibration" needed. The meters are a 0-4+ scale, so calibration would be fixed in three switchable ranges: scale, scale/2 (two watt full scale) and scale*2 (8 watt full scale). The dummy load component would also be switchable in and out, with a pickoff circuit to connect a scope or freq. counter.

I've checked my 1990 Handbook, and QRP classics, with no help. All the circuits there utilize a single meter and some sort of "cal" to measure SWR.

Private e-mail ok, if this topic wouldn't be of interest to the group. I have two articles from Hambrew mag, Spring 96 and Fall 95, both by Bill Hickox of Tejas Kits, K5BDZ, but can't figure out the metering on the SWR/Power meter, nor how to modify the ranges via switch. Nor can I determine the input vs. pickoff circuit on the dummy load.

72 es 73 de
Marty, KM7W

Jackson, Tennessee e-mail: mdwatt@usit.net
http://www.public.usit.net/mdwatt
"The Curmudgeon's Corner"
NorCal - QRP ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid Sq EM55oq
~~~~~~
~~~~~~

2675. RF parts for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: Jesus Guardon <jguardon@lander.es>
Message-ID: <5fi7jv$6v6$1@lince.lander.es>
Source record: 96351

```
For sale:
Hibrid circuit of rf UHF tx:
Mitsubishi M67728 (Final of the TS-790s)
Diodes of Kenwood reference:
UM9401
MI-308
All parts completly new.(Without soldering)
73 de EA4AQY
```

2676. FS V20 + Tape unit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: enelson@digital.net
Message-ID: <331c8285.1183743@news.digital.net>
Source record: 96352

V20 + tape unit $25 + shipping or best offer. Still in original box.
Includes extra power supply. All Email answered.

2677. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: Sir Robin <Nexus15@flash.net>
Message-ID: <331CD67D.3FA0@flash.net>
Source record: 96353

Glenn Sparks wrote:
>
> I have used the method Gary spoke of by working the pipe in with
> water, it works very well, don't force it and get it stuck, take it
> easy and you will be able to get it down quite well. The other
> suggestions are good as well, especially buying ground rods that are
> copper clad. I do not recommend clamps though, use heavy copper braid
> and braise it to the rods with a torch. I discussed this with an ex
> military explosives expert, and he recommended 8 rods 1 meter apart in
> a rectangle, all braised with copper pipe between them, and then 3/4"
> copper pipe to the shack. He claimed incredible increases in signal
> strenght and reduced noise with this setup. He also claimed with
> using the copper clad rod, and braising the connectorsand he has seen
> his old installations still blow circuit breakers of generators
> connected to two systems (the method he used to test the ground) with
> all of the steel rod rusted away and just the clad still in the
> ground.
>
> His theory is placing the rods in a rectangle or circle if you have
> the real estate, emulate a cage antenna in the ground, increasing the
> bandwidth and efficiency.
>
> Good Luck,
>
> Glenn Sparks KI5GY

Glen,

If you are referencing Bill Todd-Brown you might want to give some thought to the geology of the area in which we live. Under Houston and the whole gulf coast area is a continuous layer of water filled sand. This is the layer that Bill Todd was trying to get to and he mentioned that he had more success when he had access to this layer with this multiple ground rod system.

I'd like to here Cecil Moore's comments or Roy Lewellen's comments to the statement by Rich Measures. Something to think about Rich, thanks.....Rick W5RH

2678. Ham Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <331D05B1.ECC@cyberramp.net>
Source record: 96354

http://www.geocities.com/colosseum/7859

2679. vhf swr/watt meter for 6

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <443_9703042241@conchbbs.com>
Source record: 96355

Hi dose any one know if you can use the mfj-812b swr/watt meter for 6mtrs.

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

2680. Help with Antenna Setup Please!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: kf6htz@hotmail.com
Message-ID: <857538051.23427@dejanews.com>
Source record: 96356

Was wondering about Ideas for an antenna setup for a mobile.
Have Ic-V21AT 2m/220 transciever, also Have RCI 2950(10m mobile)

What kind of "Mono-pole" style antenna could I build that could cover
10 meters (28.1-28.5mhz), 2 meters (144-148mhz), and 1.25 meters
(220-225mhz)?

Planned to be mounted on an 88 Nisson Short-Bed Pickup-truck, with a
Tool box acrossed the bed.

In asking other green-hams(hold the Eggs) I was told an old CB antenna
could be cut short to 10 meters, but the 2 meter and the 1.25 meter would
have to be tuned by a Tuned-style circuit...But we never thought about the
effect of connecting 2 radios to the same antenna! Opps...Any Ideas?

Thanx, Nick
KK6HTZ

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2681. Re: Cardwell Caps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: philk5pc@connect.net
Message-ID: <857540450.24689@dejanews.com>
Source record: 96357

Cardwell is alive and well...

Cardwell Condenser Corporation
80 East Montauk Highway
Lindenhurst, Long Island, New York 11757
Tel. # (516)957-7200

They also bought E.F. Johnson and Hammarlund capacitor divisions
and still make all those lines also.

(((73)))
Phil, K5PC

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2682. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: dick@merlin.libelle.com
Message-ID: <dick-ya02408000R0403972255010001@news.zippo.com>
Source record: 96358

In article <5fin13$66l$1@news.wco.com>, frog200@nospam.juno.com (Ed G.) wrote:

> Just in case it hasn't been mentioned in this thread already, under
>NO circumstances should a ground system which provides antenna lightning
>protection be tied to the house AC ground system.

I disagree. You want them tied together very securely, but only at one common point (usually the service entrance). That way if your antenna system takes a lightning hit, you won't suddenly find your antenna ground six gazillion volts above your house ground. You want both grounds to rise and fall as closely together as you can and that requires they be bonded together as solidly (i.e., low inductance) as possible.

For more information, you can check out http://www.polyphaser.com

73, Dick W6OLD
--
Dick Flanagan W6OLD CFII Minden, Nevada
Visit http://wadg.greatbasin.net/siera/

2683. WTB Blown Seimens TWT Power Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: George Anderson <260anderson@msn.com>
Message-ID: <01bc291d$14ce8340$efdebec7@George.Monroe.edu>
Source record: 96359

Wanted Dead or Alive......

Seimens TWT Power Supply For RW 189 or RW289 Tubes

RW 189 Tube uses RW221 or RW223 power supply

Tnx and 73's

2684. RE: Ham-Homebrew Digest V97 #150

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: THOMPSMD@NYSOMR.EMI.COM
Message-ID: <D510ZWSTO67E4*THOMPSMD@A1.OMRDD>
Source record: 96427

RE: DMTF DECODER

I also have found a dmtf project that you may like .
It is in the November 1993 issue of Electronics Now.

Mike/N2poc
(thompsmd@nysomr.emi.com)

2685. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5ffq07$met@mtinsc05.worldnet.att.net>
Source record: 96428

No doubt, brazing will ensure a good contact. A good, tight clamp
connection is gas tight and will meet electrical code. Soldering will
not - not sure about brazing...
Ref. related post...The local cable company uses 4' ground rods, but I
am not so sure they meet code. One thing for sure.... not a very good
ground in many soils!
73, Woody

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2686. Re: need advice on home made high voltage cap's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ffvlv$n0h@hpcvsnz.cv.hp.com>
Source record: 96429

Peter Shintani (shintani@tv.sony.co.jp) wrote:
: Hi:
: I am interested in making some very high voltage caps for a loop antenna.
: I gave up on the idea of making a variable HV cap so I will concentrate on
: operating on a single frequency. My question is has anyone made some 30kv
: rate caps using glass jars and copper tape or aluminum foil(heavy duty) for

: a small loop antenna ? I understand that the er of glass is about 8, so
: that I can
: get away with 1/8 the surface area as compared to an air dielectric cap.
: What sort of luck has any one had ?

From my experience, I must offer the following cautions:

Most glasses are rather lossy at RF; it can be a "snowballing" effect,
because the loss gets worse as the temperature rises (and under power,
the temperature rises, and the loss increases, and the temp rises
further...) If you have any air bubbles between the electrodes and the
glass (or embedded in the glass), be aware that the voltage gradient in
those bubbles may be very high, and plasma may form in them. This is
because of their much lower dielectric constant. Consider how voltages
divide among series c capacitors. Be aware of high voltage gradients at
the edges of your "plates". Ideally, the conductor would curve away in
a smooth arc, not a sharp edge. But also the dielectric would follow
it.

In some work I was involved in a few years ago, we made some capacitors
by depositing metal electrodes on fused quartz microscope slides. These
worked at about 4kV. We used guard rings to avoid high voltage
gradient problems at edges, and the metalization process avoided any
air bubbles.

--
Cheers,
Tom
tomb@lsid.hp.com

2687. 4-1000A's for sale or trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: w5kft@nts-online.net
Message-ID: <5fg65b$2gp$4@news.nts-online.net>
Source record: 96430

I have several very good used and tested 4-1000A tubes for
sale at $125 each. Will consider trades of other ham gear, scanners,
computers, etc.

Also chimneys for 4-1000A's at $35 each.

Bryan W5KFT

2688. Help! What is a 8462 tube?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: KG7NN <seymour@montana.com>
Message-ID: <01bc2855$a3e423a0$462d28cf@sandy>
Source record: 96431

Does anyone know what the application is for an 8462 tube?
--
Sandy, KG7NN
Victor, MT

2689. 200+ UHF Rec Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: blum@goodnet.com
Message-ID: <331bb824.2099782@news.goodnet.com>
Source record: 96432

Need 200+ UHF Receivers!

I am looking for a small (Aprox 2" x 2" x .5") UHF receiver.
If my project is successful I will need aproximately 200 of
these units every few months. I can design and build these
units myself if need be, but I do not want to re-invent the
wheel. Here are more specs:

Input sensitivity: -118 db
frequency: xtal controlled, aprox 415.0 Mhz FM
channels: two, within 1Mhz of each other
RF Bandwidth: 12Khz
Audio bandwidth: 100Hz - 3 Khz
Audio Output impedance: 50 - 100 ohms
Audio Power output: 60 - 100 mW
Power Supply: 6V, 40mA, maximum
Temperature range: -22F to +140F
Package: Circuit board assembly only

(Note: the input sensitivity requirement is a little "stiff",
I could add a preamp if necessary)
If you have information that would lead to locating such a device
please forward to blum@goodnet.com Include specifications and
price.

2690. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5fgnm6$dcb@news.Hawaii.Edu>
Source record: 96433
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Joseph Kral <kral@hpl.hp.com.NO.JUNK> wrote:
>Jeffrey Herman <jeffreyh@Hawaii.Edu> wrote:

>>I've already pointed out why someone shouldn't use an amateur HT
>>for fire service communications; its freq'y agility and non-resistance
>>to the heat of fire were two main points that caused me concern
>>(I had a portion of my helmet melt in one structure fire - can't
>>imagine any amateur HT being able to survive such heat, but commer-
>>cial radios *will* be able to withstand such temperatures).

>Jeff, your blanket statement "...commercial radios *will* be able to
>withstand such temperatures" is not necessarily correct. Certainly, some
>will, but come won't. For instance, Yaesu markets their VX-10 radio for
>police and fire use and except for the CPU and programming, its identical
>to their FT-10,11,50 radios. Continuing, Radio Shack sells 'commercial
>radios' that would probably melt in the sun!

My firefighting days were in the early 70s; I recall us using metal
encased HTs. If plastic is being taken into fires today, then a step
backwards has be taken in firefighting comms.

Jeff KH2PZ

2691. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: "Chad H. Phillips" <chadhp@iai.i-america.net>
Message-ID: <01bc2868$eb466420$LocalHost@spider>
Source record: 96434

Pete Soper <psoper@encore.com> wrote in article <E6HCr6.B9r@encore.com>...
> "Chad H. Phillips" <chadhp@iai.i-america.net> writes:
>
> >Incidentally, the ground in your house wiring should already be a true
> >earth ground, tied to an 8-foot ground rod or other grounding electrode
> >system. The neutral side of your 120v system should also be bonded to
this
> >ground at your main service panel. This grounding system should be more
> >than ample for safety considerations. On the other hand, I can imagine
that
> >there may be certain benefits to some sort of isolated station ground
(for
> >radio equipment only), especially isolation from RF interference and
> >lightning. I would be interested to know what sort of system you work
out,
> >and how it works for you.
>
> If what you have in mind is a separate ground rod that is not bonded back
> to the service panel ground, that's an NEC violation and a severe safety
> hazard in the presence of a lightning strike.
>
> Regards,
> Pete
> KS4XG (six ground rods, 200 feet of #6)
>

Oh yes, you are absolutely right on the Code requirement that all grounding
electrode systems be bonded together.
The equipment grounding conductors in the branch circuit supplying a
station or individual piece of equipment are intended to prevent exposed
metal from becoming "hot" (with respect to ground) with power from the
branch circuit itself (i.e. 60Hz AC or some DC from an internal power
supply). With ALL exposed metal and ALL grounding systems effectively
bonded together and to ground, there can be no dangerous potentials waiting
for US to provide a path to ground. And by bonding the grounding system to
the neutral side (one place only, at the service panel or meter) we are
more likely, in the event of a fault, to draw enough current to trip the
breaker. This all works fine, and I can think of no reasons to deviate from
this simple, wisely regulated design. Well, except maybe lightning and
R.F.
First, consider a fraction of the tremendous energy of a lightning strike
delivered to some "grounded" piece of equipment. If your station is
supplied by a small branch circuit, there could easily be a hundred feet of
small-gauge wire between you and the ground rod, and who knows how many

wire-nut connections. As the voltage on your computer case soars due to the high-impedance path to ground, your phone line may suddenly become a path for some of the current, which is bad for your modem. This is just an imagined example of the freaky things (i.e. effects that i don't always even begin to understand) that can happen when lightning strikes. If we agree that grounding is good protection, might it follow that better grounding is better protection? If so, perhaps we should drive a ground rod at the station, attach all the most-likely-to-bring-lightning equipment to this, and run a #6 copper wire to the other electrode/s at the service panel. A better ground? I think so. Let's go one step further. A multioutlet branch circuit has an equipment ground that is attached to everything up to the point of connection to your small transmitter. What if we detach the transmitter ground from the branch circuit ground and attach it to the station ground system. We have developed a sort of isolated ground, and everything is still bonded per the Code. (I think hospitals use isolated grounding for patient equipment. Is this a similar system?) Then there's R.F., which does not always like to travel down the equipment ground conductor. Our other equipment can be adversely affected when some of it does. Maybe we should try to confine this high-frequency current to the station grounding electrode system.

Pete and all, please comment.

Chad
KE4KMH

2692. Re: Johnson UHF Mods & programing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: twoway@scoden.comNOSPAM
Message-ID: <5fgsrlesf1@decius.ultra.net>
Source record: 96435

Bruce- as they say, rotsa ruck. That radio is prom
programmable with an extensive prom table available in the
EF Johnson programming book-will go to 450 mhz, no lower. I
tried many years ago to convert one to ham bands
unsuccessfully. I do beleive that I had talked to efj also,
and they agreed it couldn't be done. Good luck and let me
know if you have any success.
Scott KA1CLX
twoway@scoden.com

In article <331B9CBB.3EBA@xmission.com>,
"Bruce J. Bergen" <bbergen@xmission.com> wrote:
>I recently obtained and EF Johnson SDL-6000 series (model
6065-832)
>mobile UHF xciver which I would like to see if I can modify
or program
>to the 70 cm band. The information I have indicates that
it is
>programable in the 450-512 band.
>
>Any suggestions
>
>Bruce - KI7OM

2693. PIC 16C84 programmer for Amateur use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: bryan@conquest.co.nz
Message-ID: <5fgs7m$ocf@nova.igrin.co.nz>
Source record: 96436

Hello all.

I am very excited to announce that I have made my nifty little programmer for Microchip Technology's PIC 16C84 microcontroller/CPU available for general release.

The PIC 16C84 is a full blown RISC microprocessor with EEPROM program memory, 13 I/O pins which can run up to 10MHz in DIL 18pin package! If you haven't heard of it before you really don't know what you are missing. Check out http://www.microchip2.com/products/micros/mid/overv/16c84.htm to get the gos' from the horses mouth.

Anyway... I'm not here to advertise for them :)...

My "PICPROG" program is kinda shareware but otherwise fully functional. Figured I should try and get something back for my efforts. :)

The PIC 16C84 MCU is an awesome little device which I have used for several Amateur related projects such as repeater controllers etc. I wasn't satisfied with any of the other programmers I could find so I developed my own.

I've been using it myself for about a year now and have come under preasure locally to make it available to the world. I've just spent another whole day getting a distribution package, on line help and documentation sorted out. It's a bit rough and ready but if you have ever used a PIC 16C84 (or want to) I think you will like it!

If you are interested have a look at http://www.igrin.co.nz/~bryanh/picprog/index.html

Any comments greatly appreciated.

73 de ZL1HIT
Bryan.

2694. Re: need advice on home made high voltage cap's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: wvanhorn@freenet.columbus.oh.us
Message-ID: <5fh3ga$in6@login.freenet.columbus.oh.us>
Source record: 96437

Peter Shintani (shintani@tv.sony.co.jp) wrote:
: Hi:
: I am interested in making some very high voltage caps for a loop antenna.
: I gave up on the idea of making a variable HV cap so I will concentrate on
: operating on a single frequency. My question is has anyone made some 30kv
: rate caps using glass jars and copper tape or aluminum foil(heavy duty) for

Hi, Peter -

I have had excellent luck with glass-dielectric caps. I had an antenna up for the last year using traps with caps made of aluminum tape stuck onto microscope slides. I used standard slides bought from a scientific supply house, and avoided putting the adhesive side of the tape within the dielectric field. (I used three slides: two with tape on one side of each as "plates", and one between the aluminum for dielectric). I tested them, in the antenna with 100-watts of power running, for 15-minutes key-down on the 20-meter band (the band was dead). Then I took them out and felt them. They were not even warm!

Slides are 1-inch x 3-inch x 1-mm. I trim the foil about 1-mm. away from the edges of the glass to give a longer breakdown path, and have not had any problems from arc-over. But in my use, the "traps" were not resonant, so extremely high voltages were not developed. The high dielectric constant of glass is very convenient. A cap made from almost the full area of one slide gives almost 100-uf. capacitance. It is easy to make a "pack" of as much capacitance as needed for most antenna uses.

Before settling on slides as the most convenient source of dielectrics, I made some caps of "single thickness" window glass (the type used in picture frames - the type actually used in windows is called "double thickness"). I got the idea from an article in one of the early issues of the ARRL Antenna Compendium. They work fine and would provide extremely high breakdown voltage, but the caps become much larger. Since I wanted to build traps as small as possible, the 1-mm. slides are best for my use.

"Van" Van Horne - W8UOF
wvanho@infinet.com
(This message is sent via Columbus Freenet, because Infinet is down this a.m., but please reply to infinet.)

2695. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: psam@giraffe.ru.ac.za
Message-ID: <psam.136.331C313E@giraffe.ru.ac.za>
Source record: 96438
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5fgnm6$dcb@news.Hawaii.Edu> jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:
>From: jeffreyh@Hawaii.Edu (Jeffrey Herman)
>Subject: Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)
>Date: 4 Mar 1997 08:49:10 GMT

>Joseph Kral <kral@hpl.hp.com.NO.JUNK> wrote:
>>Jeffrey Herman <jeffreyh@Hawaii.Edu> wrote:

>>>I've already pointed out why someone shouldn't use an amateur HT
>>>for fire service communications; its freq'y agility and non-resistance
>>>to the heat of fire were two main points that caused me concern
>>>(I had a portion of my helmet melt in one structure fire - can't
>>>imagine any amateur HT being able to survive such heat, but commer-
>>>cial radios *will* be able to withstand such temperatures).

>>Jeff, your blanket statement "...commercial radios *will* be able to
>>withstand such temperatures" is not necessarily correct. Certainly, some
>>will, but come won't. For instance, Yaesu markets their VX-10 radio for
>>police and fire use and except for the CPU and programming, its identical
>>to their FT-10,11,50 radios. Continuing, Radio Shack sells 'commercial
>>radios' that would probably melt in the sun!

>My firefighting days were in the early 70s; I recall us using metal
>encased HTs. If plastic is being taken into fires today, then a step
>backwards has be taken in firefighting comms.

>Jeff KH2PZ

Not true..as there as plastics that can with stand much more heat than any
metal..but they cost plenty.

2696. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: Vince <WA2RSX@worldnet.att.net>
Message-ID: <331C5A6B.23@worldnet.att.net>
Source record: 96439

Wow. I did not think my article would trigger such discussion, much of which is still over my head and still prompting me to do further research myself.

My initial thinking was to use a length of solid conductor, obtained after a nurricane caused it to fall to the ground yrs ago from the local utility power pole. My plan is to run this between the ground rod and the chassis of my radio(s) here in the shack, thinking that this would also improve my (desired) RF radiation performance on 40mtrs etc.

I could also run the conductor within the yet unfinished basement approciamately 40 feet to the main water pipe, which is where the electric service panel is grounded.

Would this be as efficient as a single ground rod installation? or would I incur problems with RF resonance, etc. on the HF bands?

Thank you and all the others that have given me much to think further about.

73s/ciao
Vince
Deer Park, LI, NY

QRV @ 7085kHz Baudot RTTY

PS: Im in process of switching from AOL to ATT WorldNet Services and must learn more about these newsgroups here.

2697. WTB YAESU FV-102DM Digital VFO and FT-102 AM/FM Board

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: wb6elm@juno.com
Message-ID: <5fhc91$5if@poisson.nosc.mil>
Source record: 96440
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi,
I recently purchased a YAESU FT-102 transceiver. Now I am looking for the optional AM/FM Module that goes in the bottom of the YAESU FT-102. Also looking for the matching remote FV-102DM Digital VFO for the FT-102.

Rubin
wb6elm@juno.com

2698. Re: mono- to stereo...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <331C5EF3.1435@idecc.com>
Source record: 96441

shearer@pluto.njcc.com wrote:
>
> i have a scanner which only outputs reception in mono...
> would it be possible to modify this to stereo?
> i am not refering to jack output.
> what might be involved?

Well, yes. With enough added circuitry you could recieve stereo but wow, alot of work just to pick up FM broadcast transmissions.

I don't know of ANY other service that is currently transmitting in stereo. But if you must. I'd take a look at the FM reciever section in the scanner, with the chipsets available today it may be using an FM reciever that already has stereo built in, but I doubt it. There are so many mono FM reciever chips on the market. Your basically looking at building an FM stereo and then just using the synthisizer in the scanner for freq control. What were you wanting to recieve?

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

2699. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0403970727450001@news.vcnet.com>
Source record: 96442
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

In article <5f0pbd$ict@news.myriad.net>, mike.luther@ziplog.com wrote:

> In <measures-ya02408000R2502970419040001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:
> >In article <01bc21ed$738b3540$f20f2399@desktop>, "Peter Gottlieb"
> ><peter_gottlieb@msn.com> wrote:
> >
> >> CRONIN <jdc3538@osfmail.isc.rit.edu> wrote in article
> >> <5ecocf$9ha@news.isc.rit.edu>...
> >> >
> >> > I'm tinkering with a radio for packet use that has a relay for T/R
> >> > switching. The relay has a diode across it to keep the transistor that
> >> > runs it from getting fried. So far so good. Every now and then
> >> > there is mention of how this increases relay switching time, obviously
> >> > a bad thing for packet.
> >>
> >> In simple terms, a magnetic field holds the relay in, and the diode
> >> prevents
> >> the field from collapsing as fast by turning the voltage created by the
> >> collapsing
> >> magnetic field back into a magnetic field for some milliseconds.
> >snip...
> >
> >A reverse diode across the coil is important since it protects the coil
> >from the otherwise large counter EMF across the coil during break. (I
> >measured 450v peak across a 24v relay coil during break.) However, such a
> >diode increases the break-time. By placing a resistor in series with the
> >diode, the break-time can be cheaply decreased and the counter EMF held to
> >a reasonable amount. As a rule of thumb, the series R should be 2 to 3
> >times the coil R. More R =s faster break-time, but with the trade-off of
> >more counter EMF volts.
> >
> >The make-time of a DC relay can be decreased by connecting the coil in
> >series with a resistor that has 3 to 5 times the resistance of the coil.
> >Naturally, this arrangement increases the voltage needed to operate the
> >relay. For example, a relay has a 240 ohm coil rated at 24v. A 720 ohm
> >resistor is connected in series with the coil. In order to produce 24v
> >across the coil, 96v must be applied to the series coil/resistor. This
> >circuit is recommended by Jennings, the company that manufacturers
> >vacuum-relays.
> > Here's how it works: Relay coils have inductance. For instance, the
> >Jennings RJ-1A's 26v coil has about 0.3H. It takes time to overcome the
> >inductance and build up a flow of current before a relay can close. The

> >circuit described temporarily provides more coil voltage at make, thereby
> >shorting the time it takes for current to build up in the coil. I
> >measured a make-time decrease of roughly 65% with the circuit described.
> >
> >--
> >--Rich-- ag6k, 805-386-3734
>
> The technique works *VERY* well. I've been using a T/R switch for QSK
> that uses an RJ-1A driven this way for 22 years now. My plate voltage
> switch has a Cramer hour meter on it that had over 10000 hours of plate-on
> all-cw time for my hand built pair of 4-400a's that goes through this relay,
> before the first one got to dragging. I bought two back in 1974, one for a
> spare, thinking I would use in a year or so....
>
> Surprise, the first one went over 20 years of *HARD* use, --- I gave up
> even *THINKING* about the zero's in the number of operations when I
> got to trying to figure that out for all those hours since my plate voltage
> isn't brought up unless I need the stuff.... Yeah I know, how much do
> you really send in an hour, but, pileups are pileups etc... :)
>
> Of course I don't switch it hot, but it follows stuff nicely up past 60 WPM
> in this sort of arrangement. I couldn't say enough good words about Jennings
> stuff, besides which the pair of vaccuum variables in the amp are also
> Jennings. These relays are available through Davilyn, Corp. out in
California
> as well as Nebraska Surplus. If you get them, be sure and get the new ones.
> Even at $100 or so each they are worth it. The reason is that pulls are
> also available, but you really have no way of knowing if the pulls have been
> subjected to abuse.
...snip...
Fair Radio Sales currently has virtually new Jennings RJ-1As--for $35
each--that are removed from new equipment that was never placed in service.
Although Fair Radio Sales does not check these relays for gas with a high
potential tester, the price is right. If a relay proves to be gassy, Fair
Radio will make it right.
The minimum rated breakdown potential across the open contacts on a
RJ-1A is 3500VDC. A gassy output relay can destroy a good input reed relay
in an amplifier. IMO, it is abundantly risky NOT to test a vacuum
component before placing it in service.

I have tested new, out of the box, Jennings vacuum components that were in
storage for a few years, that had less than half of the rated voltage
withstanding capability. Obviously, pico-scopic seal leaks may go
undetected at the time of manufacture.

At break, the reverse EMF across the RJ-1A's 26v, 0.3H, coil can exceed
450 peak V. Although there are 600V-rated power FETs than handle this much
voltage, a NEEDLESS, recurrent 450v spike across a 24v relay coil is
hardly good engineering practice. A diode and series resistor (or zener)
should be connected across the coil to set the release time as needed (by
adjusting R) and limit the reverse EMF at break.

--
--Rich-- ag6k, 805-386-3734

2700. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0403970917500001@news.vcnet.com>
Source record: 96443
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

In article <5f0pbd$ict@news.myriad.net>, mike.luther@ziplog.com wrote:

> In <measures-ya02408000R2502970419040001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:
> >In article <01bc21ed$738b3540$f20f2399@desktop>, "Peter Gottlieb"
> ><peter_gottlieb@msn.com> wrote:
> >
> >> CRONIN <jdc3538@osfmail.isc.rit.edu> wrote in article
> >> <5ecocf$9ha@news.isc.rit.edu>...
> >> >
> >> > I'm tinkering with a radio for packet use that has a relay for T/R
> >> > switching. The relay has a diode across it to keep the transistor that
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> >--
> >--Rich-- ag6k, 805-386-3734
>
> The technique works *VERY* well. I've been using a T/R switch for QSK
> that uses an RJ-1A driven this way for 22 years now. My plate voltage
> switch has a Cramer hour meter on it that had over 10000 hours of plate-on
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> stuff, besides which the pair of vaccuum variables in the amp are also
> Jennings. These relays are available through Davilyn, Corp. out in
California
> as well as Nebraska Surplus. If you get them, be sure and get the new ones.
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handle this much voltage, a NEEDLESS, recurrent 450v spike across a 24v
relay coil is

hardly good engineering practice. IMO, a diode and series resistor (or zener) should be connected across the coil to set the release time as needed (by adjusting R), AND put a limit on the reverse EMF spike at break.

--
--Rich-- ag6k, 805-386-3734

2701. Re: SB-230 mod desired: QSK and 160m?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-04 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0403970933430001@news.vcnet.com>
Source record: 96444

In article <5ev0rd$rm9@hera.ia.net>, kovar@zeus.ia.net (Jack Kovar KE0AX) wrote:

> My SB-230 is so quiet EXCEPT the relay clunk.
>
> Any ideas to convert to vacuumm relay and possible QSK?
>
> Secound how about a possible 160 mod? I know space is limited!
>
> I thought someone may have a powder core solution to switch in?
>
> Thanks,
> Jack Kovar

The QSK/high-speed switching circuit in the Jan. 1994 *QST* magazine article "The Nearly Perfect Amplifier" will work in the SB-230. You can find an updated schematic on my Web site at http://www.vcnet.com/measures

IMO, the factory-stock SB-230 is not unconditionally VHF-stable.

Since there is much unused space inside the SB-230, adding 160m should be fairly simple. A *QST* magazine article on adding 160m (in-general) appears in the Jan. 1989 issue.

--
--Rich-- ag6k, 805-386-3734

2702. WTD: Mods for the Icom IC740?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: fritter@geko.net.au
Message-ID: <5fkmct$hqt@zonk.geko.net.au>
Source record: 96197

Hi All..
I'm looking for any mods for the IC740.
Anything would be great.

Regards Graeme.....

VK2GDF.

2703. Need information on precision xtal osc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: Malcolm Mallette <mallettem@trader.com>
Message-ID: <331E341B.5B99@trader.com>
Source record: 96198

I am working on a SETI project here in Indianapolis in conjuction with a Radio Astronomy project using a 5 meter dish.

The observed frequencies will be in the 5.7 GHz ham band or the 10.68 GHz RA band.

We are going high in fequency to avoid RFI from the urban area.

I plan to use the SSB USA downconverter to a ICOM 7100 or 8400 on two meters. The lna will be from Down East. The SSB receiver on the two meter output from the downconverter will output its audio into a FFT program that will search for carriers . We will use FFTDSP or SETIFOX, or, probably, both running in two computers. SETIFOX will step the receiver across the passband of the downconverter output.

Taking into account the bin width of the programs, the integration time, the drift in frequency due to the rotation of the earth (although SETIFOX can now compensate for that) and thr rotation of the ETI planet, the downconverter must have short term stability of a cycle per second, or (better yet) less. Long term stability should be on the order of 250 cycles or 500 cycles per year.

The SSB USA downconverter LO does not have that stability. However, they can construct the LO for the downconverter so that the 117 MHz xtal osc. that is the start of the chain multiplying up to 5.7 GHz (minus 144 MHz) is not present at the LO chain, which will be on the dish with the downconverter, lna and feedhorn.

I need a xtal osc with over at 117 MHz with the stability to give me the desired results. I have heard that some commercial frequency standards lock to the GPS sats time signals, but have no details. I also wonder if the TV color burst osc. from a VCR could be used when locked to a station locked to a network standard.

We do not need a certifiable unit, but need the stability at a reasonable cost. The project will be done with a local University and the lna, downconverter and LO, except the xtal osc, will cost less that $1000. This year we must spend $3000 to $4000 for the dish and the installation cost charged to the science dept by the University Physical Plant. The radio astronomy will be done with a wide band (4 MHz wide) reciever so stability is not a problem. SETI requires stability.

I will appreciate any suggestions.

please send responses to my e-mail address as that is more certain to reach me than a reply on the newsgroup

e-mail is mallettem@trader.com and (work) mallettem@kdac.com

Malcolm WA9BVS

The SSB USA downconverter does not have that stability

2704. 3CX800A7 Amplifier Scheeme

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: EB3BAP@tro.FIlnet.ES
Message-ID: <331CE838.544E@tro.filnet.es>
Source record: 96360

I am interested in a 3CX800A7 144Mhz Amp. I will apreciate many help to find sites with scheemes or Kits suppliers (preferably European suppliers)

2705. Skywarn site - thanks to all

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: tadunlap@kellnet.com
Message-ID: <331cf12a.3626258@207.126.101.82>
Source record: 96361

Thanks to all who visited my new Skywarn site and gave their opinions. Due to overwhelming opposition, I have removed my chatroom. I had originally hoped for some weather discussion to happen here, but it seemed difficult to use. Please check back to the page often, as I will be constantly updating it as much as possible. Again, if you have comments or questions regarding the page, please e-mail me. Thank again.

Todd...
KC8EDS
tadunlap@kellnet.com
HOMEPAGE: http://www.qsl.net/kc8eds

2706. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: frog200@nospam.juno.com
Message-ID: <5fin13$66l$1@news.wco.com>
Source record: 96362

Just in case it hasn't been mentioned in this thread already, under
NO circumstances should a ground system which provides antenna lightning
protection be tied to the house AC ground system.

Ed W7DXZ (REPLY TO: ecgallup@mlode.com)

2707. WEATHER SPOTTER CLASSES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: n9npp@aol.com
Message-ID: <19970305040300.XAA11986@ladder01.news.aol.com>
Source record: 96363

I am attemping to put on one web site all locations of SERVERE WEATHER SPOTTER CLASSES. If you know of spotter classes in your area please send the schedule to me via e-mail or US mail and i will scan it into the web site. At the moment I will be using the weather page at www.axnet.com/united/wxlinks.htm . You may link your site with it, also let me know if you do and i will return a link back to yours. With each class please give;

date:
time:
location (hall or college and city,state):
hosted by:

or just send me the URL of a schedule that you've seen on the internet and i will do the rest.

send e-mail to:

united@axon.axnet.com

send US Post to:

n9npp/matt
1034 piccadilly court
bolingbrook, il usa
60440-1018

THANK YOU, N9NPP/MATT

2708. Interference from True Fitness Treadmill! Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: fallowsj@cadvision.com
Message-ID: <5fiuiq$1lse@elmo.cadvision.com>
Source record: 96364
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I continue to have severe radio interference to short wave from my neighbour's treadmill (True Fitness Model 450). The interference is in the form of hash pulsing about twice a second (depends on treadmill speed) all the way from BCB through about 20 Mhz. It is a bit like the noise from a TV oscillator (peaking every 15-20 Khz) but pulsating rather than steady. It is between S7 to +10 dB, extremely strong.

The manufacturer sent my neighbor a line filter (which they say cured two previous occurances of this interference) but it did not help. I sent them a fax saying this, but that was two weeks ago, and I have heard nothing back.

I am trying to get the attention of True Fitness, and could use some other cases. If you have experienced this intereference, I would appreciate hearing form you.

Also, if you have solved this problem, I would appreciate your advice even more.

I have a a treadmill made by a different manufacturer and it is absolutely RF-silent, at all speeds, so I know this is not an issue with all treadmills. At this point, however, I do not know if this hash is emitted by all True Fitness Model 450's, or if there is something wrong with my neighbor's unit.
--
John Fallows VE6MBA
Calgary, Alberta Ernst & Young (403) 261-4448
fallowsj@cadvision.com

2709. wanted: broken transverter 2 and 6 meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: earlve3ab@igs.net
Message-ID: <5fikaa$72r$1@nntp.igs.net>
Source record: 96365

Im pretty good at fixing things and Im interested in obtaining some gear that will give me 6 and 2 meter ssb/cw capabilities. I dont mind fixing up something that can be repaired ie..like a transverter or older style but solid state rig that has ssb capability without difficult to substitute components such as plls and microprocessor chips etc..id be interested in hearing about what you have perhaps given up on fixing..email address is earlve3ab@igs.net

2710. FS:Tubes,capacitors,etc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: elitetube@aol.com
Message-ID: <19970305074900.CAA19041@ladder01.news.aol.com>
Source record: 96366

Our What We Say Is What You Get policy means that we don't relabel tubes with phony brand names,
or put fancy gold lettering and boxes on them, or tell you that little elves in the Black Forest
made them in order to charge you 5 or 10 times what they're worth. We guarantee the goods you get
are actually the brand and type advertised. Power tubes are tested and matched at typical operating
voltages and dissipation using our British military valve checker.
Most Popular Tubes ...Prices,Availability are subject to change.
12AX7 Russia 12AX7WA 3.95.. Russia 12AX7WB 5.95.
Russia 12AX7WXT 6.95 China 3.95.. Yugo 5.95
Tesla 12AX7.these are near exact copies of exotic and rare Telefunken ECC803s.Get close to real Telefunken sound at a fraction of NOS prices!
Tesla ECC83 7.95 Tesla ECC803s, gold pins, graded/slected at factory 24.95

12AU7. Yugoslav 4.95..Sylvania 12AU7WA/6189 JAN 5.95.. Tungsram 7.95
Mullard British military "CV4003" 12AU7WA 17.95
12AT7..Yugoslav 5.95 Sylvania/Philips ECG 12AT7WA
Mullard British military "CV4024" 12AT7WA 17.95
6DJ8 and equivalent (E88CC,E188CC,6922,7308) Russia 6922 7.95
Tesla E88CC(Slovakia) 7.95 Siemens (Germany) gold pin 6922 24.95.
6550-KT88 Tesla (Slovakia) KT88..nice copy of British. Call for price/avail
Russian 6550C clear bulb-Very nice quality, looks like GE!39.90 match pair
6CA7/EL34 EL34-G Russia Narrow bulb- sim to Siemens 19.95 matched pair
6CA7/EL34 Russia fat bulb (Looks like GE) 24.95/match pair
6CA7/E34L Tesla (Czech) Very nice, close copy of Mullard 24.95/ matched pair
Dynaco ST70/MK4 should use EL34-G or Tesla Mark II can use all 3 types.
6L6-GC/KT66..Russia 6L6WGC/5881 16.90/mpair Russia 6L6-GC 11.90/mpair
6L6WGB/5881 Philips ECG/Sylvania 29.95/matched pair
KT66 blue glass Chinese, selected,tested & guaranteed, looks cool! $39.95/pair
350B Chinese, looks like WE,up to 600V Va, sub for EL37, KT66 $59.95/ mpair
6V6-GT Russia 3.95 each Brimar (England) 6V6-GT/CV511 9.95 each
807 Russian 14.95 British ITT 5B/254M same as 807 but 1/4" cap, 19.95
5AR4/GZ34 Russia (new improved type) 8.95 Chinese 7.95
CV378/GZ37 Mullard military Large bulb sub for 5AR4, WE422A 17.95 ea
300B Russian, Chinese, Cetron, WE, etc Call for avail and price
Russian Tubes 5U4-G 5.95 6AS7-G 7.95 6BQ5/EL84 3.95 6C33 call for avail
6EU7 9.95 6N7-GT 3.95 6SJ7 3.95 6SL7-GT 3.95 6SN7-GT 5.95 811A calll

6267/EF86 call for avail 7189/EL84-M 7.95 7199 8.95 6B4-G Russian 29.95
Other popular tubes Lots more not listed, please call!! (call for info
onstock)
5U4-GB 12.95 6AN8 5.95 6BM8/ECL82 5.95 6C4 4.95 6CA4/EZ81 4.95
6CG7/6FQ7(USA) 14.95 6CW4 8.95 6DL4/EC88 4.95 6FQ7 USA.see 6CG7
6FQ7 9.95 6GK5 USA 5.95 6GW8/ECL86 3.95 6J7 3.95 6SC7 6.95 6V4 3.95
6X4 3.95 7F8..see 2C51/5670 (electrical equivalent) 12BH7 9.95 12BY7
9.95
12X4 3.95 5751 Call 5879 7.95 5965 5.95 7247/12DW7 14.95 DG7-32
59.95
SORRY! We do NOT have Amperex or Telefunken tubes in popular numbers!
TUBE SALE Prices and quantities on following items are limited to stock ON

HAND, If you need more info please ask first. Guaranteed unused NOS
6AK5/EF95/5654 1.50 6AK6 75&#65533; 6AL5/5726 95&#65533; 6AT8 1.50 6AU8 1.00
6AU5-GT 1.50 6AX4-GTA 1.50 6BK5 50&#65533; 6BN6/6KS6 1.95
6CB6 1.50 6DG6 1.95 6DT6A 50&#65533; 6EH7/EF183 75&#65533; 6EW6 1.50
6GK5(Japan) 1.50 6GK5 GE 2.95 6GF7 2.95 6GS7 50&#65533; 6HA5/EC900 95&#65533;
6JB5/6JC5 95&#65533; 12AL5 25&#65533; 12EK6/12DZ6 50&#65533; 403B/5591 1.95 407A 1.00
408A 1.00 5670/2C51W 1.95 5920/E90CC 1.50 6689/E83F 3.95
Limited Quantities on following hard to find items:
Philips ECG Tubes 12FQ7 (Italy) 6.95 6GH8 (USA) 4.95
6F8-G A large bulb 6SN7-G, one of the grid leads exiting out the top cap.
4.95
6V6-GT, new old stock USA, various mfr, 9.95 each
6SN7-GT/GTA/GTB, various mfr new old stock USA mfr, 9.95 ea
12SN7-GT and 12SL7-GT, a 6SN7 or 6SL7 but 12V fil, NOS USA, 3.95
Computer grade capacitors! 1900 uF 250V 4.95 580 uF 400V 4.95
880 uF 350V 7.95 1100 uF 450V 9.95 (Clamps-1.50)
Sprague 800 volt 715P polypropylene cap, .0033 or .0047 uF .29 ea
Axial lead Polypropylenes, your choice .001-1500V, .0015 1KV, .0047 1600V,
.0068 1KV .39 each
Roderstien .037-400V axial polypropylene .29 each
Sprague 410P Axial .15 uF 300V .29 ea F-Dyne .022-400V axial .29 each
ALPS 50K stereo combo Volume & Balance control, large case,detents 4.95
Noble 250K volume control cast case,cond plastic 19.95
ALPS 24 pos 4 deck switches with PC boards for stepped atten, 24.95 ea
Terminal strips, Phenolic Bag of 30 pcs 1.95
Soldering Irons, big ones for thick metal.Wood handle.60W 4.95,100W 6.95
Transformer, #23V17 (Thordarsen) 117V 300 ma , open frame 9.95
Transformer, Triad F-90X, multiple taps 10V to 40V, 4.95 ea
Tube tester xfmr, multiple fil taps 1.5 to 117V, B+, rectifier windings
9.95
Choke,Stancor #C2344 1.5H 10ma, 1500V hipot 1.95 ea
9 pin chassis mount McMurdo socket, similar to above 1.95
Ceramic Octal with silver plate contacts,
slightly smaller than above item. 2.95 each
9 pin ceramic/gold, PC or Chassis mount, fit USA dimensions, exc quality
5.95

9 pin white plastic/gold PC mount very nice 2.95 Same item no gold plate
1.95

Ceramic/Silver 4-pin (300B,2A3) or 5-pin (807,etc) wafer socket 2.95
9 pin ceramic chassis mount with shield, fits 12AX7/6DJ8, 1.95

Dusty Files Part 1 Twenty interesting tube amp schematics 1938-1988,
with emphasis on the bizarre and high powered, plus 6 pages narration.
4.95
Dusty Files Part 2, Favorite Amp Plans, 25 tube power amplifiers that may
be
constructed from generally available, reasonably priced parts.
Includes handy Resistance Coupled Amplifier charts. 9.95
Other Regular Stock Useful Items
Computer grade capacitors, clamp mount 1 3/8 dia. Made in England
100 + 100 uF 500V 9.95 50+50 at 500V 7.95 Clamps add 1.50
Axial Electrolytic Capacitors Other lower voltages also stocked
500V:22 uF 2.95 47 uF 3.95
450V: 10uF 75¢ 22 uF 1.79 47 uF 2.95 80 uF 3.50 100 uF 3.95
300V 200 uF 3.95
160V 10 uF .39 22 uF .49 33 uF .49 47 uF .59 100 uF .99
50V 10 uF .19 22 uF .19 33 uF .19 47 uF .25 100 uF .29 220 uF .39
330 uF .49 1000 uF .95 1500 uF 1.50 2200 uF 1.95 3300 uF 2.50
25V 10 uF .19 22 uF .19 47 uF .19 100 uF .19 4700 uF 1.95
Note:When replacing electrolytics it is normally OK to replace with higher

voltage, and/or with a value -20 % to +100% (or higher) than original.
5 watt Zener diodes, 47, 82, 100, 110, 120, 130, 140, or 150 volts,1.95
each
Diodes, 1N4007 1A 1000V, pack of 5, .95 2.5A 1000V pack of five 1.95
High Voltage Diode, 500 ma 12,000 volt PRV rating (wow!) 5.95 each
Neutrik XLR connectors gold plate contacts, black case, specify male or
female, cord or chassis mounting. 4.95 each
Punch Kits, will punch all chassis above (up to 18 ga steel), covers all
popular tube socket holes, 5/8, 3/4, 7/8 , 1, 1 -1/8, 49.95 each
Lettering kits, dry transfer, for marking chassis. Specify Black or White.

Choose Audio Words (#AUD-1) Terminal Letters and Numbers (#TC-13) or Dial
Marking
(for volume/selectors,etc) (#DM-13) $3.29 per large pack.
FM Radio Alignment Tool Kit, has most popular types. #AT-1 1.95
Metal Film resistor kit,100 pc, 20+ popular values 1/2 watt 1% 6.95
Power Resistor Kit, 100 pc,20+ pop values 3 to 7W metal oxide 14.95
Sockets, Octal (for GZ34 ,EL34, 6550, 6L6,etc tubes) British Micanol
(brown plastic)
(McMurdo) phosphor bronze contacts,1 1/2" mnt centers 2.95 each
9 pin ceramic chassis mount w/ shield 1.95 each
Have Tube Sockets and Top Caps of all sorts.If you don¢t see it please
ask.
Tube Manuals, reprints, RCA (1959) 13.95, GE (1972) 12.95, WE 17.95
RCA Jacks, gold plated with teflon insulation and teflon washer to

insulate
from chassis. Same as Royce-style we used to sell. Red or Black 2.95
EACH
Insulated Gold Binding Post, 15A capacity. Red or Black. 2.95 EACH
Metal Gold Binding Post, with color-coded insulating washer. 15A capacity
Specify Red or Black. 2.95 EACH
Banana Plug, gold, takes up to 10AWG cable. Red or Black. 2.95 EACH
Spade Lug, gold, takes up to 10AWG cable. Red or Black. 2.95 EACH
Various esoteric audio wire & connectors, pls call for details
Mystery Polystyrene Capacitors Hard to find high voltage values.
These types rated 630V, 1% tolerance: 10 pf, 12 pf, 15 pf, 18 pf, 22 pf,
27 pf, 33 pf, 47 pf,
56 pf, 68 pf, 82 pf 1-9 pcs 1.95 each,
10-24 pcs, 1.59 each, 25 + pcs 1.35 each
Rated 630V, 1% tol: 100 pf, 120 pf, 150 pf, 180 pf, 200 pf, 220 pf, 270
pf,
330 pf, 390 pf, 1-9 pcs .99 each, 10-24 pcs .79 each, 25 + pcs .69 each
Rated 630V, 5% tol: 470 pf, 560 pf, 620 pf, 680 pf, 750 pf, 820 pf
1-9 pcs .69 each, 10-24 pcs .55 each, 25 + pcs .49 each
Rated 630V, 5% tolerance: 1000 pf, 2200 pf, 3300 pf, 4700 pf
1-9 pcs .49 each 10-24 pcs .39 each, 25+ pcs .35 each
Mystery Polypropylene Capacitors. All 10% tolerance. Quantity discounts as
follows:10 to 24 pcs, 20% off,
25 or more 33% off. Over 100:call forquote.
Rated 630V: .01 uF .45, .022 uF .45, .033 uF .45, .047 uF .45, .1 uF
.60
.15 uF .75 .22 uF .75, .47 uf .95 400V: .15 uF .50 .22 uF .60, .47 uF
.75,
No voice mail, no brain-dead sales clerks,no audio gurus or secret
Illuminati operatives.Just Worldwide Service,Neighborhood Prices,since
1985.
Triode Electronics
NOTE:New PO Box Number: Box 578501, Chicago,IL 60657 USA
Office : 2225 W. Roscoe St., Chicago, IL 60618 USA
All Phones: 773-871-7459 Fax machine (24 hours) 773-871-7938
Hours (CST) MonTues,Thurs,Fri 12:30 PM to 8 PM Tuesday 12:30PM-5PM
usually open late 7 PM to 9PM Monday and Thursday Night.
Terms of sale: No minimum order for credit cards or cash, however minimum
shipping charge (UPS)$4.00
Heavy items charge is chart rate plus $1.00 (USA) plus $3.00 (export).
UPS-COD (USA/Puerto Rico Only) add $5.00. COD's are cash-only, $50 min
order, $5.75 charge.
Illinois residents add 7.75% tax, Chicago residents & pickups add 8.75%
tax.
Most parts except for tubes and sale items can be returned for credit
within
30 days if with original packing and unused. Most Tubes (except sale items
where noted) are warranteed 3 months but tubes if defective are returnable
for exchange only. Other items may be subject to 15% restocking fee. This

normally waived if you apply credit towards another purchase. Please phone in advance if you wish to pick up parts at the office in order to avoid delays in filling your order.

2711. Boatanchors FS: TMC GPR90, and KWM-2A with homebrew PS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseE6K365.Arx@netcom.com>
Source record: 96367
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

FS: a reconditioned Collins KWM 2A (in a non-orginal case, but close to orginal) with a homebrew power supply. $400 + shipping

TMC GPR90 general coverage receiver, good shape, working $400 + shipping

2712. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc2a33$60489740$6960b6cd@chris>
Source record: 96368

Wana good yuk? A very lary Cable TV System did this! They used the towers
ground to ground the head end equipment. One strike and they found the
err's of thier ways!

:-)

Ed G. <frog200@nospam.juno.com> wrote in article
<5fin13$66l$1@news.wco.com>...
> Just in case it hasn't been mentioned in this thread already,
under
> NO circumstances should a ground system which provides antenna lightning
> protection be tied to the house AC ground system.
>
> Ed W7DXZ (REPLY TO: ecgallup@mlode.com)
>

2713. Wanted Yaesu FNB 4x NiCad "dead"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: Eric Bouchard <bouch@videotron.ca>
Message-ID: <01bc296f$342240e0$26db60cf@poste-1>
Source record: 96369

I need a dead FNB 40, 41or 42 battery casing for my docking station project
please inform me if you have one to trow away

Eric Bouchard, VA2 PTC
Jonqui&#65533;re, Qu&#65533;bec Canada
bouch@videotron.ca

2714. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: psoper@encore.com
Message-ID: <E6Ksv7.GDM@encore.com>
Source record: 96370

Hi Ed,

frog200@nospam.juno.com (Ed G.) writes:

> Just in case it hasn't been mentioned in this thread already, under
>NO circumstances should a ground system which provides antenna lightning
>protection be tied to the house AC ground system.

This is dead wrong.
You should read the National Electrical Code. Your home insurance company
has read this code and may hold you to it in the worst case scenario.

Regards,
Pete
KS4XG

2715. Autek RF1 RF Analyst vs MFJ 259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: dstone@bnr.ca
Message-ID: <5fk765$6pi@nrtphba6.bnr.ca>
Source record: 96371

[Article crossposted from rec.radio.amateur.antenna]
[Author was Danny Stone NT]
[Posted on 5 Mar 1997 16:26:36 GMT]

I am looking for comments on the RF1 vs MFJ-259.

What I am interested in is the accuracy of the instrument
in the scope of what is intended to do (i.e., the technical
performance).

I am not looking for a feature or price comparioson (that can
be garnered from the ads).

My primary applications include complex impedance measurements,
component measurements, and velocity factor mesurements (for
now!)

My opinion at this point is that the '259 is a more versatile
instrument, but the RF1 is more accurate. Am I wrong?

Tnx !

--

****
* *
* dstone@nortel.ca Research Triangle Park, NC *
* *
* ARS KK4E Amateur Radio Station *
* TRA 4929 Tripoli Rocketry Association *
* NAR 69244 National Association of Rocketry *
* *
* Danny "Miscreant" Stone: *
* A Professional Grouch AND Misanthrope in Training *
* *
* My Opinions are the Sole Responsibilty of Myself *
* and My Genetic Composition... *
* *
* "Don't Blame Me, Blame the Testosterone!" *
* *
****

--

****
* *
* dstone@nortel.ca Research Triangle Park, NC *

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* *
* ARS KK4E Amateur Radio Station *
* TRA 4929 Tripoli Rocketry Association *
* NAR 69244 National Association of Rocketry *
* *
* Danny "Miscreant" Stone: *
* A Professional Grouch AND Misanthrope in Training *
* *
* My Opinions are the Sole Responsibilty of Myself *
* and My Genetic Composition... *
* *
* "Don't Blame Me, Blame the Testosterone!" *
* *
**************************************************
```

2716. Re: HV variable capacitors ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0503970842340001@news.vcnet.com>
Source record: 96372

In article
<c=US%a=_%p=TELRAD%l=MISMAIL-970303093318Z-72@mismail.MIS.ELEX.CO.IL>,
morel.GRunberg@telrad.co.IL (Morel Grunberg) wrote:

> I'm looking for a source in a U.S. for two air variable capacitors
> (200-300pF@5-7KVdc) like the capacitors used in the old Heathkit
> 2KW Antenna tuners or similar.
> Does someone know who buyed the Heathkit components & parts stocks
> when they closed the bussiness few years ago ?
> Who is selling now Cardwell RF parts in U.S. ?
>
> 73 de Morel, 4X1AD

Variable inductors up to 40 Amperes; fixed inductors; variable capacitors;
right-angle drives for vertically mounting vacuum variable capacitors, et
cetera: Multronics-Cardwell @ 516-957-7200, 80 East Montauk Highway,
Lindenhurst, Long Island, N.Y. 11757.

--
--Rich-- ag6k, 805-386-3734

2717. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970305171100.MAA00955@ladder01.news.aol.com>
Source record: 96373

In article <measures-ya02408000R0403971309370001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>
> If you are looking for an RF-ground, Vince, driving a conductor deeper
>than a foot or so into the earth is a folly since HF and MF currents travel
>on the surface. IMO, a decent 'ground' can be had by burying a standard
>ten-foot length of 3/4" copper water pipe horizontally, just below the
>surface. For long life, the electrical connection to the buried copper
>pipe should be made with 95-Sn/5-Ag silver-solder, which is eutectic at 430
>deg. F, and is not as subject to errosion as is ordinary Sn-Pb 'electronic'
>solder.
>
>--
>--Rich-- ag6k, 805-386-3734

The problem with your scheme isn't that it might not provide RF ground, but that it doesn't comply with code requirements for grounding. Since such requirements usually aren't important until one needs to recover from a major disaster by getting insurance to cover a loss, it might not seem incredibly important until then. There also is a safety issue involved that most people never think of. You don't want a ground which is unconnected to your other grounds in the house, or things GFI's may not work either. de n8blk/3 -art clemons-

2718. ten-tec 6mtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <5e1_9703051208@conchbbs.com>
Source record: 96374

Hi all on the ten-tec model 1209 6mtr transverter kit on the schematic area
D20 and on the pc board were is says D20 install that the book want say to
install it but you do i just called ten-tec and asked about it.

73s kc5cxu

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

2719. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: fsimonds@icanect.net
Message-ID: <5fkdq2$7h0@news.icanect.net>
Source record: 96375

dick@merlin.libelle.com (Dick Flanagan) wrote:

->In article <5fin13$66l$1@news.wco.com>, frog200@nospam.juno.com (Ed G.) wrote:

->> Just in case it hasn't been mentioned in this thread already, under
->>NO circumstances should a ground system which provides antenna lightning
->>protection be tied to the house AC ground system.

->I disagree. You want them tied together very securely, but only at one
->common point (usually the service entrance). That way if your antenna
->system takes a lightning hit, you won't suddenly find your antenna ground
->six gazillion volts above your house ground. You want both grounds to rise
->and fall as closely together as you can and that requires they be bonded
->together as solidly (i.e., low inductance) as possible.

->For more information, you can check out http://www.polyphaser.com

->73, Dick W6OLD
->--
->Dick Flanagan W6OLD CFII Minden, Nevada
->Visit http://wadg.greatbasin.net/siera/

I disagree as well!!!

Here are two sites that contain quite a lot of good information on grounding
and lightning protection.

http://www.powerclinic.com/examlist.htm (mostly grounding)

http://www.polyphaser.com (grounding and protection. Read the newsletter issues that pertain to ham

antenna/station protection)

73--Terry/WB4FXD in Ft. Lauderdale, FL
fsimonds@icanect.net

2720. QST's Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: jmul@microlink.net
Message-ID: <857588401.17352@dejanews.com>
Source record: 96376
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Our radio club needs QST magazines from 1965 through 1980 to help fill in the gaps in our collection. Donations preferred but may work out a small payment, will pay shipping. Also want '73 Magazine from the same era. I would greatly appreciate hearing from anyone who can help. Thanks John N0EE

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

2721. FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: ilani@shani.net
Message-ID: <331D554A.6BBC@shani.net>
Source record: 96377

Can someone tell me what is the upper limit in watts for use in FM transmitter without FCC approval.

Thanks in advance
Avi ilan - ilani@shani.net

2722. Re: SHF prescalar

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: David Bindle <bindle@duke.usask.ca>
Message-ID: <Pine.OSF.3.95.970305135031.2644A-100000@duke.usask.ca>
Source record: 96378

Allen- I don't know of a prescaler at your frequency, but can you list some divide by 10 prescales that operate around 500 mhz? I have had no luck at finding such a animal, Will keep my eyes open for your requirements.
Regards Ken/VE5KRB
73's

On 3 Mar 1997, Allen Wallace wrote:

> I want to build a 2 GHZ prescalar for my frequency counter. Can anyone
> point me to a popular chip or construction article? Most of the
> prescalars I see are under 1 GHZ.
>
> 73, Allen Wallace N7CGH
>
>

2723. RE: CELL PHONE----> ham band....anybody have any luck with these?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9703051044324580@atdbbs.com>
Source record: 96379

>>I've got a couple of cell phones laying around just dying to be used
>>on a ham band...
>>Getting anything on them from the manufacturers is like pulling teeth
>>from a bull Rhino in rut.

Geeze, I wonder why....

2724. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5fkh0r$e8h@abyss.West.Sun.COM>
Source record: 96380

In article <331D554A.6BBC@shani.net>, <ilani@shani.net> wrote:
>Can someone tell me what is the upper limit in watts for use in FM
>transmitter without FCC approval.
>
>Thanks in advance
>Avi ilan - ilani@shani.net

In which radio service? I.e. what do you intend to do with this
FM transmitter - which frequency will you use?

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

2725. Re: HELP: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <331DDBBC.1B9A@vcd.hp.com>
Source record: 96381
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

dave eckhardt wrote:
>
> Siegfried Rambaum wrote:
> >
> > Who can identify these variable capacitors?
> >
> > 1 - Cardwell XG-110-XS,
> > spacing about 3/16 inches between rotor and stator
> >
> > 2 - This one does not have a manufacturer's marking that I would
> > interpret as a such ... maybe it has and I am just unaware of it
> > the modell number is NP-150-DS
> > The spacing between stators and rotors are 1/8 of an inch
> >
> > What are their capacities and what voltage are they rated for?
> >
> > Thanks for your help
> >
> > 73 de KB2YVC + DE8FGO, Siegfried
>
> I can't resist this one. Capacitors are no mystery. The BASIC
> equation for ANY capacitor (including varactors) is:
>
>
>
> (dielectric constant of vacuum)*(area of plates)
> Capacitance (fd) = ____
>
> plate spacing
>
> dielectric constant of vacuum = 8.85e-12 fd/m
> area of plates in square meters
> plate spacing in meters
>
> If you want, do the appropriate unit comversions (I personally like
> metric). In case you forgot, the area of a circle is
> 2
> A = pie*r .
>
> Then multiply by the number of plates. You shouldn't miss the actual
> maximum capacitance by more than 5 %.

Hi Dave,

Why make it so complicated? The capacitance of an air-dielectric capacitor can be determined easily using one's head or the back of an envelope. (Certainly no computer is needed!). Look in any ARRL Handbook of past few decades. To wit: From the 1961 Radio Amateur's Handbook:

C (Pf) = 0.44*(plate area, sq in)*(nr of plates-1)/plate spacing, in.

For breakdown voltage, same reference as above, use 26,000 volts/inch for reasonably smooth-edged plates.
For 1/8" and 3/16" spacing, respectively, Volts = 3250 and 4875 volts.

73,
Don, W6JL

2726. Re: HELP: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <331DD833.7C50@vcd.hp.com>
Source record: 96382
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

```
macino wrote:
>
> Siegfried Rambaum wrote:
> >
> > Who can identify these variable capacitors?
> >
> > 1 - Cardwell XG-110-XS,
> > spacing about 3/16 inches between rotor and stator
> >
> > 2 - This one does not have a manufacturer's marking that I would
> > interpret as a such ... maybe it has and I am just unaware of it
> > the modell number is NP-150-DS
> > The spacing between stators and rotors are 1/8 of an inch
> >
> > What are their capacities and what voltage are they rated for?
> >
> > Thanks for your help
> >
> > 73 de KB2YVC + DE8FGO, Siegfried
>
> Hi,
>
> If you supply me with the exact spacing, the diameter of the
> rotor and the total number of plates, I will calculate the
> values with my handy dandy soon to be released program.
>
> Jim W9LZ
```

2727. Re: HELP: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5fkoav$g44@hpcvsnz.cv.hp.com>
Source record: 96383
Cross-posted to: rec.radio.swap,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Several followups deleted about this question:

: > > Who can identify these variable capacitors?
: > >
: > > 1 - Cardwell XG-110-XS,
: > > spacing about 3/16 inches between rotor and stator
: > >
: > > 2 - This one does not have a manufacturer's marking that I would
: > > interpret as a such ... maybe it has and I am just unaware of it
: > > the modell number is NP-150-DS
: > > The spacing between stators and rotors are 1/8 of an inch

I'd have a very strong suspicion from the part numbers that they are
110pF max and 150pF max, respectively. Personally, I'd measure them
before I'd try to calculate the capacitance, there's so much fringing
in a variable. Also, measuring gives an accurate idea of the min
capacitance, too, which is much harder to calc. from dimensions.
Don's advice on voltage rating sounds pretty good.

--
Cheers,
Tom
tomb@lsid.hp.com

2728. PIC16C84 Programmer ERROR IN SCHEMATIC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: bryan@conquest.co.nz
Message-ID: <5fkof6$vs1@nova.igrin.co.nz>
Source record: 96384

You may or may not have had a look at my PIC16C84 programmer I've just released and downloaded the PICPROG10B distribution at http://www.igrin.co.nz/~bryanh/picprog/index.html

If you did PLEASE NOTE. There was an error (a serious one) in the circuit schematic of the orignal release (of a couple of days ago). The error was corected today (March 6, 1997).

The the new shematic is viewable/downloadable on its own at http://www.igrin.co.nz/~bryanh/picprog/picprog.gif.

Of course the 10b distribution ZIP file has been updated as well.

If you have any problem finding or downloading the schematic please email me and I'll send the corrected version to you as an attachment.

Apologies for any inconvenience this might have caused.

Regards
Bryan.

2729. <<<< AVVid has Moved >>>>

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <331DFE57.12F9@onramp.net>
Source record: 96385

Last weekend we completed our move to a newer and bigger facility. As of today the phones even work. Please note our new address and phone number.

AVVid
222 N. Story Rd. Suite 128
Irving, Tx. 75061

1-800-214-5779 (Old Number not changed)
1-972-986-0738
1-972-986-3040 (Fax)

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

2730. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: "Arthur N. Borg" <anborg@ksts.seed.net.tw>
Message-ID: <331E189C.47A2@ksts.seed.net.tw>
Source record: 96386
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

R. L. Measures wrote:
>
> In article <5f0pbd$ict@news.myriad.net>, mike.luther@ziplog.com wrote:
>
> > In <measures-ya02408000R2502970419040001@news.vcnet.com>,
> measures@mail.vcnet.com (R. L. Measures) writes:
> > >In article <01bc21ed$738b3540$f20f2399@desktop>, "Peter Gottlieb"
> > ><peter_gottlieb@msn.com> wrote:
> > >
> > >> CRONIN <jdc3538@osfmail.isc.rit.edu> wrote in article
> > >> <5ecocf$9ha@news.isc.rit.edu>...
> > >> >
> > >> > I'm tinkering with a radio for packet use that has a relay for T/R
> > >> > switching. The relay has a diode across it to keep the transistor that
> > >> > runs it from getting fried. So far so good. Every now and then
> > >> > there is mention of how this increases relay switching time, obviously
> > >> > a bad thing for packet.
> > >>snip> Lots of good stuff cut.

I was faced with this same problem and solved it in a slightly different way. I connected two transistors in series across twelve volts as though I was making a complementary output pair. Then I connected the relay from the connection between the two emitters and ground. With the two transistor bases connected together, the "output stage" was driven by another transistor. Thus when turned on, the top transistor passes current to the relay. When the pair is switched, the lower transistor passes the current that tries to continue to flow and produce a transistor destroying transient. Worked well for me, YMMV.

Best regards,

Art Borg

2731. Re: Ham-Homebrew Digest V97 #145

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Mar5.072009.18556@ke4zv.atl.ga.us>
Source record: 96387

In article <19970301.222825.4303.20.RJulian492@juno.com> rjulian492@juno.COM (RON C JULIAN) writes:
>ok. i'll bite. what are spammers?
>ron n0oef the FNG.

A spammer is someone who indiscriminately posts a message to dozens of newsgroups, none of which are on topic for the content of the post. The classic spam is the "Make Money Fast" illegal ponzi schemes we routinely see on all the groups.

Gary
--
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2732. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Mar5.073149.18655@ke4zv.atl.ga.us>
Source record: 96388

In article <5fin13$66l$1@news.wco.com> frog200@nospam.juno.com (Ed G.) writes:
> Just in case it hasn't been mentioned in this thread already, under
>NO circumstances should a ground system which provides antenna lightning
>protection be tied to the house AC ground system.
>
> Ed W7DXZ (REPLY TO: ecgallup@mlode.com)

The National Electrical Code *requires* that all grounds be
tied together. Failure to do this can void your homeowner's
insurance. It also won't pass the electrical inspector if he
knows his job.

Attempting to maintain separate grounding systems is also a
sure recipe for ground loops which will raise havoc with your
equipment in the event of a strike, due to the very large
Earth currents such a strike generates. That'll express
very large potentials between the two grounds, and anything
connected to both will be toast.

All site grounds must be bonded together. Use a star topology
to provide a station single point. And use a ground window at
your station entrance to enforce equal potentials on all cables
entering or leaving your station area (that includes power and
telco too).

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2733. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Mar5.202129.21177@ke4zv.atl.ga.us>
Source record: 96389

In article <331D554A.6BBC@shani.net> ilani@shani.net writes:
>Can someone tell me what is the upper limit in watts for use in FM
>transmitter without FCC approval.

That depends on a number of factors. In some cases, you can run 1 watt, in others, 100 mW, and in others much less than that. Part 15 of the FCC rules is the place to look for answers to particular questions.

If you go to the FCC website (www.fcc.gov), and go to the Office of Engineering and Technology pages, you'll find a downloadable file which addresses Part 15 operation in relatively plain language.

If you're looking to build a transmitter for the FM broadcast band, the Part 15 rules don't specify a transmitter power level anymore. Instead, there is a specification for a maximum microvolt per meter radiation the device can emit. With a very inefficient antenna, you might be able to run up to 100 mW, but for more typical antennas your output power will be much more limited than that, IE 10 mW or even less.

Basically the rule in this area is crafted to give you an effective range on the order of 100 feet to a typical consumer FM receiver. As receivers have gotten better, the maximum allowable field strength has decreased. Knowing this can be useful because measuring the field strength of these devices can be tricky. So if you build a unit that has a greater range to a typical FM broadcast receiver than 100 feet, you should probably reduce power. (Note this won't guarantee that you are in compliance, but it should get you close enough to avoid trouble with the FCC.)

If you are planning to build the device for some other frequency range, then you'll have to consult Part 15 to determine the exact limits under which you have to operate. In some cases, such as spread spectrum systems at 900 MHz or devices operating under U-NII, you can run up to a watt, and in some cases can expect a range up to 20 miles. This is an area where you have to know what you're doing to remain in compliance.

Note that if you are planning to build these for resale, much more specific requirements have to be met, and you *will* need an FCC Certification.

Note too that the FCC isn't very active in enforcement of these regulations *except* when an incumbent to the spectrum complains that you're causing interference. In those cases Uncle Fed can be motivated to come out and hunt you down. A Part 15 device must

not cause interference to other spectrum users, and *must*
accept any interference it receives from other users of the
spectrum.

Gary
--
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2734. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Mar5.195011.21030@ke4zv.atl.ga.us>
Source record: 96390

In article <19970305171100.MAA00955@ladder01.news.aol.com> n8blk@aol.com writes:
>In article <measures-ya02408000R0403971309370001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:
>> If you are looking for an RF-ground, Vince, driving a conductor deeper
>>than a foot or so into the earth is a folly since HF and MF currents travel
>>on the surface. IMO, a decent 'ground' can be had by burying a standard
>>ten-foot length of 3/4" copper water pipe horizontally, just below the
>>surface. For long life, the electrical connection to the buried copper
>>pipe should be made with 95-Sn/5-Ag silver-solder, which is eutectic at 430
>>deg. F, and is not as subject to errosion as is ordinary Sn-Pb 'electronic'
>>solder.
>>--Rich-- ag6k, 805-386-3734
>
>The problem with your scheme isn't that it might not provide RF ground, but that
>it doesn't comply with code requirements for grounding. Since such requirements
>usually aren't important until one needs to recover from a major disaster by
>getting insurance to cover a loss, it might not seem incredibly important until then.
>There also is a safety issue involved that most people never think of. You don't
>want a ground which is unconnected to your other grounds in the house, or things
>GFI's may not work either. de n8blk/3 -art clemons-

And you don't want to use solder as a connecting method to the made ground (ground rod). Code forbids that. You have to use a mechanical connection (clamp) or CADweld the connection. The reason is that low melting point solder can let go under strike currents (and heating), leaving you without a safety ground connection.

You're not even supposed to clamp *and* solder. That's because you can't confirm the resistance of the clamped joint if solder is present (but which might not be there after melting in a strike, when you need a low resistance ground the most).

Code says that the *maximum* resistance to Earth of a made ground must not exceed 25 ohms. But you'll want to do much better than that. A potential of 200 kV will be expressed across a 25 ohm resistance during a strike. That's uncomfortably high, and can promote side flashes.

You *can* bury a made ground horizontally, or at a slant, according to Code, but there are some factors you need to consider if you do. Maximum coupling to soil occurs in a cylindrical volume defined by the rod length and a diameter roughly equal to half the rod length. So if you bury an 8 foot rod horizontally, you'll want it at least 2 feet deep to provide the effective volume needed for best coupling to soil. (This is only a rule of thumb, and exact soil compositions can cause the volume to vary.)

Soil moisture improves conductivity (dramatically). In dry soils, a shallow burial probably won't be a very effective Earth connection. Going deep, to find the water table, can improve matters. (Of course in some areas the water table is hundreds of feet down, so it is usually impractical in such cases to depend on a deep rod.)

Multiple rods, spaced at least twice their length from each other to avoid charge saturation effects, will almost always offer a superior Earth connection in comparison to a single rod, no matter how deeply it is driven.

An excellent Earth connection method (and one preferred by the Code) is called the Ufer ground. This method offers excllent RF properties because it offers a low impedance to Earth (due to its large capacitance). A Ufer ground is essentially bonded rebar embedded in concrete, with the concrete in intimate contact with the soil. A minimum of 20 lineal feet of half inch rebar embedded in 6 inch concrete is needed to meet Code requirements. Much more is, of course, much better. A 20x20 concrete slab with properly installed interlaced rebar will typically offer a resistance to Earth on the order of 2/3 ohm. That will elevate above Earth potential by only 5 kV during a strike.

That's perfectly satisfactory. Side flashes should be virtually non-existent, and conventional suppression methods, and *proper* use of a ground window, will offer your station complete protection.

Gary
--
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2735. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Mar5.212322.21526@ke4zv.atl.ga.us>
Source record: 96391

In article <3319ebdf.5240339@nntp.ix.netcom.com> gsparks@ix.netcom.com (Glenn Sparks) writes:
>
>I have used the method Gary spoke of by working the pipe in with
>water, it works very well, don't force it and get it stuck, take it
>easy and you will be able to get it down quite well. The other
>suggestions are good as well, especially buying ground rods that are
>copper clad. I do not recommend clamps though, use heavy copper braid
>and braise it to the rods with a torch.

The NEC is pretty insistent on a permanent mechanical bond. Clamps
or CADwelding are the preferred methods. Ordinary hand bronze brazing
is acceptable if well done, but soldering is definitely out. Use of
braid is also not a very good idea. Braid has a higher skin resistance
than smooth solid strap, and more inductance too.

Note that a lightning stroke pulse only lasts from 2 to 10 microseconds,
but there can be multiple strokes in a strike, so the total duration
may be considerably greater. There will also be ringing resonances in
any conductors which may take a while to die down. It is essential that
your Earth connection maintain its integrity and low impedance during
the entire event.

>I discussed this with an ex
>military explosives expert, and he recommended 8 rods 1 meter apart in
>a rectangle, all braised with copper pipe between them, and then 3/4"
>copper pipe to the shack. He claimed incredible increases in signal
>strenght and reduced noise with this setup. He also claimed with
>using the copper clad rod, and braising the connectorsand he has seen
>his old installations still blow circuit breakers of generators
>connected to two systems (the method he used to test the ground) with
>all of the steel rod rusted away and just the clad still in the
>ground.
>
>His theory is placing the rods in a rectangle or circle if you have
>the real estate, emulate a cage antenna in the ground, increasing the
>bandwidth and efficiency.

Use of multiple made rods is effective in lowering the impedance to
Earth for ordinary currents, but close spacing them does virtually
nothing for you in the event of a lightning strike. An effect called
charge saturation occurs during a strike between the soil grains
in the proximity of the rod. This can dramatically raise the dynamic
impedance of the system.

To minimize that effect, you need to space the rods far enough apart to avoid having their charge saturation zones overlap. The conventional rule of thumb is that rods should be spaced no closer together than twice their length, IE 8 foot rods should be spaced no closer together than 16 feet.

Arranging the rods symmetrically around a common point can be useful to allow you to best implement a star connection topology, but you can adapt the rod placement to local obstructions as long as you maintain adequate spacing between the rods.

I'd also note that while copper pipe is better than braid, flat solid copper strap has a number of advantages. Due to skin effect, surge currents will flow on only one surface of the pipe, the outside. There will be no net currents on the inside. But if you use flat strap with a width equal to the circumference of the pipe, the current will flow on both surfaces, effectively doubling the skin area of the material, and halving the skin resistance for the same amount of copper used. This can save you money assuming you pay less than twice as much per pound for solid copper strap as for copper pipe.

And of course you must avoid introducing sharp bends into the conductors. Don't use right angle joints for pipe, or sharply bend strap (except where you're wrapping it around the rod of course). This is to minimize inductance in the current path.

It is important to minimize inductance because surge (and especially strike) current is a pulse, which is, of course, *RF*. Any inductance in the path will cause a potential to be expressed across it by the surge current. You want to minimize that as much as possible.

Model a lightning bolt as a constant current source of about 8,000 amperes. Most of the bolt's energy resides below 2 MHz, but significant fractions extend all the way up to UHF. So inductance is a significant consideration in the downlead path to the Earth connection.

Gary
--
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2736. Re: Type acceptance (was Re: -- == What drugs are you taking??? == --)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Mar5.054217.17972@ke4zv.atl.ga.us>
Source record: 96392
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <psam.136.331C313E@giraffe.ru.ac.za> psam@giraffe.ru.ac.za (MR A MULDER) writes:
>In article <5fgnm6$dcb@news.Hawaii.Edu> jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:
>>My firefighting days were in the early 70s; I recall us using metal
>>encased HTs. If plastic is being taken into fires today, then a step
>>backwards has be taken in firefighting comms.
>
>>Jeff KH2PZ
>
>Not true..as there as plastics that can with stand much more heat than any
>metal..but they cost plenty.

More than any metal? How about tungsten? Offhand I can't think of any
plastics which can sustain 2700 degree temperatures. Now some ceramics
can, and perhaps some carbon fibre composites can for a moment or two,
but plastics?

Of course this is all rather moot since any fire which raises the
radio temperature enough to melt a metal case isn't going to leave
the innards unscathed, not the mention the firefighter carrying it.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

2737. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0503971431480001@news.vcnet.com>
Source record: 96393

In article <331CD67D.3FA0@flash.net>, Sir Robin <Nexus15@flash.net> wrote:

snip...
> I'd like to here Cecil Moore's comments or Roy Lewellen's comments to
> the statement by Rich Measures. Something to think about Rich,
> thanks.....Rick W5RH

The information about RF currents not travelling underground was discovered by the US Army in the 1950s. Somebody thought that a few hundred kilowatts of RF might be able to detonate buried mines. The technique proved to be unsuccessful because RF travels on the surface of any conductor, the earth included.

I conducted numerous tests wherein I connected and disconnected my station ground system during transmitting and during receiving. It made no noticeable difference.

--
--Rich-- ag6k, 805-386-3734

2738. Need some advice from HEATHKIT Experts out there.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-05 00:00:00 UTC
From: cvictor@hooked.net
Message-ID: <5fiueq$jas_002@news.hooked.net>
Source record: 96394

Lookin to buy a HO-13 to compliment my HO-10 scope.

Just curious on whether that model had the P7 phosphor scope tube to
be a poor man's spectrum analyzer?

I'm aware of the various IF's that one needed to rig up inside to tune the
input stage for your radio's IF freq.

Thanks for ur input.

Chris WA6SUY

2739. Re: Need Circuit please ... QRP power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5fl1tm$87r$3@nadine.teleport.com>
Source record: 96199

See "A Simple and Accurate QRP Directional Wattmeter", _QST_, Feb. 1990. It was also in the 1992 _ARRL Handbook_ (p. 34-6), and may have also been in the 1991 or 1993 _Handbook_.

Roy Lewallen, W7EL

2740. Re: Autek RF1 RF Analyst vs MFJ 259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <331e14e8.44726026@netnews.worldnet.att.net>
Source record: 96200
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On 5 Mar 1997 16:32:05 GMT, dstone@bnr.ca (Danny Stone NT) wrote:

>[Article crossposted from rec.radio.amateur.antenna]
>[Author was Danny Stone NT]
>[Posted on 5 Mar 1997 16:26:36 GMT]
>
>I am looking for comments on the RF1 vs MFJ-259.
>
>What I am interested in is the accuracy of the instrument
>in the scope of what is intended to do (i.e., the technical
>performance).

>My primary applications include complex impedance measurements,
>component measurements, and velocity factor mesurements (for
>now!)
>
>My opinion at this point is that the '259 is a more versatile
>instrument, but the RF1 is more accurate. Am I wrong?

I have measured both, since I was involved in the design of the 259. I would call neither "instruments". Both types vary form unit to unit. Both use hand wired PC boards, and have no special attempts at making the detectors linear. The 259 has less harmonic energy (important for accurate measuments when the load is non-liner with frequency), but the Autek has software compensation of the detector. The 259 does not read scalar impedance, the Autek sort of does.

If you want to accurately measure reactive loads, you MAY need to buy a real RF bridge. What type of accuracy are you looking for?

73 Tom

2741. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: frog200@nospam.juno.com
Message-ID: <5fljuk$33d$1@news.wco.com>
Source record: 96201

>> Just in case it hasn't been mentioned in this thread already, under
>>NO circumstances should a ground system which provides antenna lightning
>>protection be tied to the house AC ground system.

>I disagree. You want them tied together very securely, but only at one
>common point (usually the service entrance). That way if your antenna
>system takes a lightning hit, you won't suddenly find your antenna ground
>six gazillion volts above your house ground. You want both grounds to rise
>and fall as closely together as you can and that requires they be bonded
>together as solidly (i.e., low inductance) as possible.
>
>For more information, you can check out http://www.polyphaser.com

I am talking ground systems for antenna/tower lightning protection, not AC power grounds. The purpose of such a system is to direct lightning energy directly into the ground, before it gets into your house. Tying this sytem to your house ground gives the lightning energy just such a path into your house. A properly installed ground system will not "float" during such a strike, but should be able to absorb a direct hit. I am talking about a ring of 8 foot ground rods around your structure and bonded together by large bare copper cable. The only items tied to this ring would be your tower and your antenna entry plate, where all your lightning protectors are mounted. Energy coming from either the tower or an antenna line will be passed directly to the ground ring.

Again, I stress, you do NOT want to give lightning hitting your tower or antennas a path into your house, such as the AC power ground would provide.

Ed W7DXZ

I did not see anything on the Polyphaser site mentioned above to contradict this either.

2742. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: frog200@nospam.juno.com
Message-ID: <5flka9$33d$2@news.wco.com>
Source record: 96202

>> Just in case it hasn't been mentioned in this thread already, under
>>NO circumstances should a ground system which provides antenna lightning
>>protection be tied to the house AC ground system.

>This is dead wrong.
>You should read the National Electrical Code. Your home insurance company
>has read this code and may hold you to it in the worst case scenario.
>
>Regards,
>Pete
>KS4XG

Since you have cited the NEC, please provide the NEC section that says
antenna lightning ground systems must be tied to the AC power ground system,
for all of us to check.

Ed W7DXZ

2743. Re: vhf swr/watt meter for 6

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: Ted King <tking@blvl.igs.net>
Message-ID: <331E53B2.5A7A@blvl.igs.net>
Source record: 96203

Charles Mccurdy wrote:
>
> Hi dose any one know if you can use the mfj-812b swr/watt meter for 6mtrs.
>
> --
> |Fidonet: Charles Mccurdy 1:106/1492
> |Internet: Charles.Mccurdy@1492.conchbbs.com
> |
> | Standard disclaimer: The views of this user are strictly his own.
I bought one and use it for 6 meters. The SWR and Field Strength parts
work OK, but am not sure how accurate power readings are. Queried MJF
on this, and got a wishy-washy meaningless answer.

2744. Re: Autek RF1 RF Analyst vs MFJ 259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: tgold@microvst.demon.co.uk
Message-ID: <857635647snz@microvst.demon.co.uk>
Source record: 96204
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <331e14e8.44726026@netnews.worldnet.att.net>
W8JItom@worldnet.att.net "Tom Rauch" writes:

> I have measured both, since I was involved in the design of the 259. I
> would call neither "instruments".

Congratulations on being involved with one of the nicest ham toys on
the market today. It must be very a big winner for MFJ.

Are there any alignment instructions available? The resistance and
SWR readings on mine are okay for now but I'd like to know what to do
if and when they badly disagree with my mismatch standards. Also I
find that both the meter readings start to droop and fall off very
rapidly starting at about 146MHz instead of taking me up well past
the top of 2m. I have the version with firmware for sleep mode
and the `MFJ' switch-on message which I bought new at Dayton '96.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com
tgold@microvst.demon.co.uk
packet: g3skr@n0ary.#nocal.ca.usa.na

2745. Voice rec/id

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: mike del pozzo <kr4tg@mindspring.com>
Message-ID: <331ECE6A.12EA@mindspring.com>
Source record: 96205

Hello all,
would anyone have a schematic on a kit for
voice TX by remote (simmiliar to a vantriliquist)?
could save voice on long contests...
Tnx in advance
de KR4TG
Mike

2746. 1/4L-GP antenna question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: Peter Dingemans <129432pd@mstore.eur.nl>
Message-ID: <Pine.PCN.3.91.970306141915.7907A-100000@[130.115.53.142]>
Source record: 96206

G'day everyone,

I'm planning on building a 1/4L-GP antenna for the 2 metre-band. In the ARRL antennabook there are some good instructions on building one of those, but I am left with one more question: what determines the resonant frequency of such an antenna, the length of the radiator or the length of the ground-'wires' ? I need to know, since when I have to fine-tune it (to min. SWR), which wires have to be cut shorter (I want to keep the wires at first a bit longer than necessary, so I can trim them down to the right frequency).

Any help will be greatly appreciated,

Greetings,

Peter Dingemans.

PS: in earlier ARRL antennahandbooks, the lengths of the pieces of wire differ a little bit. Was this an error, or did they do that for a reason? If so, why have they changed the lengths of the wires?

2747. Re: Autek RF1 RF Analyst vs MFJ 259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <331ed5ef.7973710@netnews.worldnet.att.net>
Source record: 96207
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

On Thu, 06 Mar 97 08:07:27 GMT, tgold@microvst.demon.co.uk ("Anthony
R. Gold") wrote:

>In article <331e14e8.44726026@netnews.worldnet.att.net>
> W8JItom@worldnet.att.net "Tom Rauch" writes:
>
>> I have measured both, since I was involved in the design of the 259. I
>> would call neither "instruments".
>
>Congratulations on being involved with one of the nicest ham toys on
>the market today. It must be very a big winner for MFJ.
>
>Are there any alignment instructions available? The resistance and
>SWR readings on mine are okay for now but I'd like to know what to do
>if and when they badly disagree with my mismatch standards. Also I
>find that both the meter readings start to droop and fall off very
>rapidly starting at about 146MHz instead of taking me up well past
>the top of 2m. I have the version with firmware for sleep mode
>and the `MFJ' switch-on message which I bought new at Dayton '96.
>
>Regards,
>--
> Tony - G3SKR / W2TG email: tgold@panix.com
> tgold@microvst.demon.co.uk
> packet: g3skr@n0ary.#nocal.ca.usa.na
>

Could be a few things Tony.

The rolloff is most likely due to loss of level, probably due to AGC
being set to high. If you look near the op-amp you'll see three pots
in a row. With connector up, the outer right side pot is AGC, middle
resistance, the one straight up from the middle is SWR, the one on the
far left is freq counter bias.

With the lowest expected impedance termination, adjust the AGC so the
meters do not "drop off" at the highest frequency you expect to use.
Adjust the SWR and resistance for the best average readings with loads
of 25 and 100 ohms (2:1) on 30 MHz.

For critical applications the 259 should be checked on a spectrum
analyzer after adjustment. Harmonics must be -20 dB or greater for
reasonable accuracy into resonant loads.

Some 259's were released with an incorrect change to install a sleep mode. They have a resistor bridged across the back of the board from the op-amp to the frequency counter plug. Add a silicon switching diode (1N914) between the op amp and the resistor, cathode to the op-amp. Without that diode, AGC operation is compromised.

73 Tom

2748. Re: Need Circuit please ... QRP power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: mdwatt@usit.net
Message-ID: <3321d8da.80279473@news.usit.net>
Source record: 96208

On Thu, 06 Mar 97 00:06:54 GMT, w7el@teleport.com (Roy Lewallen)
wrote:

>See "A Simple and Accurate QRP Directional Wattmeter", _QST_, Feb. 1990. It
>was also in the 1992 _ARRL Handbook_ (p. 34-6), and may have also been in
>the 1991 or 1993 _Handbook_.

Thanks for the information ... this article was originally published
in Feb 1990 QST, and I found it in my copy of *QRP Classics* (circa
1990).

I looked at this circuit, and have a couple of questions (I'm not an
electronic guru, I'm a pretty simple kit builder). I'd like to have
two meters, one reflected and one forward, and eliminate the
"sensitivity" adjustment (at least on the panel -- an internal
calibration I expect).

I can see the sensitivity from R6 (variable) to pin 3 on the U2A
LM358. If I wanted to use this two meter concept, would I need to
duplicate everything from the fwd/rev switch forward?

I'm interested in dual metering because I do mostly portable/QRP
work, and the ability to monitor changes in SWR (like if an antenna
problem develops) is pretty important to me, as is the ability to
monitor forward power *always*.

Thanks for the help and advice.

72 es 73 de
Marty, KM7W

Jackson, Tennessee e-mail: mdwatt@usit.net
http://www.public.usit.net/mdwatt
"The Curmudgeon's Corner"
NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq
~~~~~~
~~~~~~

2749. Re: Need Circuit please ... QRP power meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: San Rotter <rotter@postoffice.worldnet.att.net>
Message-ID: <5fmnho$7po@mtinsc04.worldnet.att.net>
Source record: 96209

I found W7EL Roy Lewallen's "A Simple and Accurate QRP Directional Wattmeter" to very accurate and stable. The only changes I made was to use HP hot carrier diodes and use a DVM with a look up table instead of a panel meter. I built it using the FAR circuit board in a electrical box with SO-239 bolted on. The FAR circuit board did have a oversized rectangular hole. I did order a new board from FAR without a hole but have not built it up. The switches are soldered right on the PC board and are bolted to a metal electrical box cover. Have not used it in a while, but it I found a brand new $12K Rohde & Schwartz signal generator was drifting with it. I thought it was the wattmeter until I tried an old HP8640!

San
WB9ELB

2750. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: Peter_Simpson@3mail.3com.COM
Message-ID: <85256452.00579E77.00@hqoutbound.ops.3com.com>
Source record: 96210

Ed said:

I am talking ground systems for antenna/tower lightning protection, not
AC power grounds. The purpose of such a system is to direct lightning
energy directly into the ground, before it gets into your house. Tying
this sytem to your house ground gives the lightning energy just such a path
into your house.
A properly installed ground system will not "float" during such a strike,
but should be able to absorb a direct hit. I am talking about a ring of 8
foot ground rods around your structure and bonded together by large bare
copper cable. The only items tied to this ring would be your tower and
your antenna entry plate, where all your lightning protectors are mounted.
Energy coming from either the tower or an antenna line will be passed
directly to the ground ring.

Again, I stress, you do NOT want to give lightning hitting your tower or
antennas a path into your house, such as the AC power ground would provide.

Ed's right, except for one small detail...that whole ring is ALREADY
connected to your house by the coax.
The coax shield is connected to your radio chassis, which is connected to
your house ground. Commercial
repeater sites attempt to keep tower, coax shield, entry bulkhead and
chassis ground at the same
potential during a lightning hit. The accepted way to do this is to bond
all ground rods together, so
that "ground is ground" no matter where you look. AC power ground IS
bonded to the rest of the site
ground system. I'm not sure how much the NEC gets into this, but all the
sites I have visited and
all the site grounding documents I've seen say exactly the same thing.
I'm sure someone with the NEC
on his desk can confirm this. I share a repeater site with a bunch of
commercial users and it is grounded
exactly this way, with powerline ground connected to a huge ground block
that ties it in to all the
tower grounds. Everything called "ground" is tied together. It was
installed by licensed electricians
and inspected by the appropriate authorities, so I know it meets code.

Regards,
Peter, KA1AXY

2751. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: frog200@nospam.juno.com
Message-ID: <5fmpd3$ak5$1@news.wco.com>
Source record: 96211

Posted after my two previous posts on this subject:

This post in an admittance of probable error on my part. While I still haven't looked at the NEC code on grounding, I have seen enough information this morning to indicate that "any" ground systems should be bonded together.

I have been mislead by the fact that many of the grounding systems I have been exposed to at my work have not been bonded to the building AC ground system. I don't understand why the "very large" organization I work for doesn't address this, but I intend to look into it.

Ed W7DXZ

2752. Re: Voice rec/id

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <331F18A2.4C7B@idecc.com>
Source record: 96212

mike del pozzo wrote:
>
> Hello all,
> would anyone have a schematic on a kit for
> voice TX by remote (simmiliar to a vantriliquist)?
> could save voice on long contests...
> Tnx in advance
> de KR4TG
> Mike

Radio Shack was selling a chip for about $17, I think you just need to add pushbuttons & audio amp. I built one years ago using a simple flash a/d & d/a converter tied to a 2048 byte static ram. But I don't have a shematic for it. Try the RS store first.

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

2753. Signal Strength Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: fg291@cleveland.Freenet.Edu
Message-ID: <5fn0p9$jkj@alexander.INS.CWRU.Edu>
Source record: 96213

i am interested in making a signal strength meter
for a cheap little vhf reciever and i was wondering if this
was possible. i plan on making one out of LEDs and resistors
but i dont know where to connect it to on the reciever. does
anyone have any hints or am i going about this the wrong way?
i guess this is why im CE and not EE.

thanks,
Chris
--

D. Christian Keelor fg291@cleveland.freenet.edu
University of Pittsburgh www.pitt.edu/~dckst14
School of Engineering 444.70 MHz /R Cleveland

2754. NEED INFO on 2m FM amp called "The Battery Saver"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5fn2s4$djp@sf18.dseg.ti.com>
Source record: 96214
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Has anyone heard of a 2m FM mobile amplifier called "The Battery Saver"?

A local newbie (a 17-year-old codeless tech) brought me this amp and asked me to work on it for him. It's designed to be driven by an HT and is supposed to put out about 40 Watts. It's a very strange design and I'm having trouble making sense of it. Normally, amps like this are dirt-simple, but this one's not. There is no manufacturer's name on the amp, just the name "The Battery Saver". There is also no info inside it anywhere.

If anyone can give me any information at all, I'd appreciate it. This kid dropped a bunch of his hard-earned money on this crummy amp, and I really hate to think it's been totally wasted.

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

2755. NEED VHF-UHF EQUIPMENT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: doug johnson <iix@pop.interaccess.com>
Message-ID: <331F053A.B45@pop.interaccess.com>
Source record: 96215

LOOKING FOR 1296 TRANSVERTER, 1/2 AND 7/8 HARDLINE, 432 BRICK, E-MAIL
AT iix@interaccess.com ....tnx, Doug

2756. Re: Autek RF1 RF Analyst vs MFJ 259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: tgold@microvst.demon.co.uk
Message-ID: <857673539snz@microvst.demon.co.uk>
Source record: 96216
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

In article <331ed5ef.7973710@netnews.worldnet.att.net>
W8JItom@worldnet.att.net "Tom Rauch" writes:

> Could be a few things Tony.

Many thanks.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com
tgold@microvst.demon.co.uk
packet: g3skr@n0ary.#nocal.ca.usa.na

2757. Re: ten-tec 6mtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: orion@capital.net**
Message-ID: <33212c9b.29693975@news.capital.net>
Source record: 96217

On 05 Mar 97 11:58:02, Charles.Mccurdy@1492.conchbbs.com (Charles Mccurdy) wrote:

>Hi all on the ten-tec model 1209 6mtr transverter kit on the schematic area
>D20 and on the pc board were is says D20 install that the book want say to
>install it but you do i just called ten-tec and asked about it.
>
>73s kc5cxu

I'm sure glad you gave us this informative bit of news, Chuck. Could you translate it into English, please?
>| Standard disclaimer: The views of this user are strictly his own.
>

--
73,
Butch N2YMJ
To send mail, delete
the two stars at the
end of my address.

2758. Need 50-10-10-10 uF @ 350/350/350/25 V Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: Alex Schapira <schapira@lucent.com>
Message-ID: <331F36DF.15FB7483@lucent.com>
Source record: 96218
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.repair

I'm looking for the above mentioned electrolytic cap to restore a
Hallicrafters S-53A receiver. Its an aluminum can (twist tab mounting),
1 3/8" dia, 3" tall.

I know quad section caps at 350 V are rare, so I'll settle for the
one with first three sections.

Also, The measured voltage is only about 250 volts, so perhaps a 300
volt cap would work. What do you think? Thanks.

-Al
schapira@lucent.com

2759. Re: Voice rec/id

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: miker <Nospam.mreiney@hevanet.com>
Message-ID: <331F226D.CBD@hevanet.com>
Source record: 96219

mike del pozzo wrote:
>
> Hello all,
> would anyone have a schematic on a kit for
> voice TX by remote (simmiliar to a vantriliquist)?
> could save voice on long contests...
> Tnx in advance
> de KR4TG
> Mike

Why not just hire someone to work the contest for you.
Then you won't have to do anything. :-)
--
To reply, remove "Nospam." from the return address.

2760. Re: SHF prescalar

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <CXGUzAABRyHzEwNe@lfheller.demon.co.uk>
Source record: 96220

In article <Pine.OSF.3.95.970305135031.2644A-100000@duke.usask.ca>,
David Bindle <bindle@duke.usask.ca> writes
>
>Allen- I don't know of a prescaler at your frequency, but can you list
>some divide by 10 prescales that operate around 500 mhz? I have had no
>luck at finding such a animal, Will keep my eyes open for your
>requirements.
>Regards Ken/VE5KRB
>73's

The GPS SP8635B goes up to 600 MHz.

Leon
--
Leon Heller, G1HSM
leon@lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home)
+44 (0) 1344 385556 (work)

2761. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc29c7$48551ee0$6560b6cd@cbx-nt>
Source record: 96221

ilani@shani.net wrote in article <331D554A.6BBC@shani.net>...
> Can someone tell me what is the upper limit in watts for use in FM
> transmitter without FCC approval.
>
> Thanks in advance
> Avi ilan - ilani@shani.net
>

You must not be an Amateur Radio Operator, its on the test, If its HAM Radio you are talking about the upper limit for a Technicain or better license in 1500W except on the Novice Bands.

Regards

Christopher Cox
KC8FRJ
TRA#4901

2762. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: psoper@encore.com
Message-ID: <E6MnzD.5Et@encore.com>
Source record: 96222

Hi Ed,
Sorry for the strong language, but this is an important issue.
I don't have a copy of the code with me. But by now others who are experts
in this field have backed me up. Trust us on this one, for the sake of
your equipment and your skin.

Regards,
Pete
KS4XG

frog200@nospam.juno.com (Ed G.) writes:

> Since you have cited the NEC, please provide the NEC section that says
>antenna lightning ground systems must be tied to the AC power ground system,
>for all of us to check.

2763. Hamcom 97 Digital / Packet programs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: Tom McDermott <mcdermot@aud.alcatel.com>
Message-ID: <331F4B7E.167EB0E7@aud.alcatel.com>
Source record: 96223
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

Hamcom will be held in the Arlington, Tx. Convention Center
from Friday, June 6 through Sunday, June 8, 1997. The
Texas Packet Radio Society (TPRS) http://www.tprs.org/ will
again host extensive programs on packet and digital subjects,
and has announced the program schedule and speakers.

In the past, these programs have been extremely well-attended,
so be sure to mark you calendar.

HAMCOM 97
TPRS Digital/Packet Program Schedule
Arlington, Tx. Convention Center

Saturday, June 7, 1997

9:00 - 9:30 Introduction to Digital Modes - Dave Wolf, WO5H
9:30 -10:30 Intro to Internet - Lee Ziegenhals, N5LYT
10:30-11:30 Spread Spectrum - Greg Jones, WD5IVD, Tom McDermott, N5EG
11:30-12:00 TEXNET update - Harry Ridenour, N0CCW
12:00-12:30 TPRS annual meeting
12:30- 1:00 break
1:00 - 2:00 APRS - Mike Heskett, WB5QLD
2:00 - 2:30 DXing with 2 Meter Packet - Presley Smith, N5VGC
2:30 - 3:00 Weather / NWS - Bob Morgan, WB5AOH
3:00 - 3:30 Radio Modifications - Joe Borovetz, WA5VMS
3:30 - 4:00 Channel Capacity - Tom McDermott, N5EG

Sunday, June 8, 1997

10:00- 10:30 Introduction to Digital Modes - Jim Neely, WA5LHS
10:30- 11:30 BBS forum - Dave Wolf, WO5H

--
Tom McDermott
mcdermot@aud.alcatel.com

2764. Re: WTD: Mods for the Icom IC740?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: demoman <demoman@rollanet.org>
Message-ID: <331FA8FA.2E0@rollanet.org>
Source record: 96224

Graeme Frith wrote:
>
> Hi All..
> I'm looking for any mods for the IC740.
> Anything would be great.

all i have is expanded rf mod.
cut [white resistor] jumper located between d31 and 'c' wire
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

2765. Microwave ovens

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: Bob <rmo@gorgon.com>
Message-ID: <331F8B1C.422A@gorgon.com>
Source record: 96225

Any hams out there use a magnetron from a microwave oven to modulate a signal on 2.45Ghz (I think that the freq of the oven I took apart)? And if so, did you use FM, CW, etc.
Thought it would be a cool project to tackle. Will also be extra, extra careful using high power magnetron.

Bob - WB2THV - rmo@gorgon.com

2766. Re: 902-928 MHz ISM band stuff for Amateurs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-06 00:00:00 UTC
From: Tom Sharples <sharples@hooked.net>
Message-ID: <331FAB99.7447@hooked.net>
Source record: 96226

Anybody know why these were manufactured with such low power? My copy of the CFR 47 (which is a few years old) implies that considerably more power would be permitted for unlicensed use, and the 900 Mhz Recoton remote headphone I have has a very considerable range (up to 1 mile).

> The transmit power level from the V-Link is only about .2 milliwatts, so
> I can't say they the reported "3 blocks" range is not streching it a bit
> far. Being a licensed Amateur, I have the option of removing the
> hardwired antenna and replacing it with an SMA receptical to permit
> attaching it to better antennas and or amplifiers
> 73s DE WA1YKL

2767. Re: Simpson Model 260 Multimeter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: Ed Zeranski <ejz@nosc.mil>
Message-ID: <01bc2a92$06d5d4c0$63bc3180@ejz.nosc.mil>
Source record: 96227

JOHN PHIPPS <jphipps@aztec.asu.edu> wrote in article
<5f5ads$2ia@news.asu.edu>...
>
> I'm looking for a schematic/manual for the subject multimeter. Any
thoughts/
> suggestions will be appreciated.
> Thanks in advance.
>
> John Phipps K7BTA
> --
Send me a mailing address and I'll burn you a copy of the 260 manual and
schemo

2768. Help with packet intro

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: doctord <doctord@mr.net>
Message-ID: <01bc2aa8$9079b960$014156c7@home-doctor>
Source record: 96228

I'm just getting my ticket this week (I hope). One of the things that I am interested, computer network engineer that I am, is learning all about packet radio. How to set it up, what is involved, etc. Anyone care to share? e-mail me direct if you want at doctord@mr.net, or I'll try to follow the newsgroup too.

How much is a tnc? what kind of software do I use? What all else do I need? I have a 166mhz 32mb ram 3.2g hd, and a bj printer. No external antenna yet and only a 2 meter handheld. Will appreciate any advice.

2769. FS: Surplus LDF5 7/8 Coax, Sydney

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: Glen & Julie Scott <gas@onaustralia.com.au>
Message-ID: <01bc2a67$7c8636e0$LocalHost@default>
Source record: 96229
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,aus.radio.amateur.wicen,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

Comms company has surplus Andrew LDF-5 7/8" Coax to get rid of. Location is at Frenchs Forest, NSW.

Four offcut (unused but dusty) lengths as follows :-

1 x 40m
1 x 25m
2 x 15m

Any offers for part or all of the above? Please send to me at the address below, or ring Glen on Sydney 9452 5522.

Cheers

Glen

gas@onaustralia.com.au

http://www.ozemail.com.au/~bobcam/gjs.html

2770. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970307022100.VAA14869@ladder01.news.aol.com>
Source record: 96230

In article <measures-ya02408000R0503971431480001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>
>I conducted numerous tests wherein I connected and disconnected my station
>ground system during transmitting and during receiving. It made no
>noticeable difference.
>
>--
>--Rich-- ag6k, 805-386-3734
>
>

I use a common point grounding system for lightning protection.
While the system was designed for lightning, it also effectively
cured several "RF hot" feedlines coming into the shack. While
it is true a ground rod is a poor RF ground AS FAR as improving
signal radiation efficiency, it is very effective at dissapating RF energy
into the earth in the form of heat energy.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

2771. FS: Mil SpecTeflon Insulated Wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <5fnt25$5od@news1.hlc.net>
Source record: 96231
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,sci.electronics.repair

I have thousands of feet of high quality Mil Spec teflon insulated
stranded wire in several colors and sizes. Will sell any length for
$.07 to $.10 per foot depending on size. 18AWG is largest size.
Shipping is $3.00 per order.
Thank you,
Dale

2772. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: aa126@fan.nb.ca
Message-ID: <857705372.619774@fan1.fan.nb.ca>
Source record: 96232
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Does anybody know the characteristics of IEEE 802.3 thin ethernet cable?
Is this useful for ham applications?

--
William Burrow -- Fredericton Area Network, New Brunswick, Canada
Copyright 1997 William Burrow

2773. Re: FS: Mil SpecTeflon Insulated Wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: hrogin@netcom.com
Message-ID: <hroginE6nMt4.MGM@netcom.com>
Source record: 96233
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,sci.electronics.repair

Dale B. Allen (radiodale@dclink.com) wrote:
: I have thousands of feet of high quality Mil Spec teflon insulated
: stranded wire in several colors and sizes. Will sell any length for
: $.07 to $.10 per foot depending on size. 18AWG is largest size.
: Shipping is $3.00 per order.
: Thank you,
: Dale

Here's something unusual about mil-spec teflon coated wire: Most mil-spec wire is silver plated. When silver plated teflon coated wire comes into prolonged contact with transmission fluid, a chemical reaction takes place. The military calls it the "Red Plague". Upon finding this out (I was working on an Army contract connected with the M1A1 tank at the time and this type of wire was prohibited on the contract - we had to use tin plated wire, which is non standard and 3 times the cost), I questioned the wire manufacturers, none of which had ever heard of this. The Army was adamant about this item, but couldn't explain the chemical reaction to me. They seemed to think that a toxic gas may be released when this reaction takes place, which would not be good news inside the close quarters of the tank. Anyhow, we all know how prevalent transmission fluid is around antique radios and phonos, so .....
--

Harry

HARRY ROGIN <hrogin@netcom.com>
San Diego, Cal.

2774. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: jw@alpha1.csd.uwm.edu
Message-ID: <5foc3n$cfs@uwm.edu>
Source record: 96234
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Christopher Cox (cobox@netexp.net) wrote:
s
: The Hardline is good stuff, but its 75 Ohm. The drop line is not lowloss
: and is also 75 Ohm (you can have it!)
:
: Christopher Cox

Tell me about it!
I found some on trash day and put "N" connectors on a 50 ft piece
to test. I came up with .37 db/100ft on 2m (not bad) but
5.7db/100 ft on 432! No wonder the cable guys use so many
amplifiers!

Good coax for short runs or low freqs.

jw

--
==========
John C. Wilke (jw@alpha1.csd.uwm.edu)
WB9UAI

" I caught a push and hit the wall. I checked off the throttle and
somebody got into me from the back. It turned me sideways and
I got over on my head (car flipped). All I knew while I was upside
down was there weren't any big booms or hard crashes like last year.
"I got out of the car and walked around and looked at it.
Man, I noticed all the wheels were still hooked on it. I told the
guy in the car (wrecker attendant), 'fire it up.' When it fired
right up I told him, 'get outta there -- I gotta go.

Dale Earnhardt 1997 Daytona 500

==========

2775. Re: Interference from True Fitness Treadmill! Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: caf@agora.rdrop.com
Message-ID: <5fo76l$9be$1@hermes.rdrop.com>
Source record: 96235
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5fiuiq$1lse@elmo.cadvision.com>,
John Fallows <fallowsj@cadvision.com> wrote:
>I continue to have severe radio interference to short wave from my neighbour's
>treadmill (True Fitness Model 450). The interference is in the form of hash
>pulsing about twice a second (depends on treadmill speed) all the way from BCB
>through about 20 Mhz. It is a bit like the noise from a TV oscillator (peaking
>every 15-20 Khz) but pulsating rather than steady. It is between S7 to +10
>dB, extremely strong.
>
>The manufacturer sent my neighbor a line filter (which they say cured two
>previous occurances of this interference) but it did not help. I sent them a
>fax saying this, but that was two weeks ago, and I have heard nothing back.
>
>I am trying to get the attention of True Fitness, and could use some other
>cases. If you have experienced this intereference, I would appreciate hearing
>form you.

Why not file a suit against True Fitness or its seller in
Small Claims court??

--
Chuck Forsberg WA7KGX caf@omen.COM http://www.omen.com
Omen Technology Inc "The High Reliability Software"
Author of YMODEM, ZMODEM, RZ, SZ, Pro-YAM, ZCOMM, GSZ, and DSZ
TeleGodzilla BBS: 503-617-1698 FTP: ftp.cs.pdx.edu pub/zmodem
POB 4681 Portland OR 97208 503-614-0430 FAX:503-629-0665

2776. Re: SHF prescalar

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <331fdab4.3389751@news.lin.foa.se>
Source record: 96236

HI
The Plessey SP8680 will go up to 600-700 MHz and is dividing 10 or 11.
This part may be obsolete but there must be plenty on the surplus
market. It is an improved 11C90 prescaler. Both have TTL o/c output.
Try "Surplus Sales of Nebraska"!!!

Good luck finding these chips
73 de Lasse SM5GLC

David Bindle <bindle@duke.usask.ca> wrote:

>
>Allen- I don't know of a prescaler at your frequency, but can you list
>some divide by 10 prescales that operate around 500 mhz? I have had no
>luck at finding such a animal, Will keep my eyes open for your
>requirements.
>Regards Ken/VE5KRB
>73's
>
>
>On 3 Mar 1997, Allen Wallace wrote:
>
>> I want to build a 2 GHZ prescalar for my frequency counter. Can anyone
>> point me to a popular chip or construction article? Most of the
>> prescalars I see are under 1 GHZ.
>>
>> 73, Allen Wallace N7CGH
>>
>>
>

2777. Q: SMD identific.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: christer.jogenborn@era.ericsson.se
Message-ID: <5fofgp$t4k@newstoo.ericsson.se>
Source record: 96237

I have often asked myself, perhaps there is a URL
'homepage' somewhere with facts on how to
identify the SMDs codes often printed on the component.
transistors, diodes would be interesting....
Hints anyone ?
73 SM0NCL Chris

--

2778. Re: How to get relays to switch faster?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <331f8858.53653637@netnews.worldnet.att.net>
Source record: 96238
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

On Wed, 26 Feb 1997 10:33:48 +0000, Burt Lang <burt@rocler.qc.ca>
wrote:

I had to call Jennings today about another matter, and I asked them if
not using a back pulse cancelling diode would hurt the relay coil of a
RJ1A.

The engineer laughed and said, "How on earth did you think up a crazy
question like that? In fifteen years I can recall anyone thinking up
something like that!"

I said, "On internet, where else."

So it seems the suggestion of using the FET is OK after all.

73 Tom

2779. Re: Need 50-10-10-10 uF @ 350/350/350/25 V Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: gibouin@ircam.fr
Message-ID: <gibouin-0703971334110001@news.ircam.fr>
Source record: 96239
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.repair

In article (Dans l'article) <331F36DF.15FB7483@lucent.com>, Alex Schapira <schapira@lucent.com> wrote (�crivait)�:

> I'm looking for the above mentioned electrolytic cap to restore a
> Hallicrafters S-53A receiver. Its an aluminum can (twist tab mounting),
> 1 3/8" dia, 3" tall.
>
> I know quad section caps at 350 V are rare, so I'll settle for the
> one with first three sections.
>
> Also, The measured voltage is only about 250 volts, so perhaps a 300
> volt cap would work. What do you think? Thanks.
^^^^^^^^^^^^^^^^^^^^^^

I think NO!
If 250V is the DC voltage on the caps the peak voltage is:
250 X square root(2) = 350V
hope this help.
--
Francois Gibouin (seul responsable de ses ecrits) : gibouin@ircam.fr
---
I.R.C.A.M. 1 place Igor Stravinsky 75004 Paris France
(Institut de Recherche et de Coordination Accoustique Musique)
http://www.ircam.fr

2780. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0703970528440001@news.vcnet.com>
Source record: 96240

In article <5fin13$66l$1@news.wco.com>, frog200@nospam.juno.com (Ed G.) wrote:

> Just in case it hasn't been mentioned in this thread already, under
> NO circumstances should a ground system which provides antenna lightning
> protection be tied to the house AC ground system.
>
> Ed W7DXZ (REPLY TO: ecgallup@mlode.com)

Amen to that, Ed.

--
--Rich-- ag6k, 805-386-3734

2781. Re: good source for amplifier tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0703970524180001@news.vcnet.com>
Source record: 96241

In article <33188fd6.11175690@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> But Rich, That's what you spend you life doing to others. On Sat, 01
> Mar 1997 02:48:41 -0800, measures@mail.vcnet.com (R. L. Measures)
> wrote:
>
> >In article <n7ws.266.003353F2@azstarnet.com>, n7ws@azstarnet.com (Wes
> >Stewart) wrote:
> >snip...
> >...and so it came to pass that what had be proffered as a pursuit of
> >science turned into a pusillanimous pursuit of slander.
> >
> >--
> >--Rich-- ag6k, 805-386-3734
>
> Rich,
>
> I'm glad you finally realize what you have been doing. I thought we'd
> never reach agreement on anything.
>
> Someone told me people see others as they really are, I guess it's
> true.
>
> 73 Tom

"The sins of the fathers are visited upon the children".--- Henrik Ibsen,
Ghosts

--
--Rich-- ag6k, 805-386-3734

2782. Convert A.W.A. Model RT80 to 70cm Band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: Peter <gremlin@iaccess.com.au>
Message-ID: <01bc2ae2$8867a2c0$a14a05cb@gremlin>
Source record: 96242
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I wish to convert a A.W.A. Model RT80 Type 2M 82004 transceiver with a
frequency coverage of 450 - 485Mhz to 438Mhz.
If anyone has had experience with this task I would appreciate any advise
and or references that can assist. I believe that a change of crystals and
modest retune may be all that is required.

Regards
Peter Miles
VK3YSF

2783. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: cjl@mitre.org
Message-ID: <5fp6t2$a3u@top.mitre.org>
Source record: 96243

Regarding the use of a common point for all grounds, I've been wondering what this means in the context of the power company's local distribution system. I suspect I probably misunderstand how they handle local distribution, but my impression is that you have:

- Several houses wired in parallel off of a single transformer,

- Each house grounded independently,

- All grounds connected together via long and comparatively "thin" conductors (in the context of lightning protection),

- Perhaps additional grounds at the pole connections for user drop cables.

From the point of view of lightning strikes, isn't this local distribution configuration subject to severe ground loop problems?

2784. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0703970649300001@news.vcnet.com>
Source record: 96244

In article <1997Mar5.212322.21526@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> In article <3319ebdf.5240339@nntp.ix.netcom.com> gsparks@ix.netcom.com (Glenn Sparks) writes:
> >
> >I have used the method Gary spoke of by working the pipe in with
> >water, it works very well, don't force it and get it stuck, take it
> >easy and you will be able to get it down quite well.
...snip...
> >I discussed this with an ex
> >military explosives expert, and he recommended 8 rods 1 meter apart in
> >a rectangle, all braised with copper pipe between them, and then 3/4"
> >copper pipe to the shack. He claimed incredible increases in signal
> >strenght and reduced noise with this setup.

With a dipole antenna, I can detect no change in signal strength or a change in noise with or without the ground system connected to my station. When it comes to old wives' tales, radio-grounding claims take the cake. I wonder what kind of ground Paul Bunyan used?
>
> Model a lightning bolt as a constant current source of about 8,000
> amperes. Most of the bolt's energy resides below 2 MHz, but significant
> fractions extend all the way up to UHF. So inductance is a significant
> consideration in the downlead path to the Earth connection.
>
> Gary

Amen, Gary. Lightning is closer to RF than it is to DC. When lightning strikes sand, it often melts the sand into tubular glass structures at the *surface* that radiate horizontally like fingers around the strike point. Lightning-glass is NOT formed vertically. So why do people drive 8 foot ground rods vertically into the earth?

I read in *National Geographic* that some lightning strokes have been measured at around 100kA. Hmmmm. If there's a five-ohm ground on a radio tower, and then, according to the National Electrical Code [NEC], a wire from this ground is connected back to the neutral wire on the electric-mains, things could get real interesting at the wall outlets in the house.

To comply with the NEC, a radio receiving antenna must be made of #14 minimum gauge Cu wire. Why 14 gauge?. A half-wave of end-fed #32 gauge wire works quite nicely for receiving AND transmitting 1500w, and nobody except the local hawks and owls are likely to spot it. . Apparently, being a 60Hz expert doesn't automatically make someone a shortwave expert.

--
--Rich-- ag6k, 805-386-3734

2785. FS: Eimac 4-1000A Tubes $125 each

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: w5kft@nts-online.net
Message-ID: <5fnv4i$33r$1@news.nts-online.net>
Source record: 96245

I have a number of Eimac 4-1000A tubes for $125 each. All
are checked and guaranteed.

Bryan W5KFT

2786. For Sale: Crystal filters for homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: owens@stout.atd.ucar.edu
Message-ID: <5fpc4f$cds@ncar.ucar.edu>
Source record: 96246
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

FOR SALE:
Crystal filters removed from U.S. military aircraft surveillance receiver model: R 902 A/L. These are six-pole crystal filters with a center frequency of 2.2MHz. They are made by Network Sciences of Phoenix, AZ, pn. 2.2-6. They are a nominal 6kHz wide. Actual specs. given below. These are used filters removed from a number of receivers I have parted out. They have some slight surface corrosion, but will clean up well. All have been checked out to make sure they are still good.

Center Frequency: 2.2MHz
nominal BW: 6kHz
no. of poles: 6
3dB BW: 5.3kHz
6dB BW: 7.2kHz
60dB BW: 13.1kHz
shape factor: 1.82
size: 3" long X 1" high X 1" wide
impedance: 3,250 ohms in parallel with 33pF

price: $35each, postpaid in U.S.

also have available a few modules that will convert from the first I.F. frequency of 2.2MHz down to 455kHz. These are part of the same receiver. Built in well shielded aluminum enclosure, these modules have an FET amplifier stage, a crystal osc. and a double-balanced mixer. Will sell for $15 with one of the above filters.

Chip Owens, NW0O
Boulder, CO
owens@stout.atd.ucar.edu

--
Chip Owens NW0O, (owens@stout.atd.ucar.edu)

2787. Re: For Sale: Crystal filters for homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <33206CB8.229E@idecc.com>
Source record: 96296
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Chip Owens wrote:
>
> FOR SALE:
> Crystal filters removed from U.S. military aircraft surveillance
> receiver model: R 902 A/L.

> Center Frequency: 2.2MHz
> nominal BW: 6kHz
> no. of poles: 6
> 3dB BW: 5.3kHz
> 6dB BW: 7.2kHz
> 60dB BW: 13.1kHz
> shape factor: 1.82
> size: 3" long X 1" high X 1" wide
> impedance: 3,250 ohms in parallel with 33pF

Im just curious, where might one apply a 6KHz filter? I would think that
BW would be good for AM only. If I were trying to select only one
sideband would this type not be too wide?

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

2788. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: tim_hynde <tim_hynde@idecc.com>
Message-ID: <33206B1F.48AF@idecc.com>
Source record: 96297

Christopher Cox wrote:
>
> ilani@shani.net wrote in article <331D554A.6BBC@shani.net>...
> > Can someone tell me what is the upper limit in watts for use in FM
> > transmitter without FCC approval.
> >
> > Thanks in advance
> > Avi ilan - ilani@shani.net
> >
>
> You must not be an Amateur Radio Operator, its on the test, If its HAM
> Radio you are talking about the upper limit for a Technicain or better
> license in 1500W except on the Novice Bands.
>
> Regards
>
> Christopher Cox
> KC8FRJ
> TRA#4901

The key here is "without FCC approval" I think several have already pointed out it depends on the freq. For example an FM transmitter of 1 watt or less is permitted on 1750m with antenna and coax restrictions as well, without a license. On 144 MHz of course any level of power being radiated would be illegal without a tech class ticket or higher.

I suspect your talking about an FM transmitter operating in the commercial FM broadcast band. Do an engine search for the FCC website, they have most of the doc's available for download.

--
Tim Hynde \,`/ /
KA8DDZ _).. `_
tim_hynde@idecc.com (__ -\
'`.
(\>_-_,
_||_ ~-/

2789. Microwave Comb generator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: Allen Wallace <allen_wallace@powertalk.dtint.com>
Message-ID: <33205761.0@news.itsnet.com>
Source record: 96298

I'd like to build a Microwave Comb Generator. Now, I see how to drive the SRD, from reading the ARRL Microwave Handbook. But they only address how to generate a specific output frequency, while I want a comb line output.

I guessing, but I think that the output would have to a hipass filter, to remove the funamental. But what about matching? Besides, how does one match multiple octave output, except by a pad?

What's inside the 2 port comb line generators that I see advertised in the trade journals? they look like there can't be much inside!

Allen Wallace

2790. need seneca manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: tpotts@clemson.edu
Message-ID: <5fpinv$jjs@hubcap.clemson.edu>
Source record: 96299

where may i find a copy of heathkit senecal manual or at least a schematic. 73 tom ke4uuc.

2791. Re: Microwave Comb generator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: miker <Nospam.mreiney@hevanet.com>
Message-ID: <332067A3.A35@hevanet.com>
Source record: 96300

Allen Wallace wrote:
>
> I'd like to build a Microwave Comb Generator. Now, I see how to drive the
> SRD, from reading the ARRL Microwave Handbook. But they only address how
> to generate a specific output frequency, while I want a comb line output.
>
> I guessing, but I think that the output would have to a hipass filter, to
> remove the funamental. But what about matching? Besides, how does one
> match multiple octave output, except by a pad?
>
> What's inside the 2 port comb line generators that I see advertised in
> the trade journals? they look like there can't be much inside!
>
> Allen Wallace

Dig out your old text on fourier transforms. You'll find that a
repetitive
train of narrow pulses translates to a bunch of frequencies that are
harmonics of the driving frequency. The amplitude envelope is a
Sinx/x shape. You're interested in the main hump centered around zero.
Note that as the pulse width narrows, the first hump gets wider.
Also note that the energy in the narrow pulse is less, so the hump
also gets smaller. So, there's a tradeoff between flatness of the
envelope and the amplitude of each harmonic.

You can use a shorted (and short) transmission line to generate the
short pulse. Make it out of copper plate suspended in air above
a circuit board. Don't try to use the board as dielectric, it's too
lossy.

You're right about having to filter the output. Even tho it looks like
a nice comb of frequencies on the spectrum analyzer, it still looks like
a honkin' big narrow pulse in the time domain. This can zap those
tiny diodes that you're using for mixers.

miker
--
To reply, remove "Nospam." from the return address.

2792. Re: Audio TS440 on ssb?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: ken.oliver@btinternet.com
Message-ID: <33226884.3874259@news.btinternet.com>
Source record: 96301
Cross-posted to: rec.ham-radio,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

On 2 Mar 1997 12:42:45 GMT, "George " <kilowatt@jadeinc.com> wrote:

>Just got a ts440s and have been told the ssb audio is low. FM and AM
>appear to supply sufficent drive, whils the SSB clarity sounds like an
>early modle HT with the same mikes as in the FM/AM tests?

ummmm
I wonder if it's been used for HF packet .... That effect happened to
me after using a rig for heavy HF digital use may be worth looking
into

Ken G4SLG
....Your deeds will follow you through life like shadows...

2793. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5fppgs$h3d@hplms2.hpl.hp.com>
Source record: 96302

In article <E6Ksv7.GDM@encore.com>, Pete Soper <psoper@encore.com> wrote:
>Hi Ed,
>
>frog200@nospam.juno.com (Ed G.) writes:
>
>> Just in case it hasn't been mentioned in this thread already, under
>>NO circumstances should a ground system which provides antenna lightning
>>protection be tied to the house AC ground system.
>
>This is dead wrong.
>You should read the National Electrical Code. Your home insurance company
>has read this code and may hold you to it in the worst case scenario.
>
>Regards,
>Pete
>KS4XG

Pete is correct. I quote from the National Electrical Code Handbook, page 1076, "Antenna masts are required to be grounded to the same grounding electrode used for the electrical system of the building. This is necessary to assure that all exposed dead metal parts are at the same potential. In many cases, masts are (incorrectly) connected to conveniently located vent pipes, metal gutters, and downspouts. This could create potential differences between various metal parts located in or on buildings and lead-in conductors, resulting in possible shock and fire hazards."
Article 810-20 describes in detail antenna grounding. Read it.

2794. Re: need advice on home made high voltage cap's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <332077FD.1CBE@vcd.hp.com>
Source record: 96303

Peter Shintani wrote:
>
> Hi:
> I am interested in making some very high voltage caps for a loop antenna.
> I gave up on the idea of making a variable HV cap so I will concentrate on
> operating on a single frequency. My question is has anyone made some 30kv
> rate caps using glass jars and copper tape or aluminum foil(heavy duty) for
>
> a small loop antenna ? I understand that the er of glass is about 8, so
> that I can
> get away with 1/8 the surface area as compared to an air dielectric cap.
> What sort of luck has any one had ?
> Peter
> PS what is the breakdown voltage of a typical canning jar ?

Hi Peter OM,

If you make a glass-foil sandwich capacitor, it is easily made
variable, by sliding alternate plates in and out, using a motor
and leadscrew or insulating push/pull line. This has been written up
before, but I cannot recall where. Try window glass; it will work.
Measure the capacity of a single set of plates, and go from there.

73, Gl

Don, W6JL

2795. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: Jim Berry <basalop@mail.eskimo.com>
Message-ID: <332077B8.5C71@mail.eskimo.com>
Source record: 96304
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Help me on this one if you will. So what if the transmission line is 75 ohms? Dipole is close to 75 ohms. A typical SWR meter is designed to read 50 ohm stuff. 75 divided by 50 is 1.5. If you use 75 ohm coax to feed a 50 ohm dummy load, using a 50 ohm SWR meter, your reading is going to be 1.5 to 1. Whoopee! Am I missing something?

Jim K7SLI (basalop@eskimo.com)
>
> Christopher Cox (cobox@netexp.net) wrote:
> s
> : The Hardline is good stuff, but its 75 Ohm.

2796. Re: For Sale: Crystal filters for homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: edrk@ix.netcom.com
Message-ID: <5fpv8c$2rh@sjx-ixn10.ix.netcom.com>
Source record: 96305
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

In <33206CB8.229E@idecc.com> tim_hynde <tim_hynde@idecc.com> writes:
>
>Chip Owens wrote:
>>
>> FOR SALE:
>> Crystal filters removed from U.S. military aircraft surveillance
>> receiver model: R 902 A/L.
>
>> Center Frequency: 2.2MHz
>> nominal BW: 6kHz
>> no. of poles: 6
>> 3dB BW: 5.3kHz
>> 6dB BW: 7.2kHz
>> 60dB BW: 13.1kHz
>> shape factor: 1.82
>> size: 3" long X 1" high X 1" wide
>> impedance: 3,250 ohms in parallel with 33pF
>
>Im just curious, where might one apply a 6KHz filter? I would think
that
>BW would be good for AM only. If I were trying to select only one
>sideband would this type not be too wide?.....

.....Not only too wide, but what receiver has a 2.2MHZ if strip?????
Ed K3PRE

2797. Re: vhf swr/watt meter for 6

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5fpt7b$smc@news1.mnsinc.com>
Source record: 96306

Ted King <tking@blvl.igs.net> whistled a happy tune like:

|>Charles Mccurdy wrote:
|>>
|>> Hi dose any one know if you can use the mfj-812b swr/watt meter for
6mtrs.

|>> |Fidonet: Charles Mccurdy 1:106/1492
|>> |Internet: Charles.Mccurdy@1492.conchbbs.com
|>> |
|>> | Standard disclaimer: The views of this user are strictly his own.
|>I bought one and use it for 6 meters. The SWR and Field Strength parts
|>work OK, but am not sure how accurate power readings are. Queried MJF
|>on this, and got a wishy-washy meaningless answer.

No surprise there... I bet the accuracy of those "Wattmeters" is probably
about plus and minus 35% !!

But that is NOT unique to MFJ. I be that most commercial wattmeters used for
ham measurements are similarly flawed.

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

2798. Tuner help wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: Fred Thompson <fhthomps@concentric.net>
Message-ID: <01bc2b3d$903f53c0$218c9bcf@crc3.concentric.net>
Source record: 96307

I am looking for an economical way to construct a receiver to pick up 179.75 - 215.75 mHz. This range is used for wirelss microphones. What I'd like is to have a hand-protable unit with a jack which would allow me to patch it into tape recorders. I guess there are really two options:

1) Find a commercially available unit to cover this spectrum with small enough steps.

or

2) Convert some readily available equipment. Seems to me some sort of FM radio could have its tuner modified to cover this spectrum. Presets would be great, be they hardwired or electronically stored. Scanner would be nice but not a necessity.

I can solder, cut wire and all those sorts of things. I just don't have the knowledge of how tuners work. If anyone can help point in the direction of a solution, I'd greatly appreciate it.

Fred Thompson
fhthomps@concentric.net

2799. +++++WTB:M1 TONE ELEMENT FOR MOTOROLA MX-320+++++

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19970307223100.RAA04970@ladder01.news.aol.com>
Source record: 96308

Hi,

I am looking for a tone element for a Mototrola MX-320 for tone M1. If you have one please E-Mail me with the price.

Thanx
Mike

HQ54@Aol.Com

2800. BREWING BOOKS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: sandcat@pobox.com
Message-ID: <5fq2db$a40@mackrel.fishnet.net>
Source record: 96309

OUT OF PRINT & HARD TO FIND

Ventura Pacific BookFinders
Serious Inquiries Only, please

Send your requests to sandcat@pobox.com

Never a fee.

2801. FS: Kenwood YK-455C-1 500Hz Filter for Ts140/680

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <33218d95.5084574@news.interbusiness.it>
Source record: 96310
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 70 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

2802. 23 cm equiptment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-07 00:00:00 UTC
From: Thomas Dinyovszky <tpsampsk@bellatlantic.net>
Message-ID: <33208CA6.726E@bellatlantic.net>
Source record: 96311

Cavities for 23cm, 130w to 750w RF decks, LNA's, Feed Horns, FO antenna mounting blocks. <http://www.signalONE.com/kb2ah/

2803. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970308222600.RAA08955@ladder01.news.aol.com>
Source record: 96247

In article <measures-ya02408000R0703970649300001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>
>Amen, Gary. Lightning is closer to RF than it is to DC. When lightning
>strikes sand, it often melts the sand into tubular glass structures at the
>*surface* that radiate horizontally like fingers around the strike point.
>Lightning-glass is NOT formed vertically. So why do people drive 8 foot
>ground rods vertically into the earth?
>
>

Gee Rich? Perhaps because sand is silicon, and like glass is an
insulator? I drive 8 foot grounds to get into moist soil where there is
improved conductivity.

Rich, do you believe that RF ground exists at the SURFACE of
dry sandy soil, such as in arid deserts?

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

2804. Re: 1/4L-GP antenna question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: ANTISPAMsteve100@dircon.co.uk
Message-ID: <3321e75d.1270071@news.dircon.co.uk>
Source record: 96248

On Thu, 6 Mar 1997 14:24:41 -0800, Peter Dingemans
<129432pd@mstore.eur.nl> wrote:

>
>G'day everyone,
>
>I'm planning on building a 1/4L-GP antenna for the 2 metre-band. In the
>ARRL antennabook there are some good instructions on building one of
>those, but I am left with one more question: what determines the resonant
>frequency of such an antenna, the length of the radiator or the length of
>the ground-'wires' ? I need to know, since when I have to fine-tune it
>(to min. SWR), which wires have to be cut shorter (I want to keep the
>wires at first a bit longer than necessary, so I can trim them down to
>the right frequency).
>
>
I found that both have some effect. To keep it simple, I'd say
calculate the gp's and leave them as specified, then tune the vertical
radiating element for a match. The angle between the gp's and the
verticle will change the angle of radiation too, play with it some but
you may well find that 150 - 140 degrees is a fair setting.

****
* steve100@dircon.co.uk
*
* M1BJR Plymouth
****
<<REMOVE "ANTISPAM" from e-mail address B4 replying>>

2805. Calc. (K) factor.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: "H.Silvia" <hrsil@flinet.com>
Message-ID: <33212D44.3763@flinet.com>
Source record: 96249

Hi I'm working on J-Pole ant length calculations and am having a
difficult time calculating the K factor ratio of wavelength by dia..
The antenna and arrl manuals do not explain the calculation formuala
enough for me to integrate (the formula itself) into my c++ program as a
variable based on material widths.
Help?

73 de Henry KE4WBW

2806. Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: edrk@ix.netcom.com
Message-ID: <5fsqgm$3fg@dfw-ixnews7.ix.netcom.com>
Source record: 96250

Looking for source(s) for: EXAR ICs (small quantities)
IF filters (455KHz), Murata, etc

Any help greatly appreciated.
73.
Ed K3PRE

2807. Re: Cheaper MHW591 for MFJ-259 pre-amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: stubstad@ix.netcom.com
Message-ID: <5fsr57$d43@sjx-ixn6.ix.netcom.com>
Source record: 96251

In <COMAS.97Mar3152639@nys01c-303.fir.fbc.com>
comas@nys01c-303.fir.fbc.com (Andrew Comas) writes:
The article mentions using a cheaper, less gain, component
>but didn't mention a part number. Does any one know of replacement
>part?

Try MAR-x, MAV-x series of 50 ohm gain blocks from Mini-Circuits Labs.
Prices vary from <$1 depending on power output and BW, power is from
>~7V DC thru a bias resistor. MAR-8 is a favorite as it has >> gain
and good dynamic range, but >> BW than u need. MAR-6 has better NF.
MAR-1 and -2 cheapies are good enuf for VHF counter app unless more
gain/less overload required.

Similar parts also sell as HP MSA-0x04, -0x05 and -0x86, formerly sold
under Avantek name.

The MHW591 covers 1 - 200 Mhz at 35dB for about $50.00 and
>requires 2 external parts and 13VDC. I was looking for one at about
>$20.00 with about 15dB gain.
>
Jim

2808. Re: How do Xtals determine transmitter frequency??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5ft39c$t99@camel1.mindspring.com>
Source record: 96252

Joe Rocci <rocci@worldnet.att.net> wrote:

>OK, here's a very simplified description of the forces at work. A
>crystal is nothing more that a finely produced slab of quartz whose
>dimensions and crystalline structure have been engineered to have a
>mechanical resonance at some frequency. Electrodes are plated onto the
>flat faces of this quartz slab. What's unique about the quartz crystal
>is that a voltage applied to the electrodes will cause the mechanical
>structure to "warp" slightly. When the voltage is removed, the quartz
>relaxes to its original position, and generates an opposite voltage
>across the electrodes. The quartz is "giving back" the energy which was
>appplied to it.
<<<< remainder deleted >>>>
This is called THE PIEZOELECTRIC EFFECT.
The atomic bonds in the crystal lattice have an acceptable range
of distance within which to "bounce" when stressed mechanically
or electrically. mech <------>elect. forces are interchangeble
with each other as input or output in this effect, hence the laws of
thermodynamics are conserved. It is interesting to note that
mech in-losses=elect out
elec in-losses=mech out
Tony WW2W
check out:
http://www.pipeline.com/~acatalan/

2809. WEB SITE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <33223B14.60D4@cyberramp.net>
Source record: 96253

http://www.cyberramp.net/~rnewland

2810. Re: Origin of 'California Kilowatt'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: "J. Henderson" <n6lv@pacbell.net>
Message-ID: <33222DA0.34C5@pacbell.net>
Source record: 96254
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

bill harris wrote:
The California Kilowatt item is no longer on my web page. I only left it
> up a short time as I need the page space for other things.
>

Oh. Darn.

I was around when the phrase popped up. Wondered What you heard...

jim n6lv

2811. Re: Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: "ir003432@worldnet.att.net" <ir003432@worldnet.att.net>
Message-ID: <33223340.7E69@worldnet.att.net>
Source record: 96255

Some of the best amateur radio kits are QRP (low-power) CW transceivers put out by S & S Engineering at somewhere in Maryland. They have a website that you could locate with most any search engine.

Their kits are not for the faint-hearted. The kits use absolutely top-quality parts, boards, and chassis. They are not easy to build because of the compact size but they work very well. I have a 40-meter and an 80-meter CW transceiver that I built from their kits and I use those two QRP rigs more than I do my 100-watt rig.

Robert Harris wrote:
>
> Can anyone tell me who makes amateur, shortwave and/or UHF/VHF radio kits
> and how to get in touch with them?
>
> I'm just getting started in amateur radio and am thinking about building
> the following:
>
> CW transmitter or transceiver
> Amateur transceiver
> Shortwave receiver
> Morse code practice kit
>
> Thanks,
> Robert

2812. Re: How to couple transmitter to antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5ftpue$pj5@camel1.mindspring.com>
Source record: 96256

gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>In article <jwg6-1002971413160001@cu-dialup-0823.cit.cornell.edu> jwg6@cornell.edu (Joel Govostes) writes:
>>Hi. I have an old Thordesen (sp?) transformer catalog, looking to be from
>>late 50's/early 60's. It includes several transmitter/exciter and
>>modulator circuits, with instructions for building them.
>>
>>The info is very interesting and nostalgic. However, I noted that the
>>transmitter outputs in the schematics are "old-fashioned."
>>What I mean is, they don't show 50 ohm or even coaxial-type ouputs.
>>Instead, they just show the two leads which are supposed to connect to the
>>antenna.
FIRST make sure any blocking capacitors are doing their job isolating
any DC from thos two outputs!!!
I got knocked on my tuchas from a ladder-line output of a 1940's
National RXCVR.
I wonder if a balun could be used right their? 300-450/35-50 ????
The match the 50 through a tuner like most do now.
Hmmm that would be interesting.
Tony WW2W

>>
>>How can you tell what type of antenna is intended? Impedance? Type of
>>feedline? There is no mention of it, so I guess it was common knowledge,
>>at the time, as to how to couple the antenna, and what impedance of
>>antenna you would use.
>>
>>I'm just used to more modern circuit diagrams, showing the usual co-axial,
>>low impedance output. With those, you pretty much can presume they're
>>looking for around 50 ohms. How about with the older tx schematics?

>Most older transmitter designs employed link coupling to ladder line.
>The loading was controlled by varying the coupling of the link to the
>output tank. So these transmitters weren't designed for any specific
>load impedance. An amateur was expected to adjust the link to match
>whatever load he had to feed.

>Gary
>--
>Gary Coffman KE4ZV | You make it, | Due to provider problems
>Destructive Testing Systems | we break it. | with previous uucp addresses
>534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
>Lawrenceville, GA 30244 | |

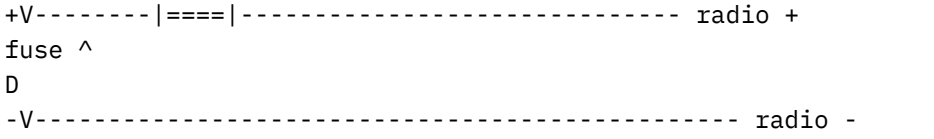
2813. Re: Crowbar Circuit????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5ftrhr$qsk@camel4.mindspring.com>
Source record: 96257

Tanya Fisher <rjagoe@nbnet.nb.ca> wrote:

>Hello:
>I have just purchased a TM-241A 2M radio brand spanking new. A fello ham
>told me that if I am going to use a 12V power supply I should have a
>crowbar circuit in it. What I would like to know does any body have
>plans for this type of circuit? Any other information about it would
>also be appriciated. You may mail comments to rjagoe@nbnet.nb.ca
>Thank you for your time de VE9BL Ryan.

Overvoltage is one reason for a crowbare circuit INSIDE the power
supply. Another reason is in case you connect the leads in the wrong
polarity.... in that case a crowbar INSIDE the power supply may not be
much help. Your 20amp power supply would be just cruising along,
happily frying your incorrectly connected radio with 20amps at the
correct 12 or 13.8 voltage! It "sees" no problem.
What me worry?
Solution:
Place the crowbar externally on the radio supply wire leads.
A combination of a fuse/heavy-duty rectifier diode (or 6-15 1A diodes
in parallel) in an "L" curcuit. The diode(s) would of course
be connected across the lines (between the fuse the radio)
and in such a polarity that would not conduct when the radio is
connected correctly.



A fuse CAN be used on BOTH rails to
add further protection. (in case one fuse
doesn't melt fast enough or is defective)
Tony WW2W
http://www.pipeline.com/~acatalan/
Ham page - Tesla - Theremin, The KCRC newsletter & more!!!

2814. Re: Oppose OR Support Little Leo instructions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5ftspe$grk@camel2.mindspring.com>
Source record: 96258
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

3W8PE1B <willi6@erols.com> wrote:

>Re what was previously posted regarding the ARRL/AMSAT position
> on this issue. I would recommend that individuals do their own
>research
> prior to sending the suggested response. The poster points out that:

> "Please note! The proposals the League opposes are not FCC proposals,
> nor are they endorsed by any other branch of the government. They are
> industry proposals. The League's objective is to falsely demonstrate
> there is broad citizen opposition to the industry proposals."

Read my letter to the wrc97 location at:
My letter was long: I did recieve a confirmation of their receipt and
thay told me that letters that are in depth would be kept separately
and presented in case certain points had to be made at any pertinant
hearing.
http://www.pipeline.com/~acatalan/kcrc.htm
This is the Kings County Radio Club's BB/Newsletter
THE IS ALSO A PICTURE OF A LITTLE LEO THERE.
CUTE LITTLE BUGGERS aren't they?

2815. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierE6sEIp.EEs@netcom.com>
Source record: 96259

in <3321643C.6E1B@postoffice.worldnet.att.net>,
: Thomas Isgro (kc8dgu@postoffice.worldnet.att.net) wrote:
: Mark Mansfield wrote:
: > What if you keyed a repeater with your transmitter that was legal (below the
: > maximum field strength and you are not licensed)? Things can get harry
: > can't they :)

: Not really, This is straightforward, if you key a repeater you are
: transmitting in that band and if you are not licensed to transmit in
: that band you are illegal, regardless of the power of the transmitter.
: i.e you may not key a transmitter in the 2 meter band unless you have a
: valid license of at least technician class.

If you bring up a repeater, you are causing interference and are
required to stop. But if you aren't interfering and meet the (very low)
levels of radiated signals in the licence free regs, you can do whatever
you want, (outside of the restricted bands, mostly radio navigation,
safety, and astronomy).

The periodic use (garage door openers, car alarm key fobs, ...)
paragraph (15.231) has a quite broad allocation (anything above 70 Mhz)
with radiated field strength equivalent to a couple of milliwatts of
power (depending of frequency, but with strict time limits per
transmission), and unless they're causing problems, there is nothing you
can do about it.

And in the 902-928 MHz band, you've got an amazing collection of
stuff (cordless phones, wireless speakers, computer LANS) that are
allowed to be there.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

2816. Re: Tuner help wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierE6sEIr.EFF@netcom.com>
Source record: 96260

in <01bc2b3d$903f53c0$218c9bcf@crc3.concentric.net>,
: Fred Thompson (fhthomps@concentric.net) wrote:
: I am looking for an economical way to construct a receiver to pick up
: 179.75 - 215.75 mHz. This range is used for wirelss microphones. What I'd
: like is to have a hand-protable unit with a jack which would allow me to
: patch it into tape recorders. I guess there are really two options:

Since those are also US TV channels 7 through 13, try a TV tuner module.

1) there were a couple of articles using TV tuners as spectrum monitors
in Radio-Electronics about 6-10 years ago. One was a analog sweep
unit that used an oscilloscope and another was a IBM PC plug in
board that was computer controlled.

2) Try whatever division of Philips that makes TV tuner modules. They
make them with a direct I2C computer interface that controls the
frequency synthesizer built into the module.

Then you need a circuit that can deal with the 40 something IF output of
the module. Look at some of the FM receiver integrated circuits that
are either made for FM broadcast or commuications FM receivers.
(Wideband or Narrowband). Try Philips Semiconductor divison for both
and Motorola Semi. for commuincations.

If that's too homebrew for you, a couple of the Radio Shack scanner
receivers will pick up in that range. (Pro-26 and Pro-60 according
to the 1997 catalog).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

2817. what is nickel metal hydride

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <332192c2.377422@news.sprynet.com>
Source record: 96261

greetings
i just purchased a cordless phone, 800 mhz, and just realised that it
uses a nickel metal hydride battery. I am not complaining. It is
just that how I am going to have to learn about nicket metal hydride
batteries, hi.
So far I am developing an expertice on nicad batteries,
http://home.sprynet.com/sprynet/lar01/nicad.htm
now I am going to have to learn about these new? ones, hi.
Larry ve3fxq

2818. 900 mhz amateur operation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <33218706.4896714@news.sprynet.com>
Source record: 96262

recently, I bought a 800 mhz cordless phone.
In the process of selecting it and bying it and using it, so far, I
have been wondering if this phone could be used as a transceiver in
the 900 mhz amateur band.
(1) is/are there service manuals available for that kind of equipment?
(2) i am wondering if anyone has considered building a converter to
move it to 900mhz.
The radios remind me of the amateur's efforts of first getting onto 2
meter fm, converting commercial radios.
Larry ve3fxq

2819. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <3321038F.69BF@aeneas.net>
Source record: 96312

Roy Lewallen wrote:
> I hit the "send" key a bit fast. Let me add that unlicensed operation on 2
> meters, as on any other frequency, also carries the restriction that Gary
> mentioned, that it can't cause interference to any licensed users. I don't
> recommend doing it, even if you do have the capability of accurately
> measuring field strength at this frequency and signal level (which you
> almost certainly don't unless you run a test lab).

What if you keyed a repeater with your transmitter that was legal (below the maximum field strength and you are not licensed)? Things can get harry can't they :)

Mark

2820. Re: Ground Rod Installati

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <857800074@infoway.com>
Source record: 96313

Cj> Regarding the use of a common point for all grounds,
Cj> - Several houses wired in parallel off of a single transformer,

Cj> - Each house grounded independently,

Cj> - All grounds connected together via long and comparatively
Cj> "thin" conductors (in the context of lightning protection),

Cj> - Perhaps additional grounds at the pole connections for user
Cj> drop cables.

Cj> From the point of view of lightning strikes, isn't this local
Cj> distribution configuration subject to severe ground loop problems?

Yes, and it seems to me, that is the point of having the ground
and each location at the service entrance, and of that
surge suppressor installed before your meter. That way,
when the ground system brings the surge from the lightning
strike (or it's induction) from your neighbors house,
it gets to ground at your survice entrance without going
through conductors smaller than the conductors bringing it
in the first place. (Ie just the current that can flow in
half inch cable). Since your grounds are tied together,
there isn't a better ground the current wants to get to,
by flowing in through your house to your antenna's super good
RF ground. Because it's already there at the service entrance
bonding.

My question is related. I have noticed I seem to have to
change light bulbs very often in my house. Recently,
I have been operating, while watching the HV meter on the
transciever run from 117 volt lines.
It goes from about 810 to 860 volts different
times of the day. I guess that this represents load imbalance
among my neighbors houses, and that regulation would be
much better accross the 230 volt connection.
It doesn't seem to be connected with any large motors going
on or off in our house.
I haven't begun these measurements, but is this normal,
and is there much one does to correct this?

If the 117 actually goes high enough to burn out the lights
faster than normal, is there minimum specs the power company
can be asked to deliver?

73, Don N6MCE

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

2821. Re: Origin of 'California Kilowatt'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: bill harris <billharr@pop.flash.net>
Message-ID: <5fr2iggcb1@excalibur.flash.net>
Source record: 96314
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

"J. Henderson" <n6lv@pacbell.net> wrote:
>bill harris wrote:
>>
>> Point your browser to
>> the URL below and check out the item CALIFORNIA KILOWATT and let me know
>> what you think.
>>
>> -73-
>>
>
>What item CALIFORNIA KILOWATT?

The California Kilowatt item is no longer on my web page. I only left it
up a short time as I need the page space for other things.

--
****
* Bill Harris *
* Bill's Antique Radio Emporium - http://www.flash.net/~billhar *
* To e-mail, remove the second 'r' from my address. This was *
* added to discourage junk e-mail. *
****

2822. Re: need seneca manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: bill harris <billharr@pop.flash.net>
Message-ID: <5fr2r6gcb2@excalibur.flash.net>
Source record: 96315

tpotts@clemson.edu wrote:
>where may i find a copy of heathkit senecal manual or at least a
>schematic. 73 tom ke4uuc.

Try the website at: http://www.sarrio.com
lots of Heathkit manuals available there.

--
****
* Bill Harris *
* Bill's Antique Radio Emporium - http://www.flash.net/~billhar *
* To e-mail, remove the second 'r' from my address. This was *
* added to discourage junk e-mail. *
****

2823. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0803970621090001@wd1v.mv.com>
Source record: 96316
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

2824. Free Mac/Ham Software on WWW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0803970625080001@wd1v.mv.com>
Source record: 96317
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing New WWW Site for Macintosh Ham Radio Enthusiasts

http://www.mv.com/ipusers/wd1v

Mac Ham Software including:

Macnet Roster:
a database of all hams in the world using Mac computers

WD1V's Ham Radio EXAM Simulators:
the fast path for upgrading your ham license with a Mac

Plus more Macnet information - come see!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

2825. Re: Ground Rod Installati

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: fsimonds@icanect.net
Message-ID: <5frnsm$3no@news.icanect.net>
Source record: 96318

don.phelps@infoway.com (Don Phelps) wrote:

-> Cj> Regarding the use of a common point for all grounds,
-> Cj> - Several houses wired in parallel off of a single
transformer,

-> Cj> - Each house grounded independently,

-> Cj> - All grounds connected together via long and comparatively
-> Cj> "thin" conductors (in the context of lightning protection),

-> Cj> - Perhaps additional grounds at the pole connections for user
-> Cj> drop cables.

-> Cj> From the point of view of lightning strikes, isn't this local
-> Cj> distribution configuration subject to severe ground loop
problems?

-> Yes, and it seems to me, that is the point of having the ground
-> and each location at the service entrance, and of that
-> surge suppressor installed before your meter. That way,
-> when the ground system brings the surge from the lightning
-> strike (or it's induction) from your neighbors house,
-> it gets to ground at your survice entrance without going
-> through conductors smaller than the conductors bringing it
-> in the first place. (Ie just the current that can flow in
-> half inch cable). Since your grounds are tied together,
-> there isn't a better ground the current wants to get to,
-> by flowing in through your house to your antenna's super good
-> RF ground. Because it's already there at the service entrance
-> bonding.

-> My question is related. I have noticed I seem to have to
-> change light bulbs very often in my house. Recently,
-> I have been operating, while watching the HV meter on the
-> transciever run from 117 volt lines.
-> It goes from about 810 to 860 volts different
-> times of the day. I guess that this represents load imbalance
-> among my neighbors houses, and that regulation would be
-> much better accross the 230 volt connection.
-> It doesn't seem to be connected with any large motors going
-> on or off in our house.
-> I haven't begun these measurements, but is this normal,
-> and is there much one does to correct this?

-> If the 117 actually goes high enough to burn out the lights
-> faster than normal, is there minimum specs the power company

-> can be asked to deliver?

-> 73, Don N6MCE

->... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
->___ Blue Wave/386 v2.30 [NR]

If your line voltage fluctuates as widely as you seem to be saying it does, then you have a real problem, Don! You may want to look at (or have an electrician look at your neutral connection at the box. That's often a major cause of upsurges.

And I'm intrigued to find out how the "...the HV meter on the transciever run from 117 volt lines.
It goes from about 810 to 860 volts different times of the day"! If that's really what's happening (800+V), then you'd better call the power company fast! You may have a bad pole pot (xfmr).

Most power companies will guarantee 115-125V under normal circumstances, with little fluctuation in voltage level. Check with a neighbor, particularly one sharing the same transformer secondary with you if this is appropriate, to see if he is experiencing a similar situation.

73--Terry/WB4FXD in Ft. Lauderdale, FL
fsimonds@icanect.net

2826. WTB:HC-1 or RJ-1A vaccuum tube relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: kovar@zeus.ia.net
Message-ID: <5fqiuq$ql5@hera.ia.net>
Source record: 96319

Thanks for reading,

I am looking for a Jennings RJ-1a or Kilovac HC-1 Vaccuum tube relay

for amp project.

Thanks,

Jack Kovar
K0VAR

2827. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0803970557300001@news.vcnet.com>
Source record: 96320

In article <1997Mar5.212322.21526@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

> In article <3319ebdf.5240339@nntp.ix.netcom.com> gsparks@ix.netcom.com (Glenn Sparks) writes:
> >
> >I have used the method Gary spoke of by working the pipe in with
> >water, it works very well, don't force it and get it stuck, take it
> >easy and you will be able to get it down quite well.
...snip...
> >I discussed this with an ex
> >military explosives expert, and he recommended 8 rods 1 meter apart in
> >a rectangle, all braised with copper pipe between them, and then 3/4"
> >copper pipe to the shack. He claimed incredible increases in signal
> >strenght and reduced noise with this setup.

With a dipole antenna, I can detect no change in signal strength or a change in noise with or without the ground system connected to my station. When it comes to old wives' tales, radio-grounding stories seem to rank about even with fish stories.

> Model a lightning bolt as a constant current source of about 8,000
> amperes. Most of the bolt's energy resides below 2 MHz, but significant
> fractions extend all the way up to UHF. So inductance is a significant
> consideration in the downlead path to the Earth connection.
>
> Gary

Amen, Gary. Lightning is closer to RF than it is to DC.
Like RF, lightning is subject to skin-effect. When lightning strikes sand, it often melts the sand into tubular glass structures at the *surface* that radiate horizontally like fingers around the strike point. Lightning-glass is NOT formed vertically. So why do most people drive 8 foot ground rods vertically into the earth?

I read in *National Geographic* that some lightning strokes have been measured at around 100kA. Hmmmm. If there's a five-ohm ground on a radio tower, and, to comply with the National Electrical Code [NEC], a wire from this five-ohm ground is connected back to the neutral wire on the electric-mains, a 40 or more kilovolt potential could appear at the wall outlets in
the house during an 8kA to 100kA discharge on the "grounded" radio tower.

To comply with the NEC, a radio receiving antenna must be made of #14 gauge--or larger-- Cu wire. Why 14 gauge?. One or more half-waves of end-fed #32 gauge Cu wire works quite nicely for receiving AND transmitting

1500w, and nobody
except the local hawks and owls are likely to spot it. . Apparently,
being a 60Hz expert doesn't automatically make one a shortwave expert.

--
--Rich-- ag6k, 805-386-3734

2828. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>
Message-ID: <3321643C.6E1B@postoffice.worldnet.att.net>
Source record: 96321

Mark Mansfield wrote:
>

> What if you keyed a repeater with your transmitter that was legal (below the
> maximum field strength and you are not licensed)? Things can get harry
> can't they :)
>
> Mark

Not really, This is straightforward, if you key a repeater you are
transmitting in that band and if you are not licensed to transmit in
that band you are illegal, regardless of the power of the transmitter.
i.e you may not key a transmitter in the 2 meter band unless you have a
valid license of at least technician class.
--
****
****
Tom Isgro
OHIO
KC8DGU

10-X #68364 QRP-L #945 ARS #203 FIST #2360
C.A.T.T #2115 NORCAL ARRL

****
****

2829. Re: Amateur Radio Kits?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: jphelan501@aol.com
Message-ID: <19970308144200.JAA14425@ladder01.news.aol.com>
Source record: 96322

Ten-Tec has a line of kits out that seem to get good reviews by people
that build them. Check out their web page.

73 de John N3DRA

2830. Re: ten-tec 6mtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Joseph M Zawodny <zawodny@exis.net>
Message-ID: <332171F8.18CD@exis.net>
Source record: 96323

Charles Mccurdy wrote:
>
> Hi all on the ten-tec model 1209 6mtr transverter kit on the schematic area
> D20 and on the pc board were is says D20 install that the book want say to
> install it but you do i just called ten-tec and asked about it.
>
> 73s kc5cxu
>

Anyone want to take a crack at translating this into English? I have a
1209
and would like to help this guy, but I have no idea what he is
saying/asking.

--

Joseph M. Zawodny Dana K. Forrest
zawodny@exis.net dana@exis.net
http://wwwp.exis.net/~zawodny

2831. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0803970658530001@news.vcnet.com>
Source record: 96324

In article <5fq834$nkb@camel1.mindspring.com>, tomwagner@mindspring.com wrote:

> measures@mail.vcnet.com (R. L. Measures) wrote:
>
> >In article <5fin13$66l$1@news.wco.com>, frog200@nospam.juno.com (Ed G.)
wrote:
>
> >> Just in case it hasn't been mentioned in this thread already,
under
> >> NO circumstances should a ground system which provides antenna lightning
> >> protection be tied to the house AC ground system.
> >>
> >> Ed W7DXZ (REPLY TO: ecgallup@mlode.com)
>
> >Amen to that, Ed.
>
> >--
> >--Rich-- ag6k, 805-386-3734
>
> Why, Rich? Where will the energy from the lightning strike go?
>
> Tom

With no connection between the radio antenna-ground and the electric-mains,
the energy from a lightning strike on the antenna will dissipate mostly
into the soil around the antenna-ground. However, all grounds have
resistance and reactance, so during a lightning strike, a potential exists
at the antenna-ground connection. Since the typical resistance of a
ground is between 2 and 20 ohms--and lightning strikes consist of many
kiloamperes of current, the I*R potential is typically going to be many
kilovolts.
Does it seem like a good idea to connect a wire from a many
kilovolt/kiloamp source to one's electric-mains, Tom?
---
e-mail copy to Mr. Tom Wagner

--
--Rich-- ag6k, 805-386-3734

2832. Help with Ailing HP8640B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: k1bqt@aol.com
Message-ID: <19970308151801.KAA16086@ladder01.news.aol.com>
Source record: 96325

Hi--

I have a surplus HP8640B with the "military" modulation unit (has 400, 1000, and 5000 Hz tones and more features than the "civilian" version). The problem I'm having is low FM modulator swing. The audio side appears okay (sinewave output 4.5V p-p, meter, meter switch, and over-drive lamp all act as they are supposed to). However, the actual modulator swing is only about 1/3 what is indicated by the meter. Don't know if something is broken or if someone merely screwed up an adjustment. Anyone who has worked on these things have any suggestions or ideas about what is causing this? The RF side is right on.

Thanks--

Rick K1BQT

2833. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Jim Berry <basalop@mail.eskimo.com>
Message-ID: <33217ACC.3ACF@mail.eskimo.com>
Source record: 96326

I run an HF Pactor MBO (BBS) that scans several freqs on each of the Hambands.
At the moment I am using a multiband vertical (Butternut) to accomplish this.
In the near future,I have plans of moving to a place that has trees.
My big plan is to use a loop antenna tuned by one of those SGC-230 antenna couplers advertised as a Smartuner. This device can tune just about anything. I have one and it works very well.
My question is what would be a good choice for the size of the loop?
Sure,one cut to each freq and have a system to select the proper antenna for that band would be the way to go,but I may wind up with only a couple of trees on an acre or two and not a few dozen trees on 10 acres.
I will put up a support for the tuner at around 40 or 50 feet between two trees that are (I hope) a 100 feet tall and a 100 feet apart. From what all I have read though,I should be considering putting up a horizontal loop. Maybe I better be looking for a place with 4 trees on it. Anyhow,I am looking for opinions on size of this loop, whether I put it up
vertically or horizontally.

73 Jim K7SLI
Radio: K7SLI @ K7SLI.WA.USA.NA
E-mail: basalop@eskimo.com

2834. WTD: Diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Wayne Wicks <wayne@h2net.net>
Message-ID: <332170DB.1250@h2net.net>
Source record: 96327

I build a bunch and am looking for bulk si diodes with at least 1000v
rating at an amp or better
--
Wayne Wicks - WA2KEC
7581 Lost Ranger Peak
Littleton, CO 80127
wayne@h2net.net

2835. Knight-Kit Info - Ocean Hoppers and Space Spanners

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <3321BD5A.5D3A@erols.com>
Source record: 96328
Cross-posted to: rec.radio.swap,rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.antiques.radio+phono

The search goes on......

Late last year when I was searching for an Ocean Hopper,
many of you forwarded leads to me. I've since located
an Ocean Hopper and my nostalgia project is underway.
Thanks to all!

One of you had a lead that surfaced when you visited another
ham in Zero-land (Kansas or Missouri?) for a radio-swap of
your own. (I believe you had driven a few hundred miles to pick
up a vintage receiver or transmitter.) You thought the other ham
might have an Ocean Hopper and you passed the lead along to me.
Although it turned out to be a Space Spanner, I had a nice chat
with the gentleman on the phone about the radio and restorations.
(The other thing I recall was the gentleman in KS/MO had just
upgraded his call.)

Now, I'd like to pass that lead along to a friend who is looking
for a Space Spanner, but I can not find any of my notes re the
original lead.

If this scenario sounds familiar, or if you know of a Space Spanner
out there in the Midwest someplace, please drop me a note and I'll
pass it along into the right hands.

Thanks again for all the help!

73 Dave K7HMP

E-Mail: willi6@erols.com

2836. A M Radio poor reception help...Newbie needs help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: robbert@ccnet.com
Message-ID: <robbert-ya023680000803970859150001@news.ccnet.com>
Source record: 96329

A M Radio poor reception help...Newbie needs help

I live in the S F Bay Area. I want to listen to some radio garden shows coming out of the L A Area.
The reception is very poor. I have heard you can buy some ....brand ..radios that pick up these far and weak signals.

I have also heard you can put a ..magnet....next to a radio to help the weak signals.

I think they sell these at Good Guys? 40 bucks?

Whats a cheap solution to help me hear these weak stations?

Thanks

reply here please

robbert@ccnet.com

2837. Re: Origin of 'California Kilowatt'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <332299af.51920580@news.santafe.edu>
Source record: 96330
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I remember a cartoon somewhere, maybe an old CQ or 73 magazine. It
showed a 6 station with a large Variac knob marked "Volume" :-) :-)

73 de K9GXC, Jim

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

2838. Re: Any retailers sell minicircuits stuff?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <3321992e.51791132@news.santafe.edu>
Source record: 96331

blair@skopen.dseg.ti.com (Arthur P Blair) wrote:

>I've used alot of their components at work. I'd like to use them in home
>projects but who sells them in small quantities?

There's no problem buying direct from the factory. Just call them and
place an order. I do it all the time.

Jim Potter

James M. Potter, President TEL: (505) 662-5804
JP Accelerator Works, Inc. FAX: (505) 662-5210
2245 47th Street EMAIL: jpotter@jpaw.com
Los Alamos, NM 87544-1604 URL: http://www.jpaw.com

2839. Looking for 73M223

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: pissaro@mail.telepac.PT
Message-ID: <2.2.32.19970308172505.006ef62c@mail.telepac.pt>
Source record: 96332

```
Hello all

I'm looking for some information on the chip 73M223. Anyone knows
where I can find it?

Many Thanks
Joao Pissarro
ct1dbh
pissaro@mail.telepac.pt
,,, SERVER JNOS em TCPIP
/'^'\
( o o ) 144.700 MHz (1200Bd), 433.875 MHz (9600 Bd)
-oOOO--(_)--OOOo-----------------------------------------------

73 de QTH : Massama
Joao Pissarro LOC : IM58is
CT1DBH Packet : CT1DBH@CS1AAS.CTLX.PRT.EU
E-Mail : pissaro@mail.telepac.pt
.oooO Homepage: http://ct1dbh.ampr.org
( ) Oooo.
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```

2840. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: tomwagner@mindspring.com
Message-ID: <5fsb56$mm0@camel1.mindspring.com>
Source record: 96333

I don't think I agree, Rich. First let me state my assumptions:
1. DC grounded antenna (e.g. typical yagi).
2. Coax feedline that remains connected to equipment
at all times.
Because of these conditions, my antenna is already
connected to the power line ground through my equipment
grounds. Therefore, I think it is wise to bring a large conductor
from the tower base to the service ground to shunt off some
of the lightning energy. Feedlines should also be grounded
at the base of the tower.

The remaining energy circulating in ground loops needs to be
choked off with a ground window that *all* conductors entering
the station must go through.

Do you still disagree with this? I believe that Gary Coffman
recommends such a configuration. (Correct me if I'm wrong,
Gary.)

Tom

---

measures@mail.vcnet.com (R. L. Measures) wrote:

>With no connection between the radio antenna-ground and the electric-mains,
>the energy from a lightning strike on the antenna will dissipate mostly
>into the soil around the antenna-ground. However, all grounds have
>resistance and reactance, so during a lightning strike, a potential exists
>at the antenna-ground connection. Since the typical resistance of a
>ground is between 2 and 20 ohms--and lightning strikes consist of many
>kiloamperes of current, the I*R potential is typically going to be many
>kilovolts.
> Does it seem like a good idea to connect a wire from a many
>kilovolt/kiloamp source to one's electric-mains, Tom?
>---
>e-mail copy to Mr. Tom Wagner

>--
>--Rich-- ag6k, 805-386-3734

2841. Re: 902-928 MHz ISM band stuff for Amateurs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <3321BBE8.1E5D@cedar.net>
Source record: 96334

Komljanec, Tony wrote:
>
> Regarding a 900 MHz Sony cordless phone, Richard wrote:
> >
> > The RF board has 9 conection.
> >
> >1 - +B 9 VDC
> >2 - GND
> >3 - AUDIO output
> >4 - SQUELCH output
> >5 - VFO inable
> >6 - data in
> >7 - clk in
> >8 - PTT
> >9 - transmit audio
> >
> >
> >This board is on a PC board the can be easily removed. It is SMALL!!!
> >The conection can be easily made by a inline socket.

Which model is this referring to?

2842. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0803970747460001@news.vcnet.com>
Source record: 96335

In article <19970307022100.VAA14869@ladder01.news.aol.com>,
commquart@aol.com wrote:

> In article <measures-ya02408000R0503971431480001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:
>
> >
> >I conducted numerous tests wherein I connected and disconnected my station
> >ground system during transmitting and during receiving. It made no
> >noticeable difference.
> >
> >--
> >--Rich-- ag6k, 805-386-3734
> >
> >
>
> I use a common point grounding system for lightning protection.
> While the system was designed for lightning, it also effectively
> cured several "RF hot" feedlines coming into the shack. While
> it is true a ground rod is a poor RF ground AS FAR as improving
> signal radiation efficiency, it is very effective at dissapating RF energy
> into the earth in the form of heat energy.
...snip...
 Improving signal radiation by dissipating RF energy into the earth as
heat energy does not make sense to me. IMO, delivering more RF energy into
the antenna is more likely to improve signal radiation.

If you have RF-hot coax feedlines--like I once had, Peter, it sounds like
you are not using coax choke-baluns at the feedpoints of your antennas. A
coax choke-balun is used wherever an unbalanced-to-balanced transistion
takes place, so that the RF potential on the balanced element does not
appear on the outside of the coax feedline---and subsequently on anything
that is connected to it in the station.. A for instance would be at the
center of a coax-fed dipole antenna. At 7MHz, a satisfactory choke-balun
can be made by winding roughly 10 feet of the coax feedline on 3" ABS
plastic drainpipe. The coil of coax can be fastened to holes in the ABS
with black (UV-resistant) nylon cable-ties. The coil of coax on such
baluns should NOT be placed against metal surfaces.
3' ABS pipe also makes a suitable center insulator for dipoles. Thus, a
choke-balun can do double-duty as the center insulator.
---
e-mail copy to Mr. Bertini

--
--Rich-- ag6k, 805-386-3734

2843. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5fsber$rip@abyss.West.Sun.COM>
Source record: 96336

In article <3321643C.6E1B@postoffice.worldnet.att.net>,
Thomas Isgro <kc8dgu@postoffice.worldnet.att.net> wrote:
>Mark Mansfield wrote:
>>
>
>> What if you keyed a repeater with your transmitter that was legal (below the
>> maximum field strength and you are not licensed)? Things can get harry
>> can't they :)
>>
>> Mark
>
>
>Not really, This is straightforward, if you key a repeater you are
>transmitting in that band and if you are not licensed to transmit in
>that band you are illegal, regardless of the power of the transmitter.
>i.e you may not key a transmitter in the 2 meter band unless you have a
>valid license of at least technician class.

Hmmmm... then what would you say about 2m <-> 10m FM links?
You know, a 2m box coupled to a 10m box. A Tech can then cause
the 10m box to transmit without being licensed to transmit
in that band.

I believe the answer is not so straightforward, at least not
as you put it. I suspect the answer is that the operator of
a Part 15 legal device would not be liable for kerchunking the
ham repeater, though this might be considered interference.

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

2844. Re: Boatanchors FS: TMC GPR90, and KWM-2A with homebrew PS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Fred Honnold <shonnold@volcano.com>
Message-ID: <5fs90n$m3d@news1.nortel.net>
Source record: 96337
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.boatanchors,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

wa2ise@netcom.com (Robert Casey) writes: >
> FS: a reconditioned Collins KWM 2A (in a non-orginal case, but close to
> orginal) with a homebrew power supply. $400 + shipping
>
> TMC GPR90 general coverage receiver, good shape, working $400 + shipping
Hi would you please pass on the s/n of the KWM2A and the condition inside the radio
Thanks Fred W6YM

2845. Re: A M Radio poor reception help...Newbie needs help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Robert Ogburn <rogburn@pacbell.net>
Message-ID: <3321C269.5F5A@pacbell.net>
Source record: 96338

robbert@ccnet.com wrote:
>
> A M Radio poor reception help...Newbie needs help
>
> I live in the S F Bay Area. I want to listen to some radio garden shows
> coming out of the L A Area.
> The reception is very poor. I have heard you can buy some ....brand
> ..radios that pick up these far and weak signals.
>
> I have also heard you can put a ..magnet....next to a radio to help the
> weak signals.
>
> I think they sell these at Good Guys? 40 bucks?
>
> Whats a cheap solution to help me hear these weak stations?
>
> Thanks
>
> reply here please
>
> robbert@ccnet.com

A few questions...

What time of day is the program broadcast?
What is the frequency of the broadcast station?

Answers to these questions will help to determine what is the best
solution to your problem (short of moving to the LA basin...)

reply bcbantenna@ultramail.com

2846. 432 transverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: Your Name <userid@seaside.net>
Message-ID: <3321d1d6.0@scipio.cyberstore.ca>
Source record: 96339

Hi... I am looking for a schematic to build a 144/432 transverter for satellite work
The rig I use here is a Yaesu FT-211 2m all mode and would like to
take a try at building something useful for my shack besides hf tuners hi hi..
If there is anyone out there who could help and share a few schematics etc. I would be very greatful.

thanks es 73's de Christopher VE7AIC

2847. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0803971036180001@news.vcnet.com>
Source record: 96340

In article <1997Mar5.195011.21030@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us
(Gary Coffman) wrote:

> In article <19970305171100.MAA00955@ladder01.news.aol.com> n8blk@aol.com
writes:
> >In article <measures-ya02408000R0403971309370001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:
...snip....
. For long life, the electrical connection to the buried copper
> >>pipe should be made with 95-Sn/5-Ag silver-solder, which is eutectic at 430
> >>deg. F, and is not as subject to errosion as is ordinary Sn-Pb 'electronic'
> >>solder.
...snip...

> And you don't want to use solder as a connecting method to the made
> ground (ground rod). Code forbids that.

Does the National Electrical Code forbid lead solder and forbid silver
solder?

And BTW, Gary, beginning a sentence with a conjuction is hardly considered
to be good English, although such is common in Ebonics.

--
--Rich-- ag6k, 805-386-3734

2848. Re: Microwave Comb generator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: netking@dircon.co.uk
Message-ID: <5fslh8$2iv$1@newsserver.dircon.co.uk>
Source record: 96341

In article <33205761.0@news.itsnet.com>,
Allen Wallace <allen_wallace@powertalk.dtint.com> wrote:
>I'd like to build a Microwave Comb Generator. Now, I see how to drive the
>SRD, from reading the ARRL Microwave Handbook. But they only address how
>to generate a specific output frequency, while I want a comb line output.
>
>I guessing, but I think that the output would have to a hipass filter, to
>remove the funamental. But what about matching? Besides, how does one
>match multiple octave output, except by a pad?
>
>What's inside the 2 port comb line generators that I see advertised in
>the trade journals? they look like there can't be much inside!
>
>Allen Wallace
If you look at Hewlett Packard microwave semiconductor handbooks
you should find some coaxial modular comb line generators. You
drive them at 100, 500 or 1000 MHz and they generate a spectrum up
to at most 18GHz, but the output power levels are very low.
I think there are some HP application notes on the use of Step
Recovery Diodes that are informative on matching networks.
There are some fairly simple L-C matching circuits in the coaxial modules, I
believe. Whatever output circuit you use will have to be wide band. A high
pass filter fits the bill. I have used quarter wave tightly coupled lines,
but for 9-13GHz bandwidth only (some time ago). You would need a more
broadband structure. On the input side, you need to arrange the input
matching so as to reflect the harmonics. You want those to exit via the
output port. Something with a series inductive element would do. However,
the series inductance might have a higher order resonance at high harmonics
that would affect the response. The best way to get a flat response is to use
resistive matching, or a controlled mismatch, which implies loss and low
efficiency. If you have the budget you can use broadband amplifiers to make
up the loss. You certainly need to suppress the fundamental, and low order
harmonics (if not wanted) since these
will be much higher amplitude than the higher order harmonics. So in fact
your filter response will need to be tailored to the amplitude spectrum of
the SRD output in order to get a flat series of harmonics. If you have a
system that selects a single harmonic, such as is done in some spectrum
analysers and frequency synthesizers, you don't necessarily have to have a
flat output spectrum. If you are building the microwave equivalent of
a BC221, you don't need a flat output spectrum either as long as the
spectral lines are all within a usable range of signal amplitudes.
On the 9-13GHz comb generator I built, I had a series matching transmission
line to match the input power (at about 1GHz) into an SRD, and a quarter wave
coupled output line centred on about 11GHz, followed by a filter that

suppressed mainly the fundamental and first few harmonics. More of a band stop filter. I think I have seen waveguide comb generators, where the input is matched to a low-impedance SRD by stepwise impdance reduction of the waveguide (this can be done in a broadband manner, using multiple line sections). Waveguide isn't multi-octave unless you use ridge guide carefully so you will probably need to use a coaxial or microstripline circuit.
A design based on a low pass filter matching to the diode impedance followed by a high pass filter to the output should work. Obviously the element values will depend strongly on the type of diode, frequencies, and what power level you wish to drive at. A technique used in cellular radio nowadays is to use a closely coupled SRD and mixer diode (these can be obtained as a module) to which you couple power, and the harmonics are coupled internally so you don't get involved in output circuit design, and it functions as a harmonic mixer. From your posting, I don't know if this would be useful for your application since you haven't told us what you are ultimately trying to do.
==========
Colin Seymour G4NNA
http://www.he.net/~netking/index.html
http://www.users.dircon.co.uk/~netking/
This information is provided without warranty of any kind

2849. Re: FS:Tubes,capacitors,etc

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5fsk5d$4n5@news1.mnsinc.com>
Source record: 96342

Let's get this straight: Are you TRIODE Electronics?
Or ELite Tube? Or both?!

Looks like a great list of goodies.

Thanks for posting it here!

elitetube@aol.com (ELITETUBE) whistled a happy tune like:

|>Our What We Say Is What You Get policy means that we don't relabel tubes
|>with phony brand names,
|>or put fancy gold lettering and boxes on them, or tell you that little
|>elves in the Black Forest

[snip]

|>tax.
|>Most parts except for tubes and sale items can be returned for credit
|>within
|>30 days if with original packing and unused. Most Tubes (except sale items
|>where noted) are warranteed 3 months but tubes if defective are returnable
|>for exchange only. Other items may be subject to 15% restocking fee. This
|>normally waived if you apply credit towards another purchase. Please phone
|>in advance if you wish to pick up parts at the office in order to avoid
|>delays in filling your order.
|>

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

2850. Re: For Sale: Crystal filters for homebrew projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970308221001.RAA07925@ladder01.news.aol.com>
Source record: 96343

In article <5fpv8c$2rh@sjx-ixn10.ix.netcom.com>, edrk@ix.netcom.com(ED KOWALSKI) writes:

>>
>>Im just curious, where might one apply a 6KHz filter? I would think
>that
>>BW would be good for AM only. If I were trying to select only one
>>sideband would this type not be too wide?.........
>
>
>........Not only too wide, but what receiver has a 2.2MHZ if strip?????
> Ed K3PRE
>
>

If someone was doing a simple homebrew receiver, the filter and converter board might be a starting point. Collins often used IF's in the 2 MHz region for the first IF to minimize image problems, in the days before up conversion designs were used. The 6-kHz filter could serve as a "roofing filter;" with the sharper filtering done at the final 455 kHz IF. I guess folks don't homebrew much anymore.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

2851. 2 meter cw qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: rohn@pubrats.com
Message-ID: <5fsoeg$iv3$1@cobra.minn.net>
Source record: 96344

I was wondering if anyone knew of a source for schematics (or preferably a kit) for a two (or six or 440) meter cw qrp transceiver?

I've elmered two (and a third on his way) new hams into the no-code license and now we're working on their upgrades to Tech+ and beyond... in my experience, sending code is the quickest way to burn it into your memory (not to mention removing the fears of that first HF QSO) so I'm looking for something that will allow them to practice with each other over a short distance (a couple of miles from house to house).

Thanks, and 73's
rohn (n0rtx)

2852. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-08 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970308222600.RAA08949@ladder01.news.aol.com>
Source record: 96345

In article <measures-ya02408000R0803970658530001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>>
>> Why, Rich? Where will the energy from the lightning strike go?
>>
>> Tom
>
>With no connection between the radio antenna-ground and the electric-mains,
>the energy from a lightning strike on the antenna will dissipate mostly
>into the soil around the antenna-ground. However, all grounds have
>resistance and reactance, so during a lightning strike, a potential exists
>at the antenna-ground connection. Since the typical resistance of a
>ground is between 2 and 20 ohms--

Yeah Tom. Listen to Rich. He would rather have the lightning find
a return path through the house wiring, and hopefully through your
ham equipment. The concept of a common point ground isn't so much
as providing a sink for lightning, but rather a common point at which
all possible lightning paths share a common path to ground, whether
ther strike take place on your power, antenna, phone line or CATV
cables. This common point should near the service entrance, and
through a ground rod as specified national and your local electrical
codes. This ground rod should be used as common ground point for
all coax cables entering the home as well.

The actual ground resistance becomes less important, so long as
the ground rod is the ONLY return path provided!

We just had two house fires in Enfield CT due to falling power lines
hitting CATV cable drops. The cable company -- in their infinite
wisdom -- grounds CATV drops AFTER the cables enter the home.
In my home, they grabbed a nearby water pipe, assuming that it
was attached to the electrical ground. In the cases of the two homes
in Enfield, a similar situation existed. The CATV cables became
overheated and burst into flames, inside and outside of the building
structures. Had the CATV cables been properly grounded at the service
entrance, no interior damage would have occurred.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

2853. ATV newsgroup?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Michael Berg <mikeberg@midstate.tds.net>
Message-ID: <33236AE6.59B3@midstate.tds.net>
Source record: 96147

Hi I'm new to this newsgroup. Is this where the homebrew amateur
television types hang out? If not, where should I look?
Thanks, Mike N0QBH
--
>~~~~~~~~~~~~~~~~~~~~~~~~~~~<Mike Berg a.k.a. N0QBH
I oscillate - Therefore I am.
>~~~~~~~~~~~~~~~~~~~~~~~~~~~<

2854. VHF EQUIPMENT WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Douglas johnson <iix@interaccess.com>
Message-ID: <33236E40.1570@interaccess.com>
Source record: 96148

LOOKING FOR 1296 TRANSVERTER AND 1/2 OR 7/8 HARDLINE/CONNECTORS REPLY
TO IIX@ INTERACCESS.COM ....TNX , DOUG W9IIX

2855. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0903971612250001@news.vcnet.com>
Source record: 96149

In article <3322F28A.7ED8@connect.net>, Phil Clements
<philk5pc@connect.net> wrote:

> R. L. Measures wrote:
> > ....snip....
> > The antenna-ground on my 3/8 wave 80m vertical antenna is about 100 feet
> > away from the NEC- 'ground' on the Neutral wire at my service-entrance.
> > Connecting a wire between these two grounds would seeming be
> > electrical-lunacy. .

> The "wire" between the two grounds in your case, Rich, is the shield of your
> coax. I lost 150 feet of RG-213 in this manner. The shield of your coax is
> connected to your antenna-ground, is it not?

no. The shield connects to an elevated counterpoise. The shield is not
connected to the antenna lightning-ground. However, the center conductor
is connected to the antenna, so the coax could still be a source of grief.

>The other end of the coax shield
> is connected to the chassis of your radio.

not unless I'm using that antenna.

>The green wire in your a.c. power cord
> goes from the chassis of your radio to the NEC ground bus in your service
entrance
> panel, which is strapped by a big wire to the neutral bus in the panel.

true.

> You have
> bonding of both ground systems whether you want it or not via the coax.

Not necessarily. Over 99% of the time, the coax is disconnected. I do
not connect the coax to my radio equipment during lightning storms.

...snip...

--
--Rich-- ag6k, 805-386-3734

2856. Regency ACT-E 10 H/L/U

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: rbare <rbare@usa.net>
Message-ID: <33235E20.4000@usa.net>
Source record: 96150
Cross-posted to: rec.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.radio.scanner

I have aquired a like new Regency ACT-E 10 H/L/U scanner. It has no instruction manual and I do not know the specs on frequency range and xtal freqs. Any help would be greatly appreciated. Jerry KB8UBG. rbare@usa.net Thank you.

2857. Re: Help: Packet radio interfaces

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Rick Szpyrka <wb8tif@cris.com>
Message-ID: <33238289.48FF@cris.com>
Source record: 96151
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

gabe nemeth wrote:

Hi;
I'd like to get inforamtion on how to interface packet
TNCs, or modems, to two well known radios, the
ICOM 2350, and the Yaesu 5100. Are the plans available anywhere on
the
net.

Thanks in advance,
Gabe ve3slj <gabe@interlog.com>

Try http://prairie.lakes.com/~medcalf/ztx/wire/index.html this should
have the wiring diagrams that your looking for.
73 Rick WB8TIF

--
Rick Szpyrka WB8TIF
Bloomfield Hills, MI USA
Email: wb8tif@cris.com or wb8tif@amsat.org
URL: http://www.concentric.net/~wb8tif

2858. Digital/Comm/Audio parts 4$ale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Brian Mork <mork@usa.net>
Message-ID: <33239FA1.7AC5@usa.net>
Source record: 96152
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair,misc.forsale.non-computer

An electronic parts bonanza (or use them as phones).
Only nine bucks or less, plus shipping!

Computerized, digital, multi-line phones to use as-is, or
strip for parts! They're Eagle Telephones,
each with the following, plus more.

o Epoxy encapsulated magnetic reed-switch (phone handset proximity
sensor)

o 12-button high-quality feel phone pad, about 2"x 3", with 8-wire
flat ribbon cable/connectors.

o 2" diameter, 8-ohm speaker

o Bunch of ICs: CD4081, HCF4069, 2x HCF4066, LS404CB, 2x ULN2003A,
2x ULN2032, SN75176, AMI 8948 (programmed 8048?), LM386

o 3.579575 MHz crystal

o 1.5" x 7" 20 push-button selector panel. Each button has two
colored LEDs and room to insert a small paper label. 34-wire
ribbon cable/connectors.

o 4-digit LED display, with ":" and decimals built onto the display

o Astec daughter card, 2.5"x 1.5", that appears to be a TelCo
interface

o One 4-pin, and two 6-pin J-connectors (telephone connectors,
often used on computer network cables, too).

o 8 position DIP switch

o Two 10k-ohm dial pots

o Beige enclosure. I have only a few handsets/cords. Let me
know if you particularly are interestd in the handset.

I'll sell these for $9 + shipping, prepaid. Check exact shipping
costs with the UPS web site cost calculator (my ZIP is 80840):
http://www.ups.com/using/services/rave/rate.html.

E-mail (mork@usa.net) or call Brian, 719-472-0707.

--
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net

http://www.pcisys.net/~mork/ --public encryption key available

2859. Desoldering Iron 4$ale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Brian Mork <mork@usa.net>
Message-ID: <3323A76E.1E60@usa.net>
Source record: 96153
Cross-posted to: rec.radio.swap,co.cos.ads,co.ads,rec.radio.amateur.homebrew,sci.electronics.repair

Ungar 44-Watt desoldering iron.

Integral suction bulb for pulling solder through
the hollow core tip. Screw in "head section" looks
like it could fit any Ungar handle.

$12 + shipping, if required.

--
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available

2860. FTV = WEFAX-FAX-SSTV-RTTY with SoundBlaster

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: "Brian E. Cauchi" <gcauchi@keyworld.net>
Message-ID: <01bc2cd3$3ce08540$0101a8c0@gcauchi.keyworld.net>
Source record: 96154
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc, rec.radio.amateur.space

Hello... Brian here!

If you have a RADIO and a SOUND BLASTER (or compatible card) you already have all the hardware necessary to:

RECEIVE - WEFAX, FAX, SSTV, COLOUR SSTV and RTTY
TRANSMIT - FAX, SSTV and COLOUR SSTV

*** Put the power of your 80386, 80486 or Pentium processor to real use ***

The external "decoder" units that are used by conventional users are modelled inside this software. This makes it easy to get started, inexpensive and rids you of the inevitable tangle of wires and boxes of decoders.

Absolutely no external hardware, other than a simple audio lead, is required by FTV. The current version decodes:

WEFAX (from weather satellites, e.g. 137-138 MHz)
HF-FAX (from terrestrial stations)
SSTV (from radio amateurs, e.g. 14.230 MHz)
RTTY (press, naval, weather etc)

Here is a run down of the more interesting features:

(1) It keeps the demodulated signal in memory, so that the signal can be analysed again at a different keying rate or polarity! Garbage can be resampled on the fly, which means that minutes of received signals decoded at the wrong baud rate or keying polarity are recovered, on the fly, while still receiving.

(2) The incoming signal is analysed automatically - standard modes, line rates, baud rates and keying polarity are automatically determined following analysis.

(3) Tuning oscilloscope available at all times, without loss of copy.

(4) Program works in real time.

*** What are you waiting for? Try it now! ***

Take a look at my web site for futher details, from where you can download an evaluation copy, at: http://www.geocities.com/SiliconValley/2504

Registration promotes the further development of this software and entitles the user to future upgrades paying only for delivery expenses, if any.
Current release is 0.98f

Finally, just in case some of you have trouble accessing my web site, here is my postal address (if you want a reply, send a self-addressed label and IRC's to cover expenses):
Brian E. Cauchi,
Gawhra, Domenico Cachia Street, Birkirkara BKR06, MALTA.

What can I say? Try it, and may you have as much fun as I am having...
73's from Brian.

2861. SPECS FOR CHICAGO TR-1556 MOD TRANSFORMER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: "George E. Benko" <gbenko03@sprynet.com>
Message-ID: <3322DDCB.D5B@sprynet.com>
Source record: 96155

I am looking for the specifications for a Chicago Transformer TR-1556
modulation transformer...Anyone out there with an old chicago catalog?
Would appreciate the wattage rating and other impedance information...

73, George K8BRW

2862. Crystal Filters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33221f56.69841586@news.erols.com>
Source record: 96263

Homebrewers:

I picked up a number of crystal filters (and know where I can get more
- cheap!)

Please let me know if anyone knos anything about these units:

Hermes Crystal Filter
Model 4429 -261 Ser. No. 1

They are packages in a little grey 2X1X1 box. Three poles (in ground
and out)

If they are useful I can go back and get the rest.

Please send an e-mail if you have info: wmeara@erols.com

73 Bill N2CQR

2863. Making Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Meg <laa@flash.net>
Message-ID: <01bc2bf7$861a0560$4fc2b5cf@laa>
Source record: 96264

Does any one know how to make a .5uf and a 1uf coil ??
Like.... give the info on what AWG # on the wire and how long it should be
and how many times you wrap it around something, like a pencil.

Thanks.

2864. Re: Making Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: ig.price@ukonline.co.uk
Message-ID: <5ft5sj$3m2$1@morse.news.easynet.net>
Source record: 96265

Coils are measured in Henries (H) not uF. There is a small book called "Coil design and Construction Manual" by B.B.Babani which gives all the info. you need.

2865. 26uH 1/2 rod core???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <857876003@infoway.com>
Source record: 96266

Help Please with understanding inductor...

I was at my local cheap parts supplier to get or make
a power line RFI filter, to keep noise out of my transciever
power supply/linear amp power supply. (I don't want anything
sending noise up to antennas to radiate the noise into my antenna.)

I found some inductors. 27 turns close wound in 3 layers of
#12 wire on a 1/2" gray rod core. The inductance meter
seemed intermittent and unreliable, but measured 26 micro Henrys.

I was going to use these in series with the power line
with some capacitors across the line.

Then I found some nicely sealed line filters I am using instead.
Now I have some questions about what these coils may best be used for.
Questions:
1. Since these cores are rods and not toroids, they are not
self shielding. Therefore, would they tend to radiate any
noise in the line?
2. Since they are close wound, would they have enough stray
capacity to couple rf noise past the inductors anyway?

3. Might they better be used in a low voltage power supply
as filter chokes. They don't have enough inductance for
a critical inductance, but maybe they could reduce the
start up surge current, and repetitive recharge current
to a bank of 2 67,000 mfd filter caps for a 25 amp 13.8 volt supply.
The transformer windings were used full wave for a 5 volt 20 amp
linear supply for a Naked Mini. But the transformer winding
is about #8 wire, and the 9 2N3055 pass transistors seem to be
able to handle a bit more current. But I will have a bit extra
voltage after making a full wave bridge for about 29 volts
=no load voltage. But again, would I have these large
spikes to recharge the caps every cycle, so the rod would
be an antenna sending 120 cycle hum everywhere. Are toroids
much better inductors because they are self shielding?

I don't know what type of core material this is, except
it is grey. All cores I have seem to be grey.

Thanks for any help.
Don

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

2866. Re: Ground Rod Installati

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: dmoorman@interaccess.com
Message-ID: <dmoorman-0803972155590001@d82.w.interaccess.com>
Source record: 96267

In article <857800074@infoway.com>, don.phelps@infoway.com (Don Phelps) wrote:

> My question is related. I have noticed I seem to have to
> change light bulbs very often in my house. Recently,
> I have been operating, while watching the HV meter on the
> transciever run from 117 volt lines.
> It goes from about 810 to 860 volts different
> times of the day.

Assuming your power supply is relatively straighforward, a 50 volt
fluctuation in the 800 volt range is roughly proportional to a 7 or 8 volt
fluctuation in the 115 volt range. That's probably within specs.

Dave, K9SW

--
Dave Moorman Be big, don't belittle!
Downers Grove
Illinois, USA
http://homepage.interaccess.com/~dmoorman/DavesPage.html

2867. How to modify a Storno 440 carphone to 70cm?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: 0aantgoor01@flnet.nl
Message-ID: <3322c87e.7051343@news.nl.net>
Source record: 96268
Cross-posted to: uk.radio.amateur,nl.radio.amateur,de.comm.ham,rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

I have a Storno 440 (PRM3663D15B) carphone and I want to use it for
packet on 70 cm.

Does somebody have any experience in moving it to 70cm.

Maybe there is also a Motorola version of this set.

Therefor some details:

The PLL is a MB1504L, IF stage: 185 77M67 KLKI18934
RF PA: Motorola: MHW720A2

Cellular chipset: Motorola/VLSI/CML
ZC80556FN / XC390064FN / XC68SEC811E2FN
EPROM is labeled:: Motorola A/S CCVN 4012A

The circuit diagrams are also very welcome.

'73 pa3ajr

Andre aan 't Goor
mailto:0aantgoor01@flnet.nl

2868. Re: 432 transverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: "Allan (VE6AQK)" <doblera@cadvision.com>
Message-ID: <3322DE82.53F9@cadvision.com>
Source record: 96269

Your Name wrote:
>
> Hi... I am looking for a schematic to build a 144/432 transverter for satellite work
> The rig I use here is a Yaesu FT-211 2m all mode and would like to
> take a try at building something useful for my shack besides hf tuners hi hi..
> If there is anyone out there who could help and share a few schematics etc. I would be very greatful.
>
> thanks es 73's de Christopher VE7AIC

Aren't you the guy who jerked that teenage kid around on that equipment trade?

Allan VE6AQK

2869. FS:2N2222 TO-18'S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: DENNYV <DENNYV@clarityconnect.com>
Message-ID: <332312AA.1E75@clarityconnect.com>
Source record: 96270

I still have a quantity of Metal case 2n2222 transistors for sale as
follows 25 for $5 ppd 50 for $9 ppd, 100 for $15 ppd to US and Canada
all US funds.
orders to:
Dennis Voorhees AD3O
712 N.Elmer Ave
Sayre,PA 18840-1804

Please send E-mailto: DENNYV@clarityconnect.com
to reserve your order Thanks and 73 Denny AD3O

2870. Re: Cheaper MHW591 for MFJ-259 pre-amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3322de13.12286645@netnews.worldnet.att.net>
Source record: 96271

On 8 Mar 1997 23:01:59 GMT, stubstad@ix.netcom.com(S) wrote:

>In <COMAS.97Mar3152639@nys01c-303.fir.fbc.com>
>comas@nys01c-303.fir.fbc.com (Andrew Comas) writes:
> The article mentions using a cheaper, less gain, component
>>but didn't mention a part number. Does any one know of replacement
>>part?
>
>Try MAR-x, MAV-x series of 50 ohm gain blocks from Mini-Circuits Labs.
>Prices vary from <$1 depending on power output and BW, power is from
>>~7V DC thru a bias resistor. MAR-8 is a favorite as it has >> gain
>and good dynamic range, but >> BW than u need. MAR-6 has better NF.
>MAR-1 and -2 cheapies are good enuf for VHF counter app unless more
>gain/less overload required.

If you are talking about a frequency counter pre-amplifier, then
MMIC's like this will work.

If you are thinking of more output for SWR measurements, the MMIC
style devices are useless. The MFJ-259 already puts out more power
than they are capable of providing.

Not only that, the MMIC's have too much distortion. That will
compromise accuracy. Not a problem with a frequency counter, but it is
with the SWR system.

>Similar parts also sell as HP MSA-0x04, -0x05 and -0x86, formerly sold
>under Avantek name.

Ditto here.

MMIC's are terrible devices when you need high power, low distortion,
and minimum current demand.

You can do much better at less current with CATV type transistors. The
exception is things like frequency counters, where harmonic
distortion isn't as important.

73, Tom

2871. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0903970804200001@news.vcnet.com>
Source record: 96272

In article <19970308222600.RAA08949@ladder01.news.aol.com>,
commquart@aol.com wrote:

> In article <measures-ya02408000R0803970658530001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:
>
> >>
> >> Why, Rich? Where will the energy from the lightning strike go?
> >>
> >> Tom
> >
> >With no connection between the radio antenna-ground and the electric-mains,
> >the energy from a lightning strike on the antenna will dissipate mostly
> >into the soil around the antenna-ground. However, all grounds have
> >resistance and reactance, so during a lightning strike, a potential exists
> >at the antenna-ground connection. Since the typical resistance of a
> >ground is between 2 and 20 ohms--
>
> Yeah Tom. Listen to Rich. He would rather have the lightning find
> a return path through the house wiring, ...snip...

Assuming that the antenna-ground is some distance from the electrical-mains
service-entrance Neutral ground, the many kilovolt I*R pulse that appears
across the antenna-ground during a strike would NOT 'find
a return path through the house wiring'--- UNLESS a wire from the
antenna-ground were connected to the mains Neutal wire, Peter.

From measurements I conducted on the soil hereabouts, the resistance of
the NEC-ground on my service entrance is roughly 25 ohms during the rainy
season. 25-ohms hardly looks comforting when we are talking about
discharging 8 or more kiloamperes.
The antenna-ground on my 3/8 wave 80m vertical antenna is about 100 feet
away from the NEC- 'ground' on the Neutral wire at my service-entrance.
Connecting a wire between these two grounds would seeming be
electrical-lunacy. .

--
--Rich-- ag6k, 805-386-3734

2872. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0903970828030001@news.vcnet.com>
Source record: 96273

In article <5fsb56$mm0@camel1.mindspring.com>, tomwagner@mindspring.com wrote:

> I don't think I agree, Rich. First let me state my assumptions:
> 1. DC grounded antenna (e.g. typical yagi).
> 2. Coax feedline that remains connected to equipment
> at all times.
> Because of these conditions, my antenna is already
> connected to the power line ground through my equipment
> grounds. Therefore, I think it is wise to bring a large conductor
> from the tower base to the service ground to shunt off some
> of the lightning energy. Feedlines should also be grounded
> at the base of the tower.
>
> The remaining energy circulating in ground loops needs to be
> choked off with a ground window that *all* conductors entering
> the station must go through.
>
> Do you still disagree with this? I believe that Gary Coffman
> recommends such a configuration. (Correct me if I'm wrong,
> Gary.)
>
...snip...

I agree with Gary that feedlines need some sort of shunt to ground before they enter the house. However, is it possible to effectively ground a feedline at the base of a tower? Since there is no such animal as a zero-ohm ground, and we are talking about many kiloamperes, baring Gary's extraordinary measures, the safest shunt to ground seems to be don't leave home without tossing feedlines out the window onto the ground. For coaxial feedlines, this practice is made considerably easier by using quick-disconnect Type-C connectors at the windows. For open-wire feedlines, banana plugs speed things up.

Neverthe less, I still see a problem with connecting a path from my tower-ground, which is elevated to many kV during a strike, back to the Neutral connection on my electric-mains.

--
--Rich-- ag6k, 805-386-3734

2873. Need info for a small (3-5watt) 2-meter amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: mysonscool@aol.com
Message-ID: <19970309162701.LAA22968@ladder01.news.aol.com>
Source record: 96274

I have a 1 Watt HT, and I'd like to build a small, around 3-5 watt, amp that I could plug into the bnc jack on the top of my radio, and that antenna into the top of that. Somthing that looks like those little scanner preamps, I figure tha ta 3-5 watt amp should be able to be that small.

any help on kits/schematics/ideas or whatever might be applicable that might help out, please e-mail me.

-Thanks

2874. Formulas for MUF and SUN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: kjelld@oslonett.no
Message-ID: <5fuouh$dg9@news1.sol.no>
Source record: 96275

Hello friends !

Are there anyone who can support me with formulas for finding MUF and SUNrise/set to use in computerprograms for the shack ??

73 de Ken

LA7AH

2875. IMPORTANT aade filter design UNINSTALL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <3322E271.596C@aade.com>
Source record: 96276

If you downloaded AADE FILTER DESIGN from my web site and have
installed it please read this.

The removal instructions list some files installed in the
WINDOWS and WINDOWS/SYSTEM directories

DO NOT DELETE ANY OF THESE FILES when removing aade filter design.

Most of them were not installed by aade filter design but are part
of WINDOWS 95 and probably WINDOWS 3.1
Deleting them could cripple WINDOWS.

To remove AADE FILTER DESIGN simply delete the directory where
you installed it and the subdirectories contained.

ie: C:\filter

Microsoft does not provide information about what files need to be
distributed with an application, instead Visual Basic creates
distribution
disks without explaination.
Microsoft makes good software but their documentation stinks
and their technical support is virtually none existant. You have a
better chance of directly communicating with GOD than
Microsoft technical support.

Hope no one had any problems with this (other than the one person
who brought it to my attention).

Neil

2876. Radio Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: "Freddie J. Ferrara" <fferrara@mindspring.com>
Message-ID: <3322E954.7514@mindspring.com>
Source record: 96277
Cross-posted to: rec.radio.swap,rec.radio.shortwave,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I have some 5U4 and 6550 vacuum tubes. I do not know the present value of these tubes. They are new in boxes. Can someone help me with their value?

Thanks,

Freddie

KA5WBV

2877. Re: Making Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <3322EC99.7703@emily.net>
Source record: 96278

Meg wrote:
>
> Does any one know how to make a .5uf and a 1uf coil ??
> Like.... give the info on what AWG # on the wire and how long it should be
> and how many times you wrap it around something, like a pencil.
>
> Thanks.

There are a number of shareware programs to do that. One of them that comes to mind is the filter design program for Windows called "Tunekit" by Max Froding, which includes a coil design feature. Check out http://users.aol.com/maxfro/private/tunekit2.html

Regards from Lyle, K0LR

2878. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: tomwagner@mindspring.com
Message-ID: <5fuqg5$vnb@camel2.mindspring.com>
Source record: 96279

So we do agree. Of course, if you can completely isolate
the antenna system from the house, it is best to leave it
isolated. ("Throw the feedlines out the window". This
presumes that you *always* will do it.).

If you can't do that, then Gary's ground window approach
is best.

I don't see any disagreement anymore.

Tom

---

measures@mail.vcnet.com (R. L. Measures) wrote:

>In article <5fsb56$mm0@camel1.mindspring.com>, tomwagner@mindspring.com wrote:

>> I don't think I agree, Rich. First let me state my assumptions:
>> 1. DC grounded antenna (e.g. typical yagi).
>> 2. Coax feedline that remains connected to equipment
>> at all times.
>> Because of these conditions, my antenna is already
>> connected to the power line ground through my equipment
>> grounds. Therefore, I think it is wise to bring a large conductor
>> from the tower base to the service ground to shunt off some
>> of the lightning energy. Feedlines should also be grounded
>> at the base of the tower.
>>
>> The remaining energy circulating in ground loops needs to be
>> choked off with a ground window that *all* conductors entering
>> the station must go through.
>>
>> Do you still disagree with this? I believe that Gary Coffman
>> recommends such a configuration. (Correct me if I'm wrong,
>> Gary.)
>>
>...snip...

>I agree with Gary that feedlines need some sort of shunt to ground before
>they enter the house. However, is it possible to effectively ground a
>feedline at the base of a tower? Since there is no such animal as a
>zero-ohm ground, and we are talking about many kiloamperes, baring Gary's
>extraordinary measures, the safest shunt to ground seems to be don't leave
>home without tossing feedlines out the window onto the ground. For
>coaxial feedlines, this practice is made considerably easier by using
>quick-disconnect Type-C connectors at the windows. For open-wire

>feedlines, banana plugs speed things up.

>Neverthe less, I still see a problem with connecting a path from my
>tower-ground, which is elevated to many kV during a strike, back to the
>Neutral connection on my electric-mains.

>--
>--Rich-- ag6k, 805-386-3734

2879. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0903970926120001@news.vcnet.com>
Source record: 96280

In article <19970308222600.RAA08955@ladder01.news.aol.com>,
commquart@aol.com wrote:

> In article <measures-ya02408000R0703970649300001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:
>
> >
> >Amen, Gary. Lightning is closer to RF than it is to DC. When lightning
> >strikes sand, it often melts the sand into tubular glass structures at the
> >*surface* that radiate horizontally like fingers around the strike point.
> >Lightning-glass is NOT formed vertically. So why do people drive 8 foot
> >ground rods vertically into the earth?
> >
> >
>
> Gee Rich? Perhaps because sand is silicon, and like glass is an
> insulator? I drive 8 foot grounds to get into moist soil where there is
> improved conductivity.

If sand were a good insulator, why does lightning-glass exist? In
nature, sand is composed of far more than pure silicon-dioxide. It
contains impurities---which is why common sand is a semi-conductor.
However, this is a moot point. My point is that lightning-glass does not
form much below the surface. It seems to me that you reject the theory of
RF skin-effect, Peter. Good luck.

If RF current can exist 8-feet below the surface of the earth as Peter
contends, why (in the 1950s) did U.S. Army researchers conclude that
detonating underground explosive-mines (that were buried only a few inches)
with hundreds of kilowatts of RF was impossible?

BTW, some decades after the Army's mine research, the Brits discovered
that an entire minefield could be set off en masse by detetonanting a cloud
of (ground-hugging) propane gas from topside with a certain pattern of
parachute-flares. This device came to be called the Concussion Bomb, and
later, the Fuel Bomb. The pressure that this device puts on the ground is
such that even tank and truck mines happily explode---which of course has
nothing to do with radio-ground.

--
--Rich-- ag6k, 805-386-3734

2880. Of T368 interest only

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: trouts1@aol.com
Message-ID: <19970309180600.NAA28124@ladder01.news.aol.com>
Source record: 96281

68 owners,
I have found that some T368 owners have common problems that would seem to be in all rigs. As it turns out other owners do not have the same
problems. A few examples are problems with the vaccum relay for T/R switching on E and F models. Another is a sharp point near the final tank coil which causes arcing which is cured with filing.
I have receintly found out that there were several (if not more) manufactures
of the T3. The problems may be due to design or specification latitude where
manufactures introduces differences or the design may have changed slightly
from order to order. I decided to track some T368's with their order numbers
to see if anything common shows up as common. So I am requesting T3 owners to send me their TYPE, SR #, ORDER # and MANUF. to see what the contract span was and how SR #'s were issued. If you have time please
include what you may have problems with or any other information you may know.
So far I have only been able to locate informaiton about the T3 A,B and C
models. Fair included one E schematic in the A,B and C package they sell.
I would like to purchase manuals for the other models if anyone has them.
I have been told that the Gov't has not released the manuals past the C model.
It may be that there was not manual for the E and F. Thay may have been covered by addendiums or bullitans? If anyone has any information please let me know.
Please send any infomation you have to me at:
trouts1@aol.com and CC
davidk@artax.webo.dg.com
If there is enough enformation to be interesting I will see if ER is interested in
posting it. I will keep a list of people who respond and will send you the
compilation as it develops.
Tkanks
David N1RBM Near Boston.

2881. $$NEED CASH$$ READ HERE!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: BMC Physics Student <student@physics.bmc.edu>
Message-ID: <3322FFF7.1E5F@physics.bmc.edu>
Source record: 96282

NEED CASH?!! READ THIS!! IT WORKED FOR ME IT WILL WORK FOR YOU!!!

When I read this I thought why not? I have tried many money saving techniques or money making services and I thought that even if this didn't work I am only out five dollars.

But this really works. I made 55,000 dollars in cash and I not only paid off my debts but I had a good bit left over for a cruise for me and the wife. Just follow the steps below EXACTLY and you to can be making between 7,000 and 60,000 dollars in a few weeks.

FOLLOW THESE STEPS EXACTLY:

Step 1.

Immediately send $1 US cash (a dollar bill, no checks, no money orders) to each of the 5 people on the list below. Wrap this dollar in a note with
the words: "Please put me on your mailing list." (In this way, you're not
just sending a dollar to someone, you're paying for a legitimate service.
Also, to discourage those who prey on cash in the mail, be sure the bill is
completely hidden by the note.)

1#- Christy Moyer
415 May Street
Platteville, WI 53818

#2 Steve Dorr
152 South Street
Bridgewater, MA 02324

#3 Bobby Binion
P.O. Box 2435
Havelock, NC

#4 Jounan Lee
210 Rogers Rd. Q305
Athens, GA 30605
USA

#5 Anika Torruella
Box C-992
101 N. Merion Ave
Bryn Mawr, PA 19010

Step 2.

Now, remove the top name from the list, and move the other names up. This way, #5 becomes #4 and so on. Put your name in as the fifth one on the list.

Step 3.

Post the article to at least 250 newsgroups. There are at least 19,000 newsgroups at any given moment in time. Try posting to as many newsgroups as possible. Remember the more groups you post to, the more people will see your article and send you cash!

HOW TO DO THIS:

If you are using netscape 3.0, do exactly the following:
1)Click on any news group like normal, THEN click on "TO NEWS", which is on the far left when you're in the newsgroup page. This will bring up a box to type a message in.

2) Leave the newsgroup box like it is. CHANGE the subject box to something flashy, like, "NEED CASH $$$ READ HERE $$$" or "FAST CASH".

3) Tab once, and you should be ready to type. Now re-type, (only once, this WHOLE ARTICLE WORD FOR WORD, except to insert your name at #5, and to remove #1 off the list; plus any other small changes you think you need to make. Keep most of it the same!!

4) When you're done typing the WHOLE article, click on File in THIS BOX, right above send, not where it say Netscape News On The First Box. Click on SAVE AS when you're under FILE. Save your article as a text file to your C: or A: drive. DO NOT SEND OR POST YOUR ARTICLE UNTIL YOU DO THIS.

Once saved, move on to number 5 below.

5) If you have all your text, send, or post, to this newsgroup, now, by just clicking send; which is located below FILE, and right above Cc:.

6) Here's where you're going to post all 250. OK click on any newsgroup, the click on "TO NEWS", again, in the top left corner. Leave the NEWSGROUP BOX alone. Again, put a flashy subject title in the SUBJECT BOX. Hit TAB once you're in the body of the message, and then click on ATTACHMENTS, which is below the SUBJECT BOX. You will get another box to come up. Click on ATTACH FILE, then find your file that you saved; click once on the file, and then click "OPEN". Now click OK. If you did this right, you should be able to see your file name in the attachment's box, and it will be shaded green.

If you use IF EXPLORER, it's just as easy...HOLDING DOWN THE LEFT BUTTON, HIGHLIGHT THIS ARTICLE. THEN PRINT THIS ARTICLE FOR YOUR RECORDS TO HAVE THE NAMES OF THOSE YOU WILL BE SENDING $1.00 TO. NEXT, GO TO THE NEWSGROUPS AND PRESS "POST AN ARTICLE". A WINDOW WILL OPEN. TYPE YOUR HEADLINE IN THE SUBJECT AREA AND THEN CLICK IN THE LARGE WINDOW

BELOW. PRESS &#65533;CRTL&#65533; AND THEN &#65533;V&#65533;, AND THE ARTICLE WILL BE PLACED IN THE WINDOW. IF YOU WANT TO EDIT THE ARTICLE , DO SO, AND THEN HIGHLIGHT AND COPY IT AGAIN. NOW EVERY TIME YOU POST THE ARTICLE IN A NEWSGROUP, ALL YOU HAVE TO DO IS REPEAT &#65533;CRTL&#65533; AND &#65533;V&#65533; AND PRESS POST.

7) That&#65533;s it. each time you do this, all you have to do is type in a different newsgroup, so that way, it posts to 200 different newsgroups. You see? Now you just have 199 to g0!! (Don&#65533;t worry, each one takes about 30 seconds; once you get used to it). remember...200 IS THE MINIMUM. THE MORE YOU POST, THE MORE MONEY YOU&#65533;LL MAKE.

AND THAT&#65533;S IT!!!! THOSE ARE THE ONLY 3 STEPS THERE ARE!!!!

You are now in business for yourself, and should start seeing returns within 7 to 14 days! Remember, the internet is new and huge. There is no way you can lose.

Now here is how and why this system works:

Out of every block of 250 posts I made, I got back 5 responses. Yes, that&#65533;s right, only 5. You make $5.00 in cash, not checks, but real cash with your name at #5.

Each additional person who sent you a dollar now also makes 250 additional postings with your name at #$, 10000 postings. On average then 50 people will send you $1.00 with your name at #4,... $50.00 in your pocket!!

Now these 50 new people will make 250 postings each with your name at #3 or 10,000 postings. Average return, 500 people,...$500.00. They make 250 postings each with your name at #2 =100,000 postings = 5000 returns at $1.00 =5000.00 in cash!

Finally 5,000 people make 250 posting each with your name at #1 and you get a return of 55,000 before your name drops off the list. And that&#65533;s only if everyone down the line makes only 250 posting each! Your total income for this cycle is $60,000.

From time to time when you see your name no longer on the list, you take the latest posting you can find and start all over again. The end result depends on you. You most follow through and post this article everywhere you can think of. The more postings you make, the more DOLLARS end up in you mail box. It&#65533;s too easy and too cheap to pass up!!! So that&#65533;s it. Pretty simple sounding stuff, huh? But believe me, it works.

There are millions of people surfing everyday, all day all over the world. And 100,000 new people get on the net everyday. You&#65533;ve seen the stories in the paper. So, my friend, read and follow the simple instructions and play fair. That&#65533;s the key, and that&#65533;s all there is to it. Print this out right now so you can refer to this article easily. Try to keep an eye on all the posting you made to make sure everyone is playing fairly. You know where your name should be. If you&#65533;re really

not sure or still think this can't be for real, THEN DON'T DO IT. BUT
PLEASE PRINT THIS ARTICLE AND PASS IT ALONG TO SOMEONE YOU KNOW WHO REALLY NEEDS THE BUCKS, AND SEE WHAT HAPPENS.

REMEMBER...HONESTY IS THE BEST POLICY. YOU DON'T NEED TO CHEAT. THE BASIC IDEA IS TO MAKE BUCKS.

GOOD LUCK TO ALL, AND PLEASE PLAY FAIR AND YOU WILL WIN AND MAKE SOME REAL INSTANT MONEY!

***By the way, if you try to deceive people by posting the message with your name on the list and not sending the bucks to the people already included, you will not get much. I know someone who did this and only received about $150.00 (and that's after 2 months). Then he sent the 5 bills, and people started adding him to there lists, and in 4-5 weeks he had over 10,000!

People have asked me if this is really legal. It is! You are using the Internet to advertise your business. What is that business? You are assembling a mailing list of people who are interested in home based computer and online businesses and methods of generating income at home. Remember - people send you a small fee to be added to your list. It is legal. What will you do with your list of thousands of names? That's up to
you, but this is how it becomes legal. To be legal, you must acctually sell
a product or service if you expect to receive a dollar. Anyone sending a dollar back to you must receive something in return. You have already received this letter due to the participation of each of the 5 persons listed below. This letter and the plan given within this letter are a "product" that you have received. Thus, you will be sending $1.00 to each
of the 5 persons given below in exchange for receiving this letter and for
asking them to provide the "service" of adding you to their mailing list.
THIS IS A SERVICE AND IS A 100% LEGAL BUSINESS OPPORTUNITY WHICH IS COVERED IN TITLE 18, SECTION 1302 AND 1342 OF THE POSTAL AND LOTTERY LAWS.

Include your address. You do not need to include your name. This is the key to
the program! Also, let each person know what number they are in your letter
so he/she knows which cycle he is receiving the $1.00 from. Make sure that
you
retain EVERY name and address sent to you, either on computer or hard copy,
but do not discard the names and notes that people send to you. This is PROOF that you are truly providing a service, and should the IRS or some

other government agency question you, you can provide them with this proof!
Therefore, you will start a list of all the people who send you a dollar requesting to be added to a mailing list. Actually, you will want to safeguard this list because it can generate even better responses and much more money later!

PLEASE GIVE EVERYONE A CHANCE AND BE HONEST, AND THIS WILL REALLY WORK

TRY IT!!!!!!!!!!!

2882. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Phil Clements <philk5pc@connect.net>
Message-ID: <3322F28A.7ED8@connect.net>
Source record: 96283

R. L. Measures wrote:
> ....snip....
> The antenna-ground on my 3/8 wave 80m vertical antenna is about 100 feet
> away from the NEC- 'ground' on the Neutral wire at my service-entrance.
> Connecting a wire between these two grounds would seeming be
> electrical-lunacy. .
> The "wire" between the two grounds in your case, Rich, is the shield of your coax. I lost 150 feet of RG-213 in this manner. The shield of your coax is connected to your antenna-ground, is it not? The other end of the coax shield is connected to the chassis of your radio. The green wire in your a.c. power cord goes from the chassis of your radio to the NEC ground bus in your service entrance panel, which is strapped by a big wire to the neutral bus in the panel. You have bonding of both ground systems whether you want it or not via the coax. The NEC requires that all antenna system, cable TV system, water well pumps, and other electrical devices all be bonded to the service entrance ground. Someone wisely stated in an earlier post that an insurance adjuster can make life very miserable for someone who ignores NEC guidelines.

(((73)))
Phil, K5PC

2883. Ham Site.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: John Fleenor <johnf@cyberramp.net>
Message-ID: <33232009.32AD@cyberramp.net>
Source record: 96284

http://www.cyberramp.net/~johnf

2884. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0903971031230001@news.vcnet.com>
Source record: 96285

In article <19970308222600.RAA08949@ladder01.news.aol.com>,
commquart@aol.com wrote:

> In article <measures-ya02408000R0803970658530001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) writes:
>
> >>
> >> Why, Rich? Where will the energy from the lightning strike go?
> >>
> >> Tom
> >
> >With no connection between the radio antenna-ground and the electric-mains,
> >the energy from a lightning strike on the antenna will dissipate mostly
> >into the soil around the antenna-ground. However, all grounds have
> >resistance and reactance, so during a lightning strike, a potential exists
> >at the antenna-ground connection. Since the typical resistance of a
> >ground is between 2 and 20 ohms--
>
> Yeah Tom. Listen to Rich. He would rather have the lightning find
> a return path through the house wiring, ...snip...

Assuming that the antenna-ground is some distance from the electrical-mains
service-entrance Neutral ground, the many kilovolt I*R pulse that appears
across the antenna-ground during a strike would NOT 'find
a return path through the house wiring'--- UNLESS a wire from the
antenna-ground were connected to the mains Neutral wire, Peter.

From measurements I conducted on the soil hereabouts, the resistance of
the NEC-ground on my service entrance is roughly 25 ohms during the rainy
season. A 25-ohm ground hardly looks comforting when we are talking about
discharging 8 or more kiloamperes.
The antenna-ground on my 3/8 wave 80m vertical antenna is about 100 feet
away from the NEC- 'ground' on the Neutral wire at the mains service-entrance.
Connecting a wire between these two grounds would seeming be
electrical-lunacy. .

--
--Rich-- ag6k, 805-386-3734

2885. need schematic for sommerkamp ts2000dx

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: ola.malmberg@swipnet.se
Message-ID: <5fv0im$frt@mn5.swip.net>
Source record: 96286

please send a schematic for sommerkamp ts2000dx or rci 2950
i would like to build larger freqvens to (0-30mhz) or more
ola.malmberg@swipnet.se

2886. Heath HW-6502 info. wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: "Roger H. Smith" <goldwing@iquest.net>
Message-ID: <01bc2cbc$d5286780$b7ec35ce@goldwing.iquest.net>
Source record: 96287
Cross-posted to: fido.ham-sale,in.ham-radio,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap

I'm looking for a owner's manual (or a good photo-copy), a rebuildable ni-cad pack (or shell only), and belt belt clip.

If you have any of the above, or know of a source for them please e-mail me at "goldwing@iquest.net"

Thanks in advance and 73's ..... Roger :-) N9PMC

2887. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>
Message-ID: <33230753.4475@postoffice.worldnet.att.net>
Source record: 96288

I repeat again for the third time, if you key a repeater and you are NOT
licensed to operate in that band, you have generated an illegal signal.
NO IFS, ANDS, BUTS, OR MAYBES. There is no output in the ham bands on
which you may operate without an appropriate amateur license.

Cordless phones, garage door openers etc are something else.
--
****
****
Tom Isgro
OHIO
KC8DGU

10-X #68364 QRP-L #945 ARS #203 FIST #2360
C.A.T.T #2115 NORCAL ARRL

****
****

2888. Re: Making Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Raj Singh VE6RAJ <singhraj@cadvision.com>
Message-ID: <3323189B.479C@cadvision.com>
Source record: 96289

Meg wrote:
>
> Does any one know how to make a .5uf and a 1uf coil ??
> Like.... give the info on what AWG # on the wire and how long it should be
> and how many times you wrap it around something, like a pencil.
>
> Thanks.

VE3ERP has a shareware program out that does this among about a hundred other things. I am not sure exactly where to find it. If you look in ham software archives you should be able to find it. Use Yahoo or HotBot to search it should point you in the right direction.

73
Raj

2889. Re: Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: bry@mnsinc.com.NO_SPAM
Message-ID: <5fuegm$n4j@news1.mnsinc.com>
Source record: 96290

edrk@ix.netcom.com(ED KOWALSKI) whistled a happy tune like:

|>Looking for source(s) for: EXAR ICs (small quantities)
|> IF filters (455KHz), Murata, etc

Hi Ed - try taking a look at the list of parts suppliers at:

http://www.mnsinc.com/bry/hamfiles.htm

and click on PARTS and SUPPLIES for the lists.
I think those EXAR chips are still available.

BTW - does anyone know if Jameco is still in business (CAL)?
They used to sell them, but I haven't seen a catalog from them in years.

Bry

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

2890. Re: Q: SMD identific.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <69JNIIAPjxIzEwAo@ifwtech.demon.co.uk>
Source record: 96291

SM0NCL Chris wrote:

>I have often asked myself, perhaps there is a URL
>'homepage' somewhere with facts on how to
>identify the SMDs codes often printed on the component.
>transistors, diodes would be interesting....

G4PMK's web pages (http://www.marsport.demon.co.uk) contain a
downloadable MS Word file with a large number of SMD equivalents from
various manufacturers.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2891. Help: Packet radio interfaces

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: gabe nemeth <gabe@interlog.com>
Message-ID: <33233712.6345@interlog.com>
Source record: 96292
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Hi;
I'd like to get inforamtion on how to interface packet
TNCs, or modems, to two well known radios, the
ICOM 2350, and the Yaesu 5100. Are the plans available anywhere on the
net.

Thanks in advance,
Gabe ve3slj <gabe@interlog.com>

2892. Crystal Filters - Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Simon Robinson <simon@soft-tools.plasma.co.uk>
Message-ID: <33229541.47C3@soft-tools.plasma.co.uk>
Source record: 96293

Surely there is somebody out there who can help me identify my C R Snelgrove Crystal Filters ???

Please help

Simon

2893. QRP Group or List?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: Dick Dillman <ddillman@igc.apc.org>
Message-ID: <APC&1'0'701dc842'614@igc.apc.org>
Source record: 96294

Can anyone direct me to a newsgroup or list dealing with QRP equipment
and techniques? If so, please reply directly via email.

Thanks!

Dick Dillman/W6AWO

<ddillman@igc.apc.org>

2894. ## wanted: Rail to rail linear oscilator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-09 00:00:00 UTC
From: techno@actcom.co.il.NOSPAM
Message-ID: <E6sux6.667@nonexistent.com>
Source record: 96295

Hello all,

I'm looking for a simple (i.e. no special I.C, just common discrete parts, CMOS gates or op-amp design) linear oscilator circuit running off a 12V supply that can deliver a triangular or sawtooth waveform with peak amplitute as close as possible to the supply rails (0 and 12V). frequency should be settable to the 100-10000Hz via a resistor/capacitor change. Frequency accuracy and linerarity are not important. Can anyone provide a pointer? Thank's.

regards,
techno

(P.S: please email directly in addition to posting here, so no responses are missed. Please remove the .NOSPAM postfix from the reply-to address (this has been done in an attempt to reduce the amount of junk mail received here from junk mailers. The correct address is techno@actcom.co.il. Thanks!)

2895. Yaesu Interface Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: thom@newshost.li.net
Message-ID: <5fvmua$l4i@linet06.li.net>
Source record: 96156
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi and thanks in advance for your help,

I just completed a computer interface for my Yaesu FT-990 and am looking for a good software program to use it with. I'd appreciate any ideas you may have

Thanks again

Tom, WB2QDG

thom@li.net

2896. Re: Making Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: earlve3ab@igs.net
Message-ID: <5fvn74$f46$1@nntp.igs.net>
Source record: 96157

In article <01bc2bf7$861a0560$4fc2b5cf@laa>, laa@flash.net says...
>
>Does any one know how to make a .5uf and a 1uf coil ??
>Like.... give the info on what AWG # on the wire and how long it
should be
>and how many times you wrap it around something, like a pencil.
>
>Thanks.
i downloaded an excellent shareware program some time ago, i think it
was called:"ECD (Electronic Circuit Design); it allowed a simple fast
calculation of an airwound coil. I dont use calculations now that I
have an RF analyser; which is quite accurate and meets my requirements.
The above mentioned program I think also allowed users to design some
pretty nifty rf filters as I recall. A shareware program I have on
my computer now is QRP Designer. Its good but concentrates on torroids
rather than airwound coils.

2897. Undeliverable mail

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: mailer-daemon@dialdata.COM.BR
Message-ID: <291095021721833408@dialdata.com.br>
Source record: 96158

This message was addressed to a user that does not exist at this address.
Please verify the name and domain in the original message that follows.
The message was addressed to: ps7ab.rony@dialdata.com.br

----- Original message follows -----
Received: from mailbox1.ucsd.edu (mailbox.ucsd.edu [132.239.1.53]) by
tiger.dialdata.com.br (8.8.5/8.7.3) with ESMTP id KAA27546 for
<ps7ab.rony@dialdata.com.br>; Sat, 8 Mar 1997 10:47:14 -0300 (EST)
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA04146 for <ham-homebrew-list@mailbox.ucsd.edu>; Sat, 8 Mar
1997 04:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id EAA08155
sendmail 8.8.5/UCSD8.3
Sat, 8 Mar 1997 04:30:59 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA08140
sendmail 8.8.5/UCSD8.3
Sat, 8 Mar 1997 04:30:56 -0800 (PST)
Message-Id: <199703081230.EAA08140@noc.ucsd.edu>
Date: Sat, 8 Mar 97 04:30:54 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #161
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Sat, 8 Mar 97 Volume 97 : Issue 161

Today's Topics:
Any retailers sell minicircuits stuff?
Bioelectrifier
Cable Television Coax (Is it good for anything)
FM transmitter and FCC approval
FS 2N2222 TO-18's
FS: Eimac 4-1000A Tubes $125 each
good source for amplifier tips
Ground Rod Installati
Ground Rod Installation w/pipe
Microwave Comb generator? (2 msgs)
Microwave ovens
need seneca manual

Origin of 'California Kilowatt'
Q: SMD identific.
Voice rec/id
WTD: Mods for the Icom IC740?

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 8 Mar 1997 01:29:40 GMT
From: blair@skopen.dseg.ti.com (Arthur P Blair)
Subject: Any retailers sell minicircuits stuff?

I've used alot of their components at work. I'd like to use them in home
projects but who sells them in small quantities?
Thanx,
Art.

****** Remover "-nospam" from my email address to reply. ****

Date: 7 Mar 1997 23:37:53 GMT
From: "Paul Racine" <racine@ibm.net>
Subject: Bioelectrifier

I built a couple circuits, the latest from March 73 Magazine is still on
the bench. I am going to try this out one of these days and keep a
personal log on any changes.

Has anyone out there tried this yet????

--paul

> I was reading a back issue of 73 magazine (May 1996) and came across an
> article about building the "Bioelctrifier".
> I was wondering if anyone has had any experience with this or knows
> where I can find out more about it

Date: 7 Mar 1997 03:29:33 GMT
From: aa126@fan1.fan.nb.ca (William Burrow)
Subject: Cable Television Coax (Is it good for anything)

Does anybody know the characteristics of IEEE 802.3 thin ethernet cable?
Is this useful for ham applications?

--
William Burrow -- Fredericton Area Network, New Brunswick, Canada
Copyright 1997 William Burrow

Date: Sat, 08 Mar 1997 00:13:35 -0600
From: Mark Mansfield <mmans@aeneas.net>
Subject: FM transmitter and FCC approval

Roy Lewallen wrote:
> I hit the "send" key a bit fast. Let me add that unlicensed operation on 2
> meters, as on any other frequency, also carries the restriction that Gary
> mentioned, that it can't cause interference to any licensed users. I don't
> recommend doing it, even if you do have the capability of accurately
> measuring field strength at this frequency and signal level (which you
> almost certainly don't unless you run a test lab).

What if you keyed a repeater with your transmitter that was legal (below the maximum field strength and you are not licensed)? Things can get harry can't they :)

Mark

Date: Fri, 07 Mar 1997 19:58:07 -0800
From: DENNYV <DENNYV@clarityconnect.com>
Subject: FS 2N2222 TO-18's

I still have a quantity of Metal case 2n2222 transistors for sale as follows: 25 for $5, 50 for $9 or 100 for $15 all post paid in the U.S.
Send orders to Dennis Voorhees
712 North Elmer Ave.
Sayre,PA 18840-1804
Please drop me an e-mail so that I can reserve your order. Thanks and 73
Denny AD3O

Date: Fri, 07 Mar 1997 02:34:19 GMT
From: w5kft@nts-online.net (Bryan Edwards)
Subject: FS: Eimac 4-1000A Tubes $125 each

I have a number of Eimac 4-1000A tubes for $125 each. All are checked and guaranteed.

Bryan W5KFT

Date: Fri, 07 Mar 1997 05:24:18 -0800
From: measures@mail.vcnet.com (R. L. Measures)
Subject: good source for amplifier tips

In article <33188fd6.11175690@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> But Rich, That's what you spend you life doing to others. On Sat, 01
> Mar 1997 02:48:41 -0800, measures@mail.vcnet.com (R. L. Measures)
> wrote:
>
> >In article <n7ws.266.003353F2@azstarnet.com>, n7ws@azstarnet.com (Wes
> >Stewart) wrote:
> >snip...
> >...and so it came to pass that what had be proffered as a pursuit of
> >science turned into a pusillanimous pursuit of slander.
> >
> >--
> >--Rich-- ag6k, 805-386-3734
>
> Rich,
>
> I'm glad you finally realize what you have been doing. I thought we'd
> never reach agreement on anything.
>
> Someone told me people see others as they really are, I guess it's
> true.
>
> 73 Tom

"The sins of the fathers are visited upon the children".--- Henrik Ibsen,
Ghosts

--
--Rich-- ag6k, 805-386-3734

Date: Sat, 08 Mar 1997 05:47:44 GMT
From: don.phelps@infoway.com (Don Phelps)
Subject: Ground Rod Installati

Cj> Regarding the use of a common point for all grounds,
Cj> - Several houses wired in parallel off of a single transformer,

Cj> - Each house grounded independently,

Cj> - All grounds connected together via long and comparatively
Cj> "thin" conductors (in the context of lightning protection),

Cj> - Perhaps additional grounds at the pole connections for user
Cj> drop cables.

Cj> From the point of view of lightning strikes, isn't this local
Cj> distribution configuration subject to severe ground loop problems?

Yes, and it seems to me, that is the point of having the ground
and each location at the service entrance, and of that
surge suppressor installed before your meter. That way,

when the ground system brings the surge from the lightning
strike (or it's induction) from your neighbors house,
it gets to ground at your survice entrance without going
through conductors smaller than the conductors bringing it
in the first place. (Ie just the current that can flow in
half inch cable). Since your grounds are tied together,
there isn't a better ground the current wants to get to,
by flowing in through your house to your antenna's super good
RF ground. Because it's already there at the service entrance
bonding.

My question is related. I have noticed I seem to have to
change light bulbs very often in my house. Recently,
I have been operating, while watching the HV meter on the
transciever run from 117 volt lines.
It goes from about 810 to 860 volts different
times of the day. I guess that this represents load imbalance
among my neighbors houses, and that regulation would be
much better accross the 230 volt connection.
It doesn't seem to be connected with any large motors going
on or off in our house.
I haven't begun these measurements, but is this normal,
and is there much one does to correct this?

If the 117 actually goes high enough to burn out the lights
faster than normal, is there minimum specs the power company
can be asked to deliver?

73, Don N6MCE

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

Date: 7 Mar 1997 13:57:54 GMT
From: cjl@mitre.org
Subject: Ground Rod Installation w/pipe

Regarding the use of a common point for all grounds, I've been wondering
what this means in the context of the power company's local distribution
system. I suspect I probably misunderstand how they handle local
distribution, but my impression is that you have:

- Several houses wired in parallel off of a single transformer,

- Each house grounded independently,

- All grounds connected together via long and comparatively "thin"
conductors (in the context of lightning protection),

- Perhaps additional grounds at the pole connections for user drop
cables.

Date: 7 Mar 97 17:58:57 GMT
From: Allen Wallace <allen_wallace@Internet.dtint.com>
Subject: Microwave Comb generator?

I'd like to build a Microwave Comb Generator. Now, I see how to drive the SRD, from reading the ARRL Microwave Handbook. But they only address how to generate a specific output frequency, while I want a comb line output.

I guessing, but I think that the output would have to a hipass filter, to remove the funamental. But what about matching? Besides, how does one match multiple octave output, except by a pad?

What's inside the 2 port comb line generators that I see advertised in the trade journals? they look like there can't be much inside!

Allen Wallace

Date: Fri, 07 Mar 1997 11:08:19 -0800
From: miker <Nospam.mreiney@hevanet.com>
Subject: Microwave Comb generator?

Allen Wallace wrote:
>
> I'd like to build a Microwave Comb Generator. Now, I see how to drive the
> SRD, from reading the ARRL Microwave Handbook. But they only address how
> to generate a specific output frequency, while I want a comb line output.
>
> I guessing, but I think that the output would have to a hipass filter, to
> remove the funamental. But what about matching? Besides, how does one
> match multiple octave output, except by a pad?
>
> What's inside the 2 port comb line generators that I see advertised in
> the trade journals? they look like there can't be much inside!
>
> Allen Wallace

Dig out your old text on fourier transforms. You'll find that a
repetitive
train of narrow pulses translates to a bunch of frequencies that are harmonics of the driving frequency. The amplitude envelope is a Sinx/x shape. You're interested in the main hump centered around zero. Note that as the pulse width narrows, the first hump gets wider. Also note that the energy in the narrow pulse is less, so the hump also gets smaller. So, there's a tradeoff between flatness of the envelope and the amplitude of each harmonic.

You can use a shorted (and short) transmission line to generate the short pulse. Make it out of copper plate suspended in air above a circuit board. Don't try to use the board as dielectric, it's too lossy.

You're right about having to filter the output. Even tho it looks like
a nice comb of frequencies on the spectrum analyzer, it still looks like
a honkin' big narrow pulse in the time domain. This can zap those
tiny diodes that you're using for mixers.

miker
--
To reply, remove "Nospam." from the return address.

Date: Thu, 06 Mar 1997 22:27:24 -0500
From: Bob <rmo@gorgon.com>
Subject: Microwave ovens

Any hams out there use a magnetron from a microwave oven to modulate a
signal on 2.45Ghz (I think that the freq of the oven I took apart)? And
if so, did you use FM, CW, etc.
Thought it would be a cool project to tackle. Will also be extra, extra
careful using high power magnetron.

Bob - WB2THV - rmo@gorgon.com

Date: Fri, 07 Mar 1997 17:16:08 GMT
From: tpotts@clemson.edu
Subject: need seneca manual

where may i find a copy of heathkit senecal manual or at least a
schematic. 73 tom ke4uuc.

Date: 8 Mar 1997 06:56:16 GMT
From: bill harris <billharr@pop1.flash.net>
Subject: Origin of 'California Kilowatt'

"J. Henderson" <n6lv@pacbell.net> wrote:
>bill harris wrote:
>>
>> Point your browser to
>> the URL below and check out the item CALIFORNIA KILOWATT and let me know
>> what you think.
>>
>> -73-
>>
>
>What item CALIFORNIA KILOWATT?

The California Kilowatt item is no longer on my web page. I only left it
up a short time as I need the page space for other things.

--
****

* Bill Harris *
* Bill's Antique Radio Emporium - http://www.flash.net/~billhar *
* To e-mail, remove the second 'r' from my address. This was *
* added to discourage junk e-mail. *
****

Date: 7 Mar 1997 07:18:49 GMT
From: christer.jogenborn@era.ericsson.se
Subject: Q: SMD identific.

I have often asked myself, perhaps there is a URL
'homepage' somewhere with facts on how to
identify the SMDs codes often printed on the component.
transistors, diodes would be interesting....
Hints anyone ?
73 SM0NCL Chris

--

Date: Thu, 06 Mar 1997 06:02:18 -0800
From: mike del pozzo <kr4tg@mindspring.com>
Subject: Voice rec/id

Hello all,
would anyone have a schematic on a kit for
voice TX by remote (simmiliar to a vantriliquist)?
could save voice on long contests...
Tnx in advance
de KR4TG
Mike

Date: Thu, 06 Mar 1997 23:34:50 -0600
From: demoman <demoman@rollanet.org>
Subject: WTD: Mods for the Icom IC740?

Graeme Frith wrote:
>
> Hi All..
> I'm looking for any mods for the IC740.
> Anything would be great.

all i have is expanded rf mod.
cut [white resistor] jumper located between d31 and 'c' wire
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

End of Ham-Homebrew Digest V97 #161
****

2898. Re: Regency ACT-E 10 H/L/U

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: parnass@marconi.ih.lucent.com
Message-ID: <5g007v$j21@ssbunews.ih.lucent.com>
Source record: 96159
Cross-posted to: rec.radio.scanner,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,alt.radio.scanner

In article <33235E20.4000@usa.net>, rbare <rbare@usa.net> wrote:

>I have aquired a like new Regency ACT-E 10 H/L/U scanner. It has no
>instruction manual and I do not know the specs on frequency range and
>xtal freqs. Any help would be greatly appreciated. Jerry KB8UBG.
>rbare@usa.net Thank you.

The Regency ACT-E-10 HLU covers 30 - 50, 148 - 174, and 450 - 470 MHz.
It has IFs of 10.7 and 0.455 MHz, and employs an AFC circuit.
Crystals may be ordered for $5 each through your local Radio Shack.

Schematic is published in Sams monitor servicing book SD-7.
For Sams Photophacts, contact Howard Sams Publishing division of
Prentice-Hall at (800)428-7267.
--
==========
Copyright 1997, Bob Parnass, AJ9S parnass@bell-labs.com

Locate & identify transmitters in your area with a color RadioMap(tm)

2899. MODS for Icom IC-725 HF Transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: Leith & Deborah Marshall <leith@clandcen.co.nz>
Message-ID: <01bc2d2f$14340e80$ca4632ca@lmhome>
Source record: 96160

Does anyone have documented mods to wide band transmit (for marine operation) this transciever. If so could you please e-mail these to me.

Many thanks in advance.

Leith Marshall - ZL2UCH

2900. Re: 2 meter cw qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3323e145.0@cheese.pcug.org.au>
Source record: 96161

rohn@pubrats.com (Rohn) wrote:
>I was wondering if anyone knew of a source for schematics (or
>preferably a kit) for a two (or six or 440) meter cw qrp transceiver?
>
>I've elmered two (and a third on his way) new hams into the no-code
>license and now we're working on their upgrades to Tech+ and beyond...
>in my experience, sending code is the quickest way to burn it into
>your memory (not to mention removing the fears of that first HF QSO)
>so I'm looking for something that will allow them to practice with
>each other over a short distance (a couple of miles from house to
>house).
>
You'd hardly need a kit as a suitable rig need have only 3 or
4 transistors. I'd suggest 6 metres as you would require fewer
multipliers. Start with a 50 MHz 3rd overtone xtal (around 50.150 should
be OK). and build a one transistor xtal oscillator. Then build a class C
power amp. A 2N2222A is OK for 6m. Key the collector voltage with a PNP
transistor. Such a rig would put out about 10-30mW and should be OK for a
short distance.

Solid State Design had a similar rig described. It used 4 transistors and
put out 0.5 watts or so. I've worked Japan with such a rig.

73, Peter VK1PK

--

____
Peter Parker parkerp@pcug.org.au

Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK
Home Page: http://www.pcug.org.au/~parkerp/
____

2901. Australian QRP and Novice Home Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3323e1b4.0@cheese.pcug.org.au>
Source record: 96162

Now featuring 'Novice Notes Online' and the Australian QRP Home page,
plus a few other bits and pieces. See below for the URL.

73, Peter
--

____
Peter Parker parkerp@pcug.org.au

Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK
Home Page: http://www.pcug.org.au/~parkerp/
____

2902. News Rover -- Automated newsgroup search/download/decode - 1493 0310060115 DKL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: NewsRover-Mgr@sandh.com
Message-ID: <5g0t4k$iju@apple.telalink.net>
Source record: 96163

Attention fans and frustrated consumers of the Usenet Newsgroups! Announcing

*** News Rover ***

No more manual shuffling through reams of useless text! No more manual decoding of encoded images and other files! No more manual reconstruction of multi-part messages! No more waiting for long downloads!

News Rover DOES ALL THIS:

o Scans newsgroups you specify while you sleep, work, and play.

o Automatically downloads messages and attached files so that they are available for instant access when you are ready to review them.

o Decodes attached files of all types (UUencoded and MIME base64).

o Displays a picture gallery of collected thumbnail size images with quick-action keys to delete, view full size, and save to permanent collection.

o Selects messages based on include and/or exclude criteria to help you find a needle in a haystack and eliminate spam. You can even use complex selection expressions with AND, OR, NEAR and NOT.

o Supports multiple "interest groups," each with sets of newsgroups, selection expressions, message database, and picture gallery.

o Remembers files already extracted and eliminates duplicates automatically.

o Saves parts of multi-part files, searches for the missing parts, and rebuilds the entire file when the last part arrives. It even combines parts found on different days and in different newsgroups.

o Operates on a schedule you set up to use your phone line only when you don't need it.

o Automatically dials the provider and hangs up the phone when it is finished.

o Works with almost all Internet providers and news servers.

o News Rover is multi-threaded so you can read messages and view pictures while it downloads and decodes more messages.

News Rover was designed and written by real-life Usnet newsgroup junkies!
With News Rover the news is ready when you are!

To learn more and download your free demonstration copy, visit:

http://www.NewsRover.com

-- 1493: rec.radio.amateur.homebrew 0310060115 --

2903. Re: Help: Packet radio interfaces

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: Tom McDermott <mcdermot@aud.alcatel.com>
Message-ID: <33240F14.167EB0E7@aud.alcatel.com>
Source record: 96164
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew

Rick Szpyrka wrote:
>
> gabe nemeth wrote:
>
> Hi;
> I'd like to get inforamtion on how to interface packet
> TNCs, or modems, to two well known radios, the
> ICOM 2350, and the Yaesu 5100. Are the plans available anywhere on
> the
> net.

One caution with the Yaesu-5100: the data jack in the
back has a problem with severe transmit frequency response
roll-off. If you feed 1200 baud tones into it, you will need
to build an audio equalizer to make it work. About +6db of
upslope from 1200 to 2200 hz seems to work fine. The receive
response is flat (no problem). The roll-off is so bad, that
even 300 baud packet is problematic through the data jack, and
9600 baseband FSK is not workable (well, at least on mine).

--

- Tom

Tom McDermott
n5eg@tapr.org

2904. Re: Origin of 'California Kilowatt'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: alan@g3kfn.ndirect.co.uk
Message-ID: <33241b4b.0@hades.ndirect.co.uk>
Source record: 96165
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

bill harris <billharr@pop.flash.net> wrote:

>"J. Henderson" <n6lv@pacbell.net> wrote:
>>bill harris wrote:
>>>
>>> Point your browser to
>>> the URL below and check out the item CALIFORNIA KILOWATT and let me know
>>> what you think.
>>>
>>> -73-
>>>
>>
>>What item CALIFORNIA KILOWATT?

>The California Kilowatt item is no longer on my web page. I only left it
>up a short time as I need the page space for other things.

>--
>**
>* Bill Harris *
>* Bill's Antique Radio Emporium - http://www.flash.net/~billhar *
>* To e-mail, remove the second 'r' from my address. This was *
>* added to discourage junk e-mail. *
>**
Will someone please tell us how the term came about as the suspense is
killing me 73 Alan G3KFN.

2905. Re: QRP Group or List?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33241E44.4DE6@ix.netcom.com>
Source record: 96166

Dick Dillman wrote:
>
> Can anyone direct me to a newsgroup or list dealing with QRP equipment
> and techniques? If so, please reply directly via email.
>
> Thanks!
>
> Dick Dillman/W6AWO
>
> <ddillman@igc.apc.org>

Howdy Dick -- Goto the AC6V DX Reference Guide Below and click on Index
--
then click on QRP -- several QRP Lists there. Also click on Mail Lists
or reflectors.

Life is too easy when you are QRO -- Anon

73
Rod in San Diego
--
AC6V DX Reference Page: http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

Retire - Hell I'll be full time DXing!! -- Old Timer

2906. Wtd: 4-1000 Schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: "Roger A. McCarty" <rmccarty@deltanet.com>
Message-ID: <33242A58.74BC@deltanet.com>
Source record: 96167

Looking for a 4-1000 amplifier schematic. Anybody have one that you would be willing to copy for me or, is there data on the web someplace?

Thanks

Roger KD6CC

2907. ## Interesting scanner query

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: techno@actcom.co.il
Message-ID: <E6u3o8.J1z@nonexistent.com>
Source record: 96168
Cross-posted to: rec.radio.amateur.equipment,alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner,sci.electronics.design,sci.electronics.equipment

Hello fellow netizens,

Is there an easy way to read (by computer) the currently received frequency from a scanner (might depend on model of course), squelch status, or to program a new frequency into it? For some reason, scanners with FAST search capabilities (100 steps/sec or more) seem to always come without computer interface/control. Of course there are those hi-end scanners with built in computer interfaces. Their main drawback is usually slow search speed and high cost.
I've also heard about specific solutions (like Bill Cheek's CE-232 interface, compatible with the RS PRO-2004/5/6 scanners only. These are slow scanners and not available here anyway) but they don't fit me needs.

I was thinking of finding a signal within the scanner that changes state once (or any other fixed/predictable number of times) per frequency step, and monitoring this signal with an external computer and constantly calculating the current frequency. Does anyone know about such a signal within popular scanners (Uniden, Radio Shack, ICOM, etc.)
Maybe other methods exist too. I'd like to hear about them.

In addition, if I could find a unit with BOTH fast scan and computer interface, that would be best.

BTW, what is the FASTEST search speed available on any scanner in the 400-500MHz band, either built in or with the help of an external computer interface such as OPTO's or similar? Of course, the search step should be considered (i.e. there is a 300 steps/sec available at 5KHz steps on Unidens, but it is not available in the 400-500MHz band). Anyway, what is more important is the RAW frequency range covered per second. 300steps/sec at 5KHz steps gives 1.5MHz/sec. 100s/s at 12.5KHz gives 1.25MHz/s. So I'm looking for the maximum RAW frequency range coverage per second at 5, 10, 12.5, 15, or 30 search steps. I'm ignoring fast receivers such as OPTO's Xplorer (1 second lock!) because they capture too much junk to be useful for my needs.

Thank's for any help offered.

2908. Re: Microwave Comb generator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: landisj@nad.com
Message-ID: <1997Mar10.120527.692@main03>
Source record: 96169

In article <33205761.0@news.itsnet.com>, Allen Wallace <allen_wallace@powertalk.dtint.com> writes:
> I'd like to build a Microwave Comb Generator. Now, I see how to drive the
> SRD, from reading the ARRL Microwave Handbook. But they only address how
> to generate a specific output frequency, while I want a comb line output.
>
> I guessing, but I think that the output would have to a hipass filter, to
> remove the funamental. But what about matching? Besides, how does one
> match multiple octave output, except by a pad?
>
> What's inside the 2 port comb line generators that I see advertised in
> the trade journals? they look like there can't be much inside!
>
> Allen Wallace

Driving a diode in a hunk of waveguide will do your harmonic generation and high-pass filtering. Use a surplus waveguide crystal detector. A wg below cutoff is an excellent highpass filter and does a good job of removing the fundamental. Just keep the drive below around 10dbm to keep the diode alive.

Joe - AA3GN
--
landisj@nad.com - speaking only for myself, of course
No, this is not a sig.

2909. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: cjl@mitre.org
Message-ID: <5g1kt0$c4v@top.mitre.org>
Source record: 96170

In article <measures-ya02408000R0803970747460001@news.vcnet.c>
measures@mail.vcnet.com (R. L. Measures) writes:

>A coax choke-balun is used wherever an unbalanced-to-balanced transistion
>takes place, so that the RF potential on the balanced element does not
>appear on the outside of the coax feedline---and subsequently on anything
>that is connected to it in the station.. A for instance would be at the
>center of a coax-fed dipole antenna. At 7MHz, a satisfactory choke-balun
>can be made by winding roughly 10 feet of the coax feedline on 3" ABS
>plastic drainpipe.

This appears to be about 8 to 9 microhenries, or an impedance of about
370 ohms at 7.0 MHz. Is this adequate for a choke-balun?

2910. FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: wlfuqu00@pop.UKy.EDU
Message-ID: <199703102037.PAA25086@pop.uky.edu>
Source record: 96171

Part 15 does not allow any unlicensed intentional radiators (transmitters) in any of the ham bands at any power level. Just checked it this morning.

73
Bill wa4lav

William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU Phone (606) 257-4155
Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
University of Kentucky , Lexington, Ky 40506-0055

2911. transistor equivalents to RCA 40977 and 40082

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: ianls@patrol.i-way.co.uk
Message-ID: <33247306.145058@news.i-way.co.uk>
Source record: 96172

Has anyone got info on the RCA transistors 40977 and 40082? They are
not listed in any of my equivalents books. Thanks de G4JQT
--
Ian
ianls@patrol.i-way.co.uk

2912. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: Chris Broadbent <cfb@bga.com.nospam>
Message-ID: <33247A12.4BB5@bga.com.nospam>
Source record: 96173

My house was hit by lightning last year. We had an orange plasma flash inside the house where it followed the corner of a vaulted ceiling. It found its way into the mains system, melting the ground wire at the entry point (I had to thread new cable, I'm keeping the damaged bit as a momento).

Fortunately, given the onset of the storm and the fact that we always get close strikes, we had unplugged most equipment (computer, TV, etc.). However, that which remained connected (doorbell, garage door opener, etc.) died. Aside from the electrical damage, it punched two holes in my roof, blew out the siding on that side of the house, split the eaves, etc. etc.

I guess it's just a natural hazard of living in central Texas (we get some quite amazing storms in the summer).

Since that event, I have become somewhat sensitive to the potential of lightning damage. Thus, whenever I don't use my Ham equipment, I disconnect the coax, put a plastic bag over the PL259 plug and throw it out the door. Then the lightning can vapourise the antenna for all I care (it's a #14 copper wire dipole - wire costs $16/500ft reel at Home Depot). It's easy enough to make a new antenna, not so easy to make a new house.

It's a pain to have to pull it in whenever I want to burn the ether, but IMO it's a fair tradeoff.

--
Cheers,

Chris. Broadbent (KC5VQL)

NOTE: My email address in this post is modified to prevent spam. Just remove the '.nospam' from the end of it if you wish to email me. It sucks that I must do this, but the amount of unsolicited crap I'm receiving now makes it necessary.

2913. Re: Making Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: Madjid <mboukri@cam.org>
Message-ID: <3324966F.530D@cam.org>
Source record: 96174

Meg wrote:
>
> Does any one know how to make a .5uf and a 1uf coil ??
> Like.... give the info on what AWG # on the wire and how long it should be
> and how many times you wrap it around something, like a pencil.

Coils are measured in Henries ;(
There is coil calculation program at:
http://oak.oakland.edu:8080/pub/hamradio/arrl/bbs/programs/coil112.exe

---
Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

2914. List Of Stamp Applications [970310]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: cj@hth.com
Message-ID: <3324264a.2670376@news.buller.se>
Source record: 96175
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
Since the L.O.S.A is getting bigger I only post the index of
applications to the mailing list and you can download the complete
L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 Whats is L.O.S.A all about ?
--------------------------------

I started to compile L.O.S.A because I know there are lots of great
ideas and many problems that are solved with the BASIC Stamp and the
main purpose of this list is to get an idea of what other people are
using their BASIC Stamps for and maybe get some inspiration or hints.

1.1 How can I contribute to this list ?
---------------------------------------

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 List of contributions
-------------------------

> = Indicates a new or updated application since last time.

# 001 Robo-Cat
# 002 Logic Rudder
# 003 Interfacing MAX186 8 channel 12bit A/D
# 004 Scrolling LED Sign
# 005 Tone Decoder
# 006 Pager
# 007 HexWalker Mobile Robot
# 008 Robo Bug
# 009 EXPBOT Robot controlled by Stamp
```

010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector
044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule
054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
059 Wind speed and wind direction measurement device

060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
065 Compass Interface for Navigation
066 Truck + ? identification
067 Meteoreological Station
068 Stamp Controls Electronic Tester for flex circuits
069 Game Timer
># 070 Photoghrapic light meter
># 071 Data System Remote Control on unmanned aircraft
># 072 Speaking Instructor
># 073 Small Moblie Robot
># 074 R/C helicopter altitude control unit

Regards,

/Christer

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-

2915. Re: ## Interesting scanner query

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: John Montalbano <jrmont@iquest.net>
Message-ID: <3324EEB8.206E@iquest.net>
Source record: 96176
Cross-posted to: rec.radio.amateur.equipment,alt.radio.scanner.uk,rec.radio.amateur.homebrew,rec.radio.scanner,sci.electronics.design,sci.electronics.equipment

Techno,

I have modified my RS 2032 for computer control. I took the brute for approach and wired a CMOS Matrix switch across the keypad. This cost about $10.00 in parts and works just fine. I have a windows program to download freqs to the radio.

Although my interface allows me to read data back from the radio, I have not programmed it yet. There are several ways to do this. Most scanners are going to have a synthesizer chip that has a serial programming interface. I planned on monitoring the data, clock, and load signals going to this chip in the 2032 and determining the current frequency from the serial programming stream that appears on them. I would monitor the squelch signal and LO select as well.

Ultimately, I will use the same three wire interface to set frequencies during scanning.

If you would like to take on such a project and need help, drop me some mail. If you have a radio in mind and have a schematic, it would be helpful if you could send me a copy.

John Montalbano
KA2PYJ

Techno wrote:
>
> Hello fellow netizens,
>
> Is there an easy way to read (by computer) the currently received
> frequency from a scanner (might depend on model of course), squelch
> status, or to program a new frequency into it? For some reason,
> scanners with FAST search capabilities (100 steps/sec or more) seem to
> always come without computer interface/control.

2916. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1003972005380001@news.vcnet.com>
Source record: 96177

In article <33247A12.4BB5@bga.com.nospam>, cfb@bga.com.nospam wrote:

> My house was hit by lightning last year. We had an orange plasma flash
> inside the house where it followed the corner of a vaulted ceiling. It
> found its way into the mains system, melting the ground wire at the
> entry point (I had to thread new cable, I'm keeping the damaged bit as a
> momento).
>
> Fortunately, given the onset of the storm and the fact that we always
> get close strikes, we had unplugged most equipment (computer, TV,
> etc.). However, that which remained connected (doorbell, garage door
> opener, etc.) died. Aside from the electrical damage, it punched two
> holes in my roof, blew out the siding on that side of the house, split
> the eaves, etc. etc.
>
> I guess it's just a natural hazard of living in central Texas (we get
> some quite amazing storms in the summer).
>
> Since that event, I have become somewhat sensitive to the potential of
> lightning damage. Thus, whenever I don't use my Ham equipment, I
> disconnect the coax, put a plastic bag over the PL259 plug and throw it
> out the door. Then the lightning can vapourise the antenna for all I
> care (it's a #14 copper wire dipole - wire costs $16/500ft reel at Home
> Depot). It's easy enough to make a new antenna, not so easy to make a
> new house.
>
> It's a pain to have to pull it in whenever I want to burn the ether, but
> IMO it's a fair tradeoff.
>

However, to comply with the National Electrical Code, you must connect a
wire from the shield of the coax that is laying out in the yard to the
Neutral wire in your mains inlet breaker box. -chortle-

Type-C connectors [the RG213 equivalent of BNC connectors] are easier to
connect and disconnect than PL259s, and they are waterproof, Chris.

--
--Rich-- ag6k, 805-386-3734

2917. Re: Origin of 'California Kilowatt'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: "J. Henderson" <n6lv@pacbell.net>
Message-ID: <3324E31D.6154@pacbell.net>
Source record: 96178
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Jim Potter wrote:
>
> I remember a cartoon somewhere, maybe an old CQ or 73 magazine. It
> showed a 6 station with a large Variac knob marked "Volume" :-) :-)
>
> 73 de K9GXC, Jim

I had a friend who made a KW from 20 1625 tubes in parallel. He said
he was going to make one with 100 6c4s. The truth, so help me!

jim n6lv

2918. 10m-2m transverter project, where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5g0rrs$87k_001@leeds.ac.uk>
Source record: 96179

I'm be sitting the RAE in May and would like to get on air after getting my ticket. I've got an FT-101Z and would like to build a transverter to the 2m band (I'm interested in 2m SSB) are there any suitable books with such a transverter design? TIA

73 de Laurens RS171840

2919. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierE6w4K6.I1H@netcom.com>
Source record: 96180

in <33230753.4475@postoffice.worldnet.att.net>,
: Thomas Isgro (kc8dgu@postoffice.worldnet.att.net) wrote:
: I repeat again for the third time, if you key a repeater and you are NOT
: licensed to operate in that band, you have generated an illegal signal.
: NO IFS, ANDS, BUTS, OR MAYBES. There is no output in the ham bands on
: which you may operate without an appropriate amateur license.

: Cordless phones, garage door openers etc are something else.

You can repeat it all you want, but that doesn't make it true. The only bands where license free signals may not operate are radio navigation, radio astronomy, safety frequencies like maritime calling channels, and (showing some political pull) in the TV broadcast bands. Sure, you may only get 50 feet or so, but as far as the FCC is concerned, in the 2 meter band, a low power intentional signal and RFI from a computer are treated the same.

And there are provisions with more power allowed that have the potential for causing no small amount of interference to ham operations (like wireless lans and key fob transmitters), but it would be very poor politics to try to assert some territorial "rights" to the ham bands, as those "rights" aren't backed up by the regulations and would be very poor public relations to try.

By the way, for general information, parts of the Code of Federal Regulations are now online, including the FCC regulations in Title 47. At www.access.gpo.gov under the pages for National Archives ard Records Administration. You get to a search request form, check off the Title (47 for Telecommunications) and type in a search string. For example "part 15" or "part 97" and it returns a menu page with its best guesses that you can download with. (Part 15 came in fine as a 400k .pdf file).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

2920. RE:K1OInK - Happiness is...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-10 00:00:00 UTC
From: Woody <rafman@kerrlake.com>
Message-ID: <3324A95D.130C@kerrlake.com>
Source record: 96181
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

```
Happiness is seeing K1OInK's picture on a milk carton.
Along with his pal in the White Pigoda: Slick Willie!
--
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
Woody - KA2RAF/4 - I'm the NRA, not the ARRL | Buggs Island Lake:
The BuckHorn WoodWorx of Buggs Island | Virginia's best fishing
"A mind's a terrible thing to waste, provided you had one to start with"
"There are 5 boxes to Freedom: Ballot, Witness, Jury, Soap & Cartridge"
=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
```

2921. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <332566BC.5DC5@earthlink.net>
Source record: 96097

Thomas Isgro wrote:
>
> I repeat again for the third time, if you key a repeater and you are NOT
> licensed to operate in that band, you have generated an illegal signal.
> NO IFS, ANDS, BUTS, OR MAYBES. There is no output in the ham bands on
> which you may operate without an appropriate amateur license.

AHhh yes there is....The INPUT to the rptr is the band in question..if the rptr is a crossband from say 2 to 10 or 220 to 10m FM (29.5-29.7 only), Techs AND Novices may be crossbanded..the 10m tx callsign of course must be General or above....(This is how an OSCAR is legal also!) BELOW 29.5, no retransmitting of improper class license is allowed because its no longer a rptr but a remote base....and the rules are quite different for them...

> Cordless phones, garage door openers etc are something else.
> --
> **********

Very true...they are intentional radiators and have specfic rules covering them....but they canNOT cause interference to licensed users in their band...and must accept interference from ANY source..

73
Chris
WB5ITT

2922. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <3325659E.7C5C@earthlink.net>
Source record: 96098

Dana Myers wrote:
>
> Hmmmm... then what would you say about 2m <-> 10m FM links?
> You know, a 2m box coupled to a 10m box. A Tech can then cause
> the 10m box to transmit without being licensed to transmit
> in that band.
>
> I believe the answer is not so straightforward, at least not
> as you put it. I suspect the answer is that the operator of
> a Part 15 legal device would not be liable for kerchunking the
> ham repeater, though this might be considered interference.

The 2-> 10 box is called a rptr (provided the 10mtr system is within
29.5-29.7) and is PERFECTLY legal for a TECH to use from
2mtrs...CROSSband rptrs have been around for years...as long as the
CALLSIGN of the 10mtr tx is a General or above...
Now below 29.5, its not a rptr....and cannot be retransmitting ANY 2mtr
signal automatically.....

Chris
WB5ITT

2923. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <33256502.2BA3@earthlink.net>
Source record: 96099

Mark Mansfield wrote:
>
> Roy Lewallen wrote:
> > I hit the "send" key a bit fast. Let me add that unlicensed operation on 2
> > meters, as on any other frequency, also carries the restriction that Gary
> > mentioned, that it can't cause interference to any licensed users. I don't

> What if you keyed a repeater with your transmitter that was legal (below the
> maximum field strength and you are not licensed)? Things can get harry
> can't they :)
>
> Mark

Mark, did you miss this line above?
"that it can't cause interference to any licensed users."

Chris
WB5ITT
If it causes interference, it aint legal...and they dont specify how MUCH
interference.....ANY will do here

2924. Re: Origin of 'California Kilowatt'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: Jim <jstrohm@texas.net>
Message-ID: <5g42v2$c30@newsgate.sps.mot.com>
Source record: 96100

As I recall, Don Stoner's SSB book from the 1950s had plans
for a "Compact California Kilowatt" based on a 4CX1500.
I'm sure this wasn't the first usage of the CK name, but
probably helped popularize it.

2925. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: Jim <jstrohm@texas.net>
Message-ID: <5g42m3$c7b@newsgate.sps.mot.com>
Source record: 96101

wlfuqu00@pop.UKy.EDU (William L. Fuqua III) wrote:
> Part 15 does not allow any unlicensed intentional radiators (transmitters) in
>any of the ham bands at any power level. Just checked it this morning.

Check 900 MHz -- cordless phones

Check 2304 MHz -- ISM.

FWIW, you have an unlicensed kilowatt transmitter in your kitchen.
Jigger the interlocks and work moonbounce on 2410 simply by
opening the door and pointing it up.

N6OTQ

2926. ICOM IC-R7100 commands?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E6vvDy.CJE@pe1chl>
Source record: 96102
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am looking for the complete CI-V command set of the IC-R7100 receiver.
It is no problem to find general docs about CI-V, so I have already built
an interface and have written a simple program that displays the frequency
and mode when the receiver stops scanning.

However, I would like to control the AF GAIN depending on the frequency
where the scan stopped. It is possible according to the user manual, and
there even is a LED on the front panel that is supposed to indicate that
the AF GAIN is being remotely controlled.
But, this command does not appear in the generic CI-V documents that I
have seen.

Does anybody have a complete IC-R7100 command set, or know where one can
be obtained?

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2927. Re: robocopy

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: Hal Rosser W4PMJ <hmrosser@csranet.com>
Message-ID: <3325CD57.62F8@csranet.com>
Source record: 96103

Robert McMillan wrote:
>
> I came across this file the other day while searching for a similarly named
> program. This robocopy refers to an article in the September 1990 edition
> of 73 magazine for a device to connect your receiver to your computer to
> interpret CW.
>
> I don't have access to this copy of the magazine, and I guess by now there
> have been a few more articles written, and circuits designed around this
> subject. Can anyone e-mail to me the circuit diagram for this device or
> one similar?
>
> Thanks..... Rob... I believe its Just a program that works with your sound card.
Not hardware, so no circuit to draw.. just hook into the sound card.
--
HAL W4PMJ
hmrosser@csranet.com

2928. Re: 10m-2m transverter project, where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <ObCgcOAnWXJzEwMz@ifwtech.demon.co.uk>
Source record: 96104

L. DE BRUIJN wrote:
>I'm be sitting the RAE in May and would like to get on air
>after getting my ticket. I've got an FT-101Z and would like
>to build a transverter to the 2m band (I'm interested in 2m
>SSB) are there any suitable books with such a transverter
>design? TIA

Try 'The VHF/UHF DX Book', available from RSGB (01707 569015, since
you're in England too) and also ARRL.

For more details, see http://www.rsgb.org/books/vhf.htm#VHDX
and also http://www.nitehawk.com/rasmit/g3sek_bk.html

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

2929. Re: Calc. (K) factor.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: CHRISTOPHER MCCALL <s004cnm@discover.wright.edu>
Message-ID: <Pine.OSF.3.93.970311153444.9189A-100000@alpha.wright.edu>
Source record: 96105

On Sat, 8 Mar 1997, H.Silvia wrote:

> Subject: Calc. (K) factor.
>
> Hi I'm working on J-Pole ant length calculations and am having a
> difficult time calculating the K factor ratio of wavelength by dia..
> The antenna and arrl manuals do not explain the calculation formuala
> enough for me to integrate (the formula itself) into my c++ program as a
> variable based on material widths.
>
> 73 de Henry KE4WBW

I've used the formula (1/2 wave in ft.)/freq of interest=dipole int ft. Then Dipole in ft. converted to inches. Dipole in inches/(O.D. of conductor in inches=K ratio. Use the K in a look up data table to find K factor. I round K ratio to fit nearest .01 of K factor. Ie. ratio 441 = .94 factor (disclamer those are not valid numbers; I just pulled out of my head for illustration). I've implemented this on my HP-48 G calculator. My feelings on the whole thing is your Calcs. can be exact as significant figures allow, but a fudge factor still needs to be introduced in final physical implementation and SWR tune up, due to height over terrain, ground conductivity, feedline loss, etc... Anyone that knows of a better graph (I' m using the one out of '90 Handbook) or better method of calc, please let me know. Hopefully more precision= less fudge.

Chris McCall KB8YPO
145.110 Mhz Kettering Medical Center ARC
Dayton Oh.

2930. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5g4mn8$4de@hplms2.hpl.hp.com>
Source record: 96106

In article <01bc2868$eb466420$LocalHost@spider>,
Chad H. Phillips <chadhp@iai.i-america.net> wrote:
>
>
>Then there's R.F., which does not always like to travel down the equipment
>ground conductor. Our other equipment can be adversely affected when some
>of it does. Maybe we should try to confine this high-frequency current to
>the station grounding electrode system.
>

Lets hope you don't have R.F. on your equipment ground. If you do, you've
got some serious problems. There shouldn't be any R.F. traveling on your
grounding conductors.

2931. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: kral@hpl.hp.com
Message-ID: <5g4nkk$4u1@hplms2.hpl.hp.com>
Source record: 96107

In article <5fp6t2$a3u@top.mitre.org>, <cjl@mitre.org> wrote:
>Regarding the use of a common point for all grounds, I've been wondering
>what this means in the context of the power company's local distribution
>system. I suspect I probably misunderstand how they handle local
>distribution, but my impression is that you have:
>
> - Several houses wired in parallel off of a single transformer,
>
> - Each house grounded independently,
>
> - All grounds connected together via long and comparatively "thin"
> conductors (in the context of lightning protection),
>
> - Perhaps additional grounds at the pole connections for user drop
> cables.
>
>From the point of view of lightning strikes, isn't this local distribution
>configuration subject to severe ground loop problems?

Electrical distribution is a multiple-grounded neutral system. The neutral conductor is grounded at many points in the distribution. The safety ground in your house is local to your house. It does not go house to house. The safety ground is bonded to the neutral at one point, at the service entrance. The neutral is also grounded at the step down transformer on the pole (or underground). Your houses' safety ground is not for lightning protection.

2932. ARRL Publications?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <3325EAB2.30A6@primenet.com>
Source record: 96108
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I received an advertisement from ARRL today (and I
love to receive junk mail, really) and realized that
one can spend too much time staring at a tube (monitor).
There are many books in the Publcation Catalog that I
had never even heard about!

Not counting getting the back issues of QST on CDROM
(had to purge/recycle the hard copies some time ago)
and the 1997 Handbook (either CD or hard copy as my
copies go from 1974 to 1981 to 1987 and a *lot* does
happen in the world of ham radio in 10 years), I came
up with the following list of interesting offerings:

#5714 Personal Computers in the Ham Shack $15.95
#5854 Getting on Track With APRS $14.95
#3207 W1FB Design Notebook $10
#3851 Hints & Kinks $10
#5617 QRP Power $12
#3657 W1FB QRP Notebook $10
#4319 NOS Intro $23
#4955 Packet SPEED $15

Some seem like remarkable buys, others... Can't judge a
book by the cover either (you can quote me). Anyone have
specific comments on any of these books?

Where is the least expensive place to order these as the
total (if I were to get all of them) is over $110?

Anyone have "used" copies of any of these books for sale?
Anyone want to get rid of the QST or ARRL Handbook CDROMs?

Not that ARRL Publications are such a bad buy, I'm just miserly!

73, Brian ke7gh@primenet.com

2933. hlp pls, i need change my tone voice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: alfonsog@redestb.es
Message-ID: <5g4o64$5r0$1@diana.ibernet.es>
Source record: 96109
Cross-posted to: rec.radio.amateur.homebrew,es.rec.radio.amateur

Hi, all.

I need help to modify my tone voice. I have a problem with my voice,
more people, don't think my age, no think my callsign, is similary a
girl voice. I want down the frequency to be similary with a men.

Do you know any chip, construccion or circuit to made this mod?

Thanks for your help. The bests 73's EB3FYJ

Hola a todos:

Necesitaria vuestra ayuda. Necesitar&#65533;a modificar el tono de mi voz,
mucha gente no cree mi indicativo, ni mi edad, se parece mas a la voz
de una chica. Querria que mi voz sonara m&#65533;s masculina.

Conoceis algun integrado, circuito o construcci&#65533;n para hacerlo??

Gracias por vuestra ayuda. 73's muy cordiales. EB3FYJ
e-mail: alfonsog@redestb.es
73 de EB3FYJ
Regards :-)

2934. Re: ARRL Publications?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: Raj Singh VE6RAJ <singhraj@cadvision.com>
Message-ID: <332617B8.1039@cadvision.com>
Source record: 96110

Brian K. Short wrote:
>
>
> Some seem like remarkable buys, others... Can't judge a
> book by the cover either (you can quote me). Anyone have
> specific comments on any of these books?
>
> Where is the least expensive place to order these as the
> total (if I were to get all of them) is over $110?
>
> Anyone have "used" copies of any of these books for sale?
> Anyone want to get rid of the QST or ARRL Handbook CDROMs?
>
> Not that ARRL Publications are such a bad buy, I'm just miserly!
>
> 73, Brian ke7gh@primenet.com

Hi Brian:

Are you all set for BARTG? I just got my copy of Design Notes by W1FB or is it WF1B!! You can't be miserly in your quest for knowledge. It seems to me that filters for my Icom 745 are like dodo birds. I was strongly advised to buy this book and make my own. I didn't get the ARRL mailout, but if my filters work out I will have saved myself three times the price of these books. Actually other hams may want to consider building their own filters, as its seems to be nothing to spend $600 - $ 1000 for add filters these days

73 and hope to see you in the fray
Raj VE6RAJ

2935. WW2W W.W.W Max Spectrum Homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5g57pv$35a@camel2.mindspring.com>
Source record: 96111

Ma, allright! Allright! Just let me finish FTPing this thing.
There all done.... ENJOY!
PLEASE SIGN-IN & LET ME KNOW YOU FOUND IT FROM HERE!
QRP rules!
http://www.pipeline.com/~acatalan/
vy 73 de WW2W Tony

2936. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5g5805$35a@camel2.mindspring.com>
Source record: 96112

ilani@shani.net wrote:

>Can someone tell me what is the upper limit in watts for use in FM
>transmitter without FCC approval.

>Thanks in advance
>Avi ilan - ilani@shani.net
From the limited content of your question I
would personally limit you to ZERO watts.
(Better play it safe)
de WW2W Tony

2937. Walkie-Talkie kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: Mark White <markw@Iconnect.net>
Message-ID: <33263141.4AF@Iconnect.net>
Source record: 96113

Does anyone know of any inexpensive walkie talkie kits, to be used for a 7th grade class project? thanks markw@iconnect.net N9OHS

2938. 950SD qeustion

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <33256E25.782@apollo.wes.army.mil>
Source record: 96114
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

In order to make the MARS MOD to the Knwd TS950SD, you just clip 1 of 3 diodes. If you know of this, what are the OTHER TWO for? you suppose there is something of benifit to be gained in just clipping one at a time and see what happenes or would there be irreparable damage?

Butch Magee, KF5DE

2939. We have taken the Hassles out of the net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: goextreme@hotmail.com
Message-ID: <3325edbf.0@news1.betacom.net>
Source record: 96115

WELCOME And Go To
www.GoExtreme.com

The Premiere Site on the Internet for EXTREME NET TOOLZ,
Internet Relay Chat (IRC) help, and Newsgroup help without
the clutter!

A large group of irc operators and newsgroup gurus
have tested and evaluated the best internet toolz
and HERE are their choices to become
an EXTREME Net user!

All of this software is FREE!!
It is either shareware or freeware!
Enjoy!

Best newsgroup reader: Free Agent!...Freeware!!!
Best chat software: mIRC 4.72!...Shareware!!!
Become your own FTP site! WAR-FTP 1.55 ....Freeware!!!!
Fastest jpeg\gif viewer ACDSEE!...Shareware!!!
Best E-Mail Program Eudora Lite 3.01!...Freeware!!!
Winzip 6.2 takes the chore out of these zip
files!...Shareware!!!
CuteFTP 1.8 makes "browsing" FTP sites a
snap!...Shareware!!!
Fastest Web Browser Netscape 3.01!...Shareware!!!

(�`�.(�`�.!�!BOSnet: Voted The MOST EXTREME Internet
Provider!�!.���).���)

Great Page for Extreme Net Toolz! All listed software
here!
Get Extreme `Net Toolz here!

Great Help Page for IRC!!! Fserve, Flood Protection, New
IRC Servers!
IRC Help here!

Great Help Page for News Groups! How To Do It! Big List of
Public Servers!
Newsgroup Help here!

This information provided so that we may all enjoy the
Internet, IRC, and Newsgroups better!

!�!We receive no money!�!

Members of
[freespeech]
Campaign

and

[AOL SUX Get a REAL ISP Campaign]

2940. Amplifier 2m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: christer.nilsson@mbox2.swipnet.se
Message-ID: <33251026.595606@nntpserver.swip.net>
Source record: 96116

Hello everybody
Can some one help me with schematic, and maybe layout, over 2m
amplifier with about 150 W output

Thank's and 73 SM5VST

2941. Re: Origin of 'California Kilowatt'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970311001801.TAA20681@ladder01.news.aol.com>
Source record: 96182

Someone in California heard about a G building a 400 watt amplifier around an 813 with 4 KV on the anode and got jealous. He scrounged a slightly warm 4CX25000 and built a 1000 watt amplifier. He thought the 1 KW rating was for the filament dissipation.. After special 3 phase power installation from Pacific Gas and Electric, he ionized the atmosphere all the way East to Phoenix...hence the name CK.

And now you like know, y'know.

W4ZCB

2942. Re: Origin of 'California Kilowatt'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: dunnt@cco.caltech.edu
Message-ID: <dunnt-1003971741330001@tom-dunn.caltech.edu>
Source record: 96183
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <332299af.51920580@news.santafe.edu>, jpotter@jpaw.com wrote:

> I remember a cartoon somewhere, maybe an old CQ or 73 magazine. It
> showed a 6 station with a large Variac knob marked "Volume" :-) :-)
>
> 73 de K9GXC, Jim
>

Last year on one of the "shack" cover photos on CQ Magazine, you can see at the end of the operating bench a 30 Amp plus Variac and next to it a 6ft "California Kilowatt". I'm sure the Variac was keeping the AMP within legal limits:-) Not for busting pile ups. BTW it was not a 6 call. 73
Tom WB6IQD

2943. LIVE MAINE LOBSTERS OVERNIGHT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: ezxpress@aol.com
Message-ID: <19970311020800.VAA27595@ladder01.news.aol.com>
Source record: 96184

Live Maine lobsters freshly shipped right from the wharf
to your home or business Overnight. They make a most
memorable gift and they're mighty tasty too!

Our lobsters are specially packed in a reusable
waterproof cooler and ice pack which can also
be used again. Shipped daily overnight by Federal
Express. You can't get any fresher than that.

To place an order, kindly call 1-800-456-0133,
24 hours a day, 7 days a week. Gift Certificates
are also available on any one of the Lobster Parcels
described below.

Everything is included in the prices - packaging,
overnight shipping, lobster cooking & eating instructions,
and tax. We can even include a personalized message card,
especially if it should be a gift. Sure is better than always
sending flowers or candy.

Please have your Visa, Mastercard, or American Express
credit card ready when calling. Thank you kindly!

All orders to be shipped for next day delivery should
be called in by 12 noon EST. Saturday delivery is
available, just add $10.00 to any order.

Lobster Parcels offered are the following:
(remember everything is included in the price,
even the overnight shipping)

All lobsters are 1 and a 1/4 pound each or slightly more.
The toll free number again is 1-800-456-0133.

Lobster Parcel #1 - 2 lobsters - $64.95
Lobster Parcel #2 - 4 lobsters - $89.95
Lobster Parcel #3 - 6 lobsters - $109.95
Lobster Parcel #4 - 8 lobsters - $129.95

Thank again from EzXpress, Home of the LobsterXpress.
Enjoy!

2944. HUMBUG Monitor Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: tlazzaro@oncomdis.on.ca
Message-ID: <5g2ie0dqt1@news>
Source record: 96185

Would like to find an eprom with the monitor program used in the SBC-02 computer, that was featured in Kilobaud Klassroom, back in 1980. My board is completed and only need the 2k monitor to run. If you no longer use yours and are willing to part with it - please advise.Thanks for reading my post,73 Tom.

2945. baggybob's surface mount buck a bag bonanza

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: baggybob@townsquare.net
Message-ID: <baggybob-1003972132490001@206.173.111.48>
Source record: 96186
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

baggybobs' buck a bag bargain bonanza
brought to you by bob & kim.

Surface mount parts for experimenters/prototypers
all new surplus unless otherwise noted

Shipping to the USA
Small parts orders (less than $35 usd). I ship by priority mail. Cost is $3

Larger parts orders I will ship by UPS using an agent. Cost is $5
I ship UPS COD only upon receipt of $10 deposit. The UPS depot is 60 Km
away. I have to drive there and handle CODs myself. I cannot afford the
cost or hassle of refused COD shipments.

Really small parts orders (up to $5 surface mount parts only). Send me a
SASE with three stamps. I will put in some foam filler to prevent damage.
International orders require international money order or funds drawn upon
a US bank. We can determine together the best way to ship.
.
If you have tech questions please e-mail. I will answer in a day or two.

prices reduced yea!!!!!
tantalum A & B size were 10/$1.00 now 12/for a buck
C & D size were 8/$1.00 now 10/for a buck
smd inductor was 8/$1 now 10/$1

prices increased boo !!!!
smd varactors were 8/$1 now 6/$1

Motorola MRF 94llL NPN hi gain low noise small signal transistor
excellent broadband linearity with typ fT = 8 GHz.
4 pin SOT-143 package data sheet available at Motorola SPS web site.
5 / $1.00 80 for $10

Toshiba 2SC3606 NPN hi gain low noise transistor. Typical fT=7GHz, noise
figure @1GHz=1.1dB.
3pin EIAJ SC59 package; slightly larger than EIA SOT-23.
8/ $1.00 100 for $10 data sheet is at Toshiba web site in .pdf format

Toshiba 2SC5084 NPN RF transistor SC-59 pkg 8/$1
data sheet available

MMBFU310 N-channel FET SOT-23 8/$1
same electrical specs as J310

MMBF5460 P-channel FET SOT-23 8/$1
same electrical specs as 2N5460

Phillips BCP51 PNP or BCP54 NPN Both are SOT 223
VCEO=45, Ic= 1 Amp, hFE 40/250, fT= 50 Mhz
good for audio, DC control
8/$1.00 100 for $10

ROHM 2SB1132 PNP SOT-89 Equal to Phillips BCX51 VCEO=45,
IC=1Amp, VCEsat= .5 V data sheet included upon request.
10/$1.00

MMBT3904 NPN general purpose amp. SOT-23 version of 2N3904, one of the most common transistors ever made.VCEO=40. fT min =200 MHz, hFE >100<300 @ 10 ma. 10/$1

MMBTA56LT1(Motorola) or PMBTA56 if you prefer Phillips. PNP driver... both are SOT-23 version of MPSA56. VCEO=80, fT >50MHz, hFE> 50 @ 100mA 12/$1

MMBD352 Schottky (hot carrier) SOT-23 dual diode. Use for mixer or detector at UHF and upwards. V(BR)R= 7 volts, CT= 1pf @ 0 volts
6/$1

Motorola BAV99 dual diode series connected SOT 23 package
commonly used to prevent ESD latch-up damage on MOS inputs
VBR=70 volts, IF max =100 mA, PD=500 mW
12/$1.00

Tunning diodes SOT-23 6/$1.00
MMBV109 ratio 5:1 8-40pf
MMBV2105 ratio 2.5:1 Ct 15pf @ 4v

Quad analog switch 14066B in 14 pin SOIC pkg 4/$1

surface mount diodes in round MELF package
Rohm RLRH100: same ratings as 1N4002 (1 AMP, 100 Volt)
12/$1.00

SMD zener diode 350mW Pd 5% tolerance in
SOT 23 package Motorola MMBZ5240 10 volt 12/$1.00
other zeners from same series 10/$1.00
3.9 V MMBZ5227
12 V MMBZ5242
18 V MMBZ5248

ROHM NPN digital transistor DTC114YK 12/1.00

excuse the poor artwork. There is a 10K in series with the base and 47K between base and emitter. Use as inverter with no external bias resistors required or as digital switch. IC=100 mA,VCC=50. Package is SC-59, pin spacing is same as SOT-23. data sheet available package stamping -- 64

Surface mount 1/8 watt resistor assortment.
paper strips of 20 each of 50 different values = 1000 resistors

all parts marked with standard 3 digit code
$10.00 each assortment

Chip capacitors -- 0.1uf 50 volt ,tolerance range Z
size 1206 (3.2mm x 1.5mm) packaged on paper tape
Y5V ceramic with nickel barrier terminations
MuRata pn GRM42-605Y5V104Z50
30/$1.00

I have other chip caps, mostly MuRata for same price
1206 size NPO (C0G) 50 volt 5%
1pf 2.7 3.3 4.7 5.6

20 22 24 27 30 39
56 75 150 180 300
560

220, 1000pf are 10% X7R ceramic

smaller size 0805 50 volt NPO also 30/$1.00

1.2 8.2pf, 11 12 30 100
.01uF X7R

Mica surface mount capacitor from Soshin Electric 1210 size unless
otherwise noted all are 500 volt , 5% tolerance. Yeah, this is a strange
one.
1, 3.5, 4.5pf, 5.5, 6.5, 7.5, 9.5, 11, 13, 15,16, 20, 22, 27, 30, 39, 51,
56, 62, 68, 75, 82, 91

the following are rated at 100 volt:110pf, 180, 200, 240

12/$1.00

Surface mount inductor (most are TDK 1210 size) 47,56,82, 220, 330, 560,
680,820 nH 10/$1.00

Surface mount resin molded tantalums made by Panasonic, Matsuo, NEC,
Sprague and possibly others.
A & B sizes 12/$1.00, C & D size 10/$1.00
A size stamping code
.1uf 35v A104
.22uf 35v V224
.33uf 35v V334
.47uf 25v E474
1 uf 16v C105
4.7uf 10v A475

B size
1uf @ 35v 4.7uf @ 10v 10uf @ 10v

C size
4.7uf @ 16v 10uf @ 16v 22uf @ 10v

Dsize
6.8uf @ 35v 33uf @ 16v

these tantalums are slightly smaller than a C size. They measure .185" L x
.1 W. 12/$1
.22uf 15v
.33uf 20v

smd LEDs 1206 size mixed mostly green with a few red or yellow or not
mixed all yellow 12/$1.00

also have some not so common leaded parts

e-mail for more info: baggybob@cris.com

2946. baggybob's parts & stuff for experimenters & prototypers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: baggybob@townsquare.net
Message-ID: <baggybob-1003972139070001@206.173.111.48>
Source record: 96187
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

baggybobs' buck a bag bargain bonanza
brought to you by bob & kim.

all new surplus unless otherwise noted

Shipping to the USA
Small parts orders (less than $35 usd). I ship by priority mail. Cost is $3

Larger parts orders I will ship by UPS using an agent. Cost is $5
I ship UPS COD only upon receipt of $10 deposit. The UPS depot is 60 Km
away. I have to drive there and handle CODs myself. I cannot afford the
cost or hassle of refused COD shipments.

Really small parts orders (up to $5 surface mount parts only). Send me a
SASE with three stamps. I will put in some foam filler to prevent damage.
International orders require international money order or funds drawn upon
a US bank. We can determine together the best way to ship.
.
If you have tech questions please e-mail. I will answer in a day or two.

Leaded parts. Surface mount parts for experimenters/prototypers are in a
different message

Digital-to-Analog IC DAC08030 from National Semi. 8 bit CMOS with double
buffered output. .05% linearity. 20 pin DIP package, works on single supply
Most parts have house marking but guaranteed to be as represented. $1 ea

15 pages of data sheets and suggested circuits $ .50 but no charge if you
purchase 10 or more parts.

Voice synthesizer. Phillips PCF8200 used in applications with
microprocessor. Speech code stored in memory. Programable speaking speed in
male or female voice. Single 5 v supply. 24 pin DIP
3/$1
data sheets and application notes 14 pages $.50 but no charge if you
purchase 15 or more parts.

Schottky barrier diodes in quad ring configuration. Used for balanced mixer
at 800-900 MHz NEC part # ND487R1-3R. 10/$1.00
I can only find a 1 line description for this part in my NEC catalog. The
first person to send me a mfgr's data sheet on this part will get $10 of
parts for free. (your choice, not valid for shipping cost)

Transistors TO-92 plastic 10/$1 100/$8.00
Motorola
BC557B PNP VCEO=45, typ HFE=290@IC 2 mA, typ fT 320Mhz

BC547B NPN VCEO=45, typ HFE=290@IC 2 mA, typ fT 300Mhz

General Instrument yellow and green LEDs. T1 size with long 1 inch leads.
25/$1

Motorola MHW803-1 blue brick power amp module. new $8 each
30dB gain with 1mW input. Optimized for 850MHz but will still deliver 2
watts out at 900 MHz. 7.5 volt supply Use to boost power of Rabbit for ATV.
Data sheet included. I have quantity 8 MHW803-3 optimized for 890-940 MHz
for $12 each.

MHW812A3 blue brick 12 watts class C optimized for 870-950 Mhz. 20 DB gain
12 volt supply removed from working equipment marked with house number but
guaranteed to be as represented. Data sheet included. only 12 available $6
each

Ferrite core choke for RF filtering. Quarter inch diameter by .4 inch
length. Has six holes. Use as supplied with 2 turns bare wire or clip &
wind your own. 12/$1.00

Smaller ferrite core with only one hole. Wound with #28 solid wire.
Covered with plastic shrink sleeve. 15/$1.00
yellow 2 turns
brown 3 turns
green 5 turns

Dipped mica caps most have leads clipped and formed for PCB insertion
Values range from 12pf to 10,000 pf with many gaps Inquire for values you
want. 12/1.00 for smaller sizes to 8/$1.00 for largest.

Disc ceramic caps these have leads clipped & formed for PCB insertion
mfg: MuRata & KCK-
value voltage tolerance diameter lead spacing
.01uF 100 Z .41" .25" (6.35MM)
.01uF 200 Z .45 .25
.02uF 200 Z .53 .25
.1uF 25 Z .5 .375 (9.5MM)

12 parts per bag - 2 bags for $1.00
quantity price $20.00 per thousand, .
.01uF @100V is $18.00 per thousand

Very small polyester film caps - leads clipped for PCB insertion
Wima MKS 2 or FKS2 series (100C) and Panasonic V series (85C) temp rating.
5MM lead spacing (.2")
Parts up thru .1uF measure .approx .275" square (7 MM)

value voltage % tolerance size
3300pf 100 5 7 x 7.2 mm
3900pf 100. 5
6800pf 63 5
.01 63 5
.018 63 5

.022 63 5
.03 63 5
.033 63 5
.039 63 5
.056 63 5
.068 63 5
.1 63 5
.15 63 5 8 x 7.2
.33 50 5 8 x 7.2
1.0 50 5 11 x 7.2

Above caps 12/$1.00 limited quantity on some values.
For some values 100 volt may be substituted for 63 volt.
Make your own assortment: 20% off on 6 or more bags.

POLYESTER FILM CAPACITOR ASSORTMENT
$5.00 each assortment
Nichicon YA series or similar for upright mounting on PC board. Coated with
epoxy resin: rated for +85C. Tolerance 10% or better (most are 5%)
12 pieces each of 16 different values with bonus 30 disc ceramic caps,
.01uf @100v and .1uf @25v. Over 200 total pieces.
typical assortment: some values may change
.value voltage tolerance
.001 100 10
.0015 100 5
.003 100 5
.0033 100 5
.0047 100 10
.01 100 10
.015 100 10
.018 100 5
.022 100 5
.033 100 5
.039 100 5
.047 50 10
.056 100 10
.068 100 5
.082 100 10
.1 100 5

Aluminum electrolytic caps
axial mount with leads suitable for PCB insertion
two bags for a dollar (2/$1)
VALUE QUANTITY PER BAG
1@100 8
1@50 10
5@300 5
10@25 10
22@35 10
47@35 10
47@50 10

75@15 VNP 5 non polarized
100@10 10
100@25 10
220@10 10
220@16 10
220@25 10
330@25 5
1000@50 5
1500@50 3

Tantalum caps dollar a bag
VALUE QUANTITY PER BAG
.1@35 12 dipped resin radial
.39@35 12 dipped resin radial
.68@50 12 molded resin radial Kemet T340 series
1@35 15 hermetic sealed axial
1@35 12 dipped resin radial
1@35 20 dipped resin radial short leads but fit thru PCB
3.3@16 12 dipped resin radial also available on tape
4.7@10 12 molded resin axial full length leads
4.7@25 12 molded resin radial Kemet T340 series
4.7@20 12 dipped resin radial
4.7@20 12 hermetic sealed axial
4.7@25 15 molded resin axial Kemet
6.8@20 15 dipped resin radial
10@25 12 dipped resin radial
15@20 12 dipped resin radial
15@25 15 molded resin axial
15@25 12 molded resin radial Kemet T340
15@35 15 molded resin axial
22@15 15 molded resin axial
22@16 12 dipped resin radial
47@10 12 dipped resin radial
47@20 8 dipped resin radial
68@20 8 dipped resin radial

Bourns cermet trimpots series 3386 3/8" square 5/$1
single turn linear taper
limited quantity on some values
1K side adj
2K top adj
5K side adj
5K top adj
10K top adj
25K side adj
50k top adj
100K top adj
200K side adj
500K top adj

10K 3/4" rectangular series 3069 cermet multi-turn 4/$1

Hirose microphone plug. Used on many imported HTs $6 ea
Hirose # SR30-10PE6P 6 pin plug with threaded lock. Has 5 notches on shell for indexing. Look in Digi-Key catalog for picture

Motorola 6 unit rack charger-battery conditioner for STX portable batteries. Model PLN 1193A. Also have one for MX radio Model PLN1157A. Like new.....never put into service. Copy of manual included. $200 ea plus UPS shipping.

Motorola Intellicharger desk charger for any flip phone or Elite. Rapid charges both NiCd and NiMh batteries and then switches to pulsed "top-off" mode to prevent overcharging. Holds two batteries. Very good condition includes wall transformer. $35

Motorola Intellicharger for brick phone. Works same as above but only one pocket. $30

Switching supply plugs directly into wall socket (US or Japan). About the same size as computer mouse. Well filtered output 1 Amp @ 7.5 V or programable up to 10.5 volts using external feedback resistor. Input 100 to 240 volt. Made by Anam, Daewoo, Phihong and others but no choice because I don't know who made what. Output cord is about 4 foot long with leads at end. May have cosmetic blemishes so I'm not calling these new. $8 ea or 2 for $15.

thank you
baggybob@cris.com
Motorola replacement transistors for 2 way radios.
These 4 parts were ubiquitous in Motorola equipment during the Micor/Maxar era and beyond. TO-92 plastic package

M9642 NPN (48-00869642)
M9643 PNP (48-00869643)

M9570 NPN (48-00869570)
M9571 PNP (48-00869571)
straight leads 8/$1.00
tape & reel 8/$1.00
formed leads for PCB insertion 15/$1.00
inquire for large quantity discount

The following types are 4/$1.00
All are unused old stock
greatly expanded selection of numbers coming soon ?

M9411 JFET-N M9491 NPN
M9528 NPN M9534 ? M9568 NPN M9576 NPN
M9594 NPN
M9619 PNP M9640 NPN M9641 PNP M9648 NPN
M9649 PNP M9658 NPN M9660 FET-P M9673 UJT
M9706 NPN Darlington
M9807 PNP M9839 JFET-N M9867 NPN

many other numbers available, most at same price
No RF power devices

e-mail for further details baggybob@cris.com

2947. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970311051100.AAA08561@ladder01.news.aol.com>
Source record: 96188

In article <33247A12.4BB5@bga.com.nospam>, Chris Broadbent <cfb@bga.com.nospam> writes:

>Since that event, I have become somewhat sensitive to the potential of
>lightning damage. Thus, whenever I don't use my Ham equipment, I
>disconnect the coax, put a plastic bag over the PL259 plug and throw it
>out the door. Then the lightning can vapourise the antenna for all I
>care (it's a #14 copper wire dipole - wire costs $16/500ft reel at Home
>Depot). It's easy enough to make a new antenna, not so easy to make a
>new house.
>
>

Actually, I'ld prefer putting your PL259 onto a SO239 that's grounded on both connectors
(read that shorted on both sides to ground). No static build up that way,
less possibility that you will have to replace your wire too! -art clemons-

2948. Re: Ground Rod Installation w/pipe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970311055301.AAA10869@ladder01.news.aol.com>
Source record: 96189

In article <measures-ya02408000R1003972005380001@news.vcnet.com>, measures@mail.vcnet.com (R. L. Measures) writes:

>>
>However, to comply with the National Electrical Code, you must connect a
>wire from the shield of the coax that is laying out in the yard to the
>Neutral wire in your mains inlet breaker box. -chortle-
>
>Type-C connectors [the RG213 equivalent of BNC connectors] are easier to
>connect and disconnect than PL259s, and they are waterproof, Chris.
>
>--
>--Rich-- ag6k, 805-386-3734

Not true Rich. Only if the cable is brought into the house.

Pete

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

2949. Help : Need info on synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: dvoges@plessey.co.ZA
Message-ID: <5A39C04049@fs14.plessey.co.za>
Source record: 96190

Hi

I woner if anyone out there has a data sheet for a GEC Plessey synth
number NJ8812. This is a very old chip and is not listed in the
current data books.

Regards

E-mail dvoges@plessey.co.za
Snail-mail
David P Voges
P.O Box 30451
Tokai
South Africa
7966
------------------------- end ---------------------------------

2950. Re: ten-tec 6mtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: serrup@baynet.net
Message-ID: <5g306s$pf5$2@news>
Source record: 96191

In <332171F8.18CD@exis.net>, Joseph M Zawodny <zawodny@exis.net> writes:
>Charles Mccurdy wrote:
>>
>> Hi all on the ten-tec model 1209 6mtr transverter kit on the schematic area
>> D20 and on the pc board were is says D20 install that the book want say to
>> install it but you do i just called ten-tec and asked about it.
>>
>> 73s kc5cxu
>>
>
>Anyone want to take a crack at translating this into English? I have a
>1209
>and would like to help this guy, but I have no idea what he is
>saying/asking.
>

>--
>
>Joseph M. Zawodny Dana K. Forrest
>zawodny@exis.net dana@exis.net
>http://wwwp.exis.net/~zawodny

I,m going to purchase the TT 6m transverter kit (2m-6m) and
am all eyes'n'ears re instructions and/or schematic ommisions/errors.
What kind of real RF o/p would this unit have using FM???

Eric..VE3RUE(EN58)
serrup@baynet.net

2951. Re: Need info for a small (3-5watt) 2-meter amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: earlve3ab@igs.net
Message-ID: <5g35cg$12b$1@nntp.igs.net>
Source record: 96192

In article <19970309162701.LAA22968@ladder01.news.aol.com>,
mysonscool@aol.com says...
>
>I have a 1 Watt HT, and I'd like to build a small, around 3-5 watt,
amp
>that I could plug into the bnc jack on the top of my radio, and that
>antenna into the top of that. Somthing that looks like those little
>scanner preamps, I figure tha ta 3-5 watt amp should be able to be
that
>small.
>
>any help on kits/schematics/ideas or whatever might be applicable that
>might help out, please e-mail me.
>
>-Thanks
>I can probably help if no-one else offers to. Feel free to email me.
I have a library of tech data gleaned from ham mags and electronics
mags..it is quite comprehensive. one watt to 5 watts is quite easy to
achieve; you could use a simple one transistor design and a few
handwound coils and capacitors and youre laughing.I built a RF
sensing TR switch for my lil 2 transistor 2 mtr amp and if I can
scare that up too if you wish. 73 earl /...earlve3ab@igs.net

2952. MINI-REVIEW: CPCW-5 xmtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5g3frg$f8r@news1.mnsinc.com>
Source record: 96193

Someone please copy this mini-review to QRP-L

Here is a "First Impression" of the new CAKE PAN CW-5 transmitter
that arrived today.

It is a new TUBE product on the market for hams! What a great way for
all of those new NO CODE TECHS and other beginners to get their feet
wet with a REAL RADIO!

The radio can be bought assembled or as a kit. It comes with a really
good manual and plenty of helpful instructions. Mine was already
assembled and worked great right out of the box. I was on the air
within 10 minutes.

This CW transmitting device uses a specially designed
tranformer that is made just for this rig, plus a 6C4 - 6AQ5 tube
line-up, plug-in coils and a PI-NET output. There is plenty of room
on the chassis for your own mods or add-ons, and later this month
they will begin offering an AM version of the rig, or a modification
kit to add modulation to existing rigs.

I can see adding a semi-break-in circuit, maybe a relay for keying
from my memory keyer etc, later. For tonight I just used the straight
key.

This rig is destined to become a classic!
Once I figured out which tube went where and got the 6C4 and 6AQ5
tubes plugged in OK, I realized that the OTHER 7 pin tube socket
is for the crystals to plug in! A novel approach. I had seen
something like this done with FT-243 crystals in Octal tube sockets plenty
of times.

I plugged it in and
connected an antenna (G5RV and MFJ-949D tuner) and plugged in the
crystal for 3640 kHz that came with it. No one around so I tried a
CQ. It only has ONE tuning control (plate variable) - the PI-NET has
a fixed cap on the antenna side. No problem getting a full 5 watts
out right away (according the notoriously inaccurate wattmeter used
in tuners of this type) - but certainly in the ballpark of 5-6 watts
out all of the time. The rig tunes nicely and has a good note.

Some RTTY signal is hogging the frequency and I get no replies to my
CQs, so I plug in the 3700 kHz rock and move up the band.

SO at 0042 UTC I put out my first CQ on 3700 and got a reply from
W8TMS in TROY, MI - DX!! AND he gave me RST 599! Not bad for a
maiden viyage on the CPCW-5.

Later on I heard K3JO nearby calling CQ and gave 81 year-old Jules a call. He came right back and chatted with me for 35 enjoyable minutes. My report was RST 579 From Narberth, PA up near Philly using his homebrew 2-tube rig with a 6DQ6 final pumping 25 watts to an end-fed wire.

Later at 0135 UTC I tried a CQ again, and got a call from KR4LE. THe band was
getting noisier now, but Emery got me RST 599 in Richmond, VA

My last QSO of the evening came at 0211 UTC, again on 3700 kHz with KB1MJ up in Dedham, MA running a Heath HW-9 QRP rig. Conditions were awful but Paul and I toughed it out!

I hope to work many of you soon with my delightful new glowbug here! I will be QRV evenings on 3640 and 3700 kHz with the CPCW5 rig from VINTAGE RADIO KIT COMPANY.

If you are interested - contact Carl, WB1EYE who supplies these kits at:

427 N. Main Street
Sharon, MA 02067

or you can read more about it on my web pages at:

http://www.mnsinc.com/bry/hamfiles.htm

I have no financial interest in this company - just a happy user of their product.

Anyone else using one - please contact me via e-mail at:

bry@mnsinc.com

72 to all - Bry, AF4K in Gaithersburg, MD

2953. phone patches and transverters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: scd@po.cwru.edu
Message-ID: <5g3h6q$2gn@alexander.INS.CWRU.Edu>
Source record: 96194

Hi I'm looking for any info on phone patches and transverters. infor on
how they work, what different types there are, operation, and if
possible plans for the creation of these (along with theory if possible)
if anyone can lead me in the right direction or offer any help please
e-mail me (I'm on a friends machine right now and don't get to the news
groups all that much)
thanks in advance
-Adam
arg2@po.cwru.edu

2954. Re: VHF EQUIPMENT WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5g3j3t$f8r@news1.mnsinc.com>
Source record: 96195

Douglas johnson <iix@interaccess.com> whistled a happy tune like:

|>LOOKING FOR 1296 TRANSVERTER AND 1/2 OR 7/8 HARDLINE/CONNECTORS REPLY
|>TO IIX@ INTERACCESS.COM ....TNX , DOUG W9IIX

You could check via the unique BUY/SELL -or- VHF/UHF resources at:

http://www.mnsinc.com/bry/hamfiles.htm

Happy hunting!

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

2955. Re: Help : Need info on synthesizer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-11 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <3325566d.16560656@news.lin.foa.se>
Source record: 96196

Hi David
I have the complete data, infact my book is so old it is listed as
advance information!
The data sheet is in fact 6 pages, and I can fax it, if you supply me
with your fax no!
BTW this was looooong before GEC came into the picture..... the
databook was printed 1982.
73
Lasse
dvoges@plessey.co.ZA (David Voges) wrote:

>Hi
>---
>
>I woner if anyone out there has a data sheet for a GEC Plessey synth
>number NJ8812. This is a very old chip and is not listed in the
>current data books.
>
>Regards
>
>---
>E-mail dvoges@plessey.co.za
>Snail-mail
> David P Voges
> P.O Box 30451
> Tokai
> South Africa
> 7966
>-------------------------- end ---------------------------------
>

2956. WTB: Motorola Code Plug 151.4hz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Vic <vgadzik@vivanet.com>
Message-ID: <33269AF1.4740@vivanet.com>
Source record: 96048

Need the tone "code plug" chip for Model HLN4181A, found in Mitrek UHF
radio. Need freq 151.4 only.
Have 107.2 for trade, if you need that tone.

Tnx, Vic AA2YW

2957. Re: 902-928 MHz ISM band stuff for Amateurs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: "Carl R. Stevenson" <carl@ais.net>
Message-ID: <01bc2e7e$c58de8e0$d0c1e1ce@cstevens.usr.com>
Source record: 96117

```
-----BEGIN PGP SIGNED MESSAGE-----

If it's not SS, it is limited to somewhat less than a milliwatt.
SS devices can be approved under Pt 15 for up to 1 Watt.

Carl - wa6vse
carl@ais.net

Tom Sharples <sharples@hooked.net> wrote in article
<331FAB99.7447@hooked.net>...
> Anybody know why these were manufactured with such low power? My copy of
> the CFR 47 (which is a few years old) implies that considerably more
> power would be permitted for unlicensed use, and the 900 Mhz Recoton
> remote headphone I have has a very considerable range (up to 1 mile).
>
> > The transmit power level from the V-Link is only about .2 milliwatts,
so
> > I can't say they the reported "3 blocks" range is not streching it a
bit
> > far. Being a licensed Amateur, I have the option of removing the
> > hardwired antenna and replacing it with an SMA receptical to permit
> > attaching it to better antennas and or amplifiers
> > 73s DE WA1YKL
>
-----BEGIN PGP SIGNATURE-----
Version: 4.5

iQCVAwUBMyX8xeIP1XFmaCFVAQGdAAP/TDoqiuT1OmiE4ocQyVJjK59T23xUiwUx
WxRriNR6IiS/rvCe5PIUHRQ1s3Pua40ZlRjJOc8GqvIklG0bo6hS8o0majQqISU9
17RerVjO1V0A4vrrc9GLLUEx2ikS/04m2u7qp9SSDnjGFnwgaeH0AlcCgaMI4K6S
8+L2Veiu+Es=
=9Bho
-----END PGP SIGNATURE-----
```

2958. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: techno@actcom.co.il
Message-ID: <E6wqrq.7t1@nonexistent.com>
Source record: 96118
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

aa126@fan.nb.ca (William Burrow) wrote:

>Does anybody know the characteristics of IEEE 802.3 thin ethernet cable?
>Is this useful for ham applications?

The heading contradicts the content...
IEEE 802.3 thin ethernet cable is just the regular thin 50ohm coax
(RG-59 I think) or maybe a little better since it's under IEEE control
(I know the IEEE802.3 THICK coax is really high quality, since it must
have strict quality control to allow tapping into it at many points
,up to 30 low capacitance taps per 100 meters. On the other hand, it's
designed only for 10Mbps, not VHF/UHF) .
The heading talks about Cable Television Coax, which here is a white,
low-cost coax feeding CATV signals to the home. Gut feeling: it's not
so good (since it must be cheap and they have lot's of amplifiers
along the way). Yes, I guess someone will have to run a test on this
cable...
Just my 2 cents...

2959. Antenna design needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: fougereg@nbnet.nb.ca
Message-ID: <5g5lid$98g_001@nbnet.nb.ca>
Source record: 96119

I am looking for antenna designs for citizen band radios...

Geoff Fougere
Email fougereg@nbnet.nb.ca

2960. ARRL Handbook wanted for Prison Library

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: bahaus@micron.net
Message-ID: <33264358.2923822@news.micron.net>
Source record: 96120

I teach GED classes inside a prison in Oregon, and I have several students who have an interest in electronics and amateur radio in particular. I would like to know if a ham operator out there might have an older, outdated ARRL handbook he or she might be interested in donating to our prison library. If you would like to help us out, I'd be glad to send you the library's address. These men have rather limited access to books and specialized reading materials such as manuals and handbooks, so if you could help, it would be greatly appreciated. I don't often get to this group, so if you could e-mail me, I'd appreciate it. Thanks.

2961. Tubes needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5g6668$5dn@news1.mnsinc.com>
Source record: 96121

Hi - I need some ECL80 and ECL82 and ECL86 tubes please.

U.S. equivalents are 6AB8, 6BM8 and 6GW8. Anyone have these?

This is to build some simple 1-tube QRP transmitters I want to try.

Anyone have some they don't need? E-mail me please.

bry@mnsinc.com

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

2962. Re: hlp pls, i need change my tone voice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5g651u$5dn@news1.mnsinc.com>
Source record: 96122
Cross-posted to: rec.radio.amateur.homebrew,es.rec.radio.amateur

alfonsog@redestb.es (Alfonso) whistled a happy tune like:

|>Hi, all.

|>I need help to modify my tone voice. I have a problem with my voice,
|>more people, don't think my age, no think my callsign, is similary a
|>girl voice. I want down the frequency to be similary with a men.

|>Do you know any chip, construccion or circuit to made this mod?

|>Thanks for your help. The bests 73's EB3FYJ

Have you considered a sex change?

2963. Re: Walkie-Talkie kits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5g6569$5dn@news1.mnsinc.com>
Source record: 96123

Mark White <markw@Iconnect.net> whistled a happy tune like:

|>Does anyone know of any inexpensive walkie talkie kits, to be used for
|>a 7th grade class project? thanks markw@iconnect.net N9OHS

Hi there Mark - you can find a BUNCH of sources for kist like that at my web site:

http://www.mnsinc.com/bry/hamfiles.htm

Then click on KITS for the list of sources. Many of these folks have catalogs listing small radio transmitter kits, FM wireless mikes etc. "Walkie-talkies" are not so common but I am sure you can find something suitable. Some of the kit catalogs are geared toward school students too!

Bry

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

2964. Re: LIVE MAINE LOBSTERS OVERNIGHT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: wa4ucf@pcc-uky.campus.mci.net
Message-ID: <33260e57.6505830@news.campus.mci.net>
Source record: 96124

This is what they call real
homebrew!!

On 11 Mar 1997 02:08:47 GMT, ezxpress@aol.com (Ezxpress) wrote:

>Live Maine lobsters freshly shipped right from the wharf
>to your home or business Overnight. They make a most
>memorable gift and they're mighty tasty too!
>
>Our lobsters are specially packed in a reusable
>waterproof cooler and ice pack which can also
>be used again. Shipped daily overnight by Federal
>Express. You can't get any fresher than that.
>
>To place an order, kindly call 1-800-456-0133,
>24 hours a day, 7 days a week. Gift Certificates
>are also available on any one of the Lobster Parcels
>described below.
>
>Everything is included in the prices - packaging,
>overnight shipping, lobster cooking & eating instructions,
>and tax. We can even include a personalized message card,
>especially if it should be a gift. Sure is better than always
>sending flowers or candy.
>
>Please have your Visa, Mastercard, or American Express
>credit card ready when calling. Thank you kindly!
>
>All orders to be shipped for next day delivery should
>be called in by 12 noon EST. Saturday delivery is
>available, just add $10.00 to any order.
>
>Lobster Parcels offered are the following:
>(remember everything is included in the price,
>even the overnight shipping)
>
>All lobsters are 1 and a 1/4 pound each or slightly more.
>The toll free number again is 1-800-456-0133.
>
>Lobster Parcel #1 - 2 lobsters - $64.95
>Lobster Parcel #2 - 4 lobsters - $89.95
>Lobster Parcel #3 - 6 lobsters - $109.95
>Lobster Parcel #4 - 8 lobsters - $129.95
>
>Thank again from EzXpress, Home of the LobsterXpress.

>Enjoy!
>

2965. Re: ICOM IC-R7100 commands?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <3326aef4.1185667@news.cmc.net>
Source record: 96125
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Tue, 11 Mar 1997 14:39:34 GMT, rob@pe1chl (Rob Janssen) wrote:

>I am looking for the complete CI-V command set of the IC-R7100 receiver.
>It is no problem to find general docs about CI-V, so I have already built
>an interface and have written a simple program that displays the frequency
>and mode when the receiver stops scanning.
>
>However, I would like to control the AF GAIN depending on the frequency
>where the scan stopped. It is possible according to the user manual, and
>there even is a LED on the front panel that is supposed to indicate that
>the AF GAIN is being remotely controlled.
>But, this command does not appear in the generic CI-V documents that I
>have seen.
>
>Does anybody have a complete IC-R7100 command set, or know where one can
>be obtained?

ICOM America sells a book titled the CI-V Reference Manual for $ 15.00
plus shipping and handling. It does have the commands for the R-7100
included in that book. Later radios now have the command sets
included in the instruction manual for each radio.

Gary

2966. Ethernet Coax FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Peter_Simpson@3mail.3com.COM
Message-ID: <85256458.005014BB.00@hqoutbound.ops.3com.com>
Source record: 96126

Gang --

Maybe someone should put this in a FAQ somewhere

Once and for all: Ethernet coax is OK. It's 50 ohms.
The yellow stuff is basically a bit better than RG-8.
It has double shielding and a #12 ga. solid copper
center conductor. Bend radius is about 2 ft.
The thinnet is an average RG-58. Crimp-on N and BNC
connectors are available. Crimp tools are cheap ($50).

Loss per 100 ft in table below:
(4 digit numbers are Belden part numbers)

Belden 9880 Yellow Ethernet Cable
Belden 9907 Thin Ethernet Cable
loss vs. frequency compared to
Belden RG-8/U, Belden 9913 and Belden RG-58

Freq E'net RG-8 9913 Thinnet RG-58
MHz 9880 8214 9913 9907 8240

1 0.19 0.14 0.1 0.43 0.3
10 0.52 0.51 0.4 1.3 1.1
50 1.20 1.2 0.9 2.9 2.5
100 1.70 1.8 1.3 4.2 3.8
200 2.55 2.7 1.8 6.1 5.6
400 3.90 4.2 2.7 8.9 8.4
700 5.50 5.8 3.6 12.1 11.7
900 6.50 6.7 4.2 13.9 13.7
1000 6.90 7.1 4.5 14.8 14.5
4000 18.0 11.0

Information from Belden "Master Catalog"
(c) 1995

Belden Wire and Cable Comapny
POB 1980
Richmond, IN 47375

(800) BELDEN1
(800) 235-3361

You may also find some orange teflon covered stuff. It has the same
characteristics, but a smaller OD. Belden also makes several
different RG-8 and RG-58 variants. Their characteristics vary.
I've chosen the "best" but a Belden catalog is a good thing to

have, if you're splitting dBs, or want to know the characteristics of a certain Belden product.

I don't work for Belden, or have any financial interest other than some of their cable in my basement.

Peter, KA1AXY

2967. Q:2n3904 as HF/VHF Diode?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Thomas Mahanna <tmahanna@ziplink.net>
Message-ID: <5g6lq2$ul6$1@kayrad.ziplink.net>
Source record: 96127

Hi:
I don't have any high frequency (3-300Mhz) detector diodes, but I
do have a junkbox full of 2n3904 transistors. They have an ft of 300 Mhz.
Is there any reason why I shouldn't use the B-E juction as a detector at
thes frequencies? Thanks for any help.

-Tom

2968. Re: ICOM IC-R7100 commands?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E6xo73.H0o@pe1chl>
Source record: 96128
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In <3326aef4.1185667@news.cmc.net> gfiber@news.cmc.net (Gary Fiber) writes:

>ICOM America sells a book titled the CI-V Reference Manual for $ 15.00
>plus shipping and handling. It does have the commands for the R-7100
>included in that book.

Thanks for the info!
I'll try to order it...

>Later radios now have the command sets
>included in the instruction manual for each radio.

That seems the logical thing to do. Pity they did not think of
that before...

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

2969. Which size torroid core?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: "Todd W. Schifferdecker" <tws@surface.com>
Message-ID: <01bc2f03$89722da0$f30afe26@tws-pc3.surface.com>
Source record: 96129

Greetings,
I am building a switching power supply,
Input 8 VDC,
Output 10-12 VDC, 30 Amps
I wish to use a step-up transformer wound on a torroid. Can someone give me some guidelines on which torroid core to use? I understand that I can use a smaller cross section if I raise the frequency. I plan on using Logic-Level FETs to drive this transformer. I understand that there will be an upper limit on the frequency I can use due to the switching characteristics of theFETs. I wish to use the smallest torroid possible. Some guidelines on frequency and torroid core size would be appreciated.

Thanks,
Todd Schifferdecker
tws@surface.com
#include <disclaimer.std>

2970. FS: Rectifier tubes 87s, 3B28, and GL-673

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: w5kft@nts-online.net
Message-ID: <5g6o54stm2@news.nts-online.net>
Source record: 96130
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boaatanchors

FOR SALE: I have a group of rectifier tubes for sale.

1- 872
4- GE GL-673s with sockets
2- 3B28s with sockets and plate caps.

Will take $35 plus UPS for all of them

Bryan W5KFT

2971. Re: hlp pls, i need change my tone voice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Raj Singh VE6RAJ <singhraj@cadvision.com>
Message-ID: <3326FF17.2CB8@cadvision.com>
Source record: 96131
Cross-posted to: rec.radio.amateur.homebrew,es.rec.radio.amateur

Alfonso wrote:
>
> Hi, all.
>
> I need help to modify my tone voice. I have a problem with my voice,
> more people, don't think my age, no think my callsign, is similary a
> girl voice. I want down the frequency to be similary with a men.
>
> Do you know any chip, construccion or circuit to made this mod?
>
> Thanks for your help. The bests 73's EB3FYJ
>
> ----------

Hi:

Heathkit used to make a gadget called a microlyzer. It allowed you to change the base and treble of your voice before it was fed in to the rig. I use mine the opposite way. I lower the base and raise the treble to max. That way DX thinks they are working a YL!

73
Raj VE6RAJ

2972. Help wanted for the Pixie-2 Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: markv@pixar.com
Message-ID: <5g6u09$da@pixar.com>
Source record: 96132

I was assembling the Pixie-2 transeiver kit that I got last weekend (these kits are made up by HSC). All was going well, until I went to install the inductors. L2 and L3 are fine, but L1 is supposed to be a 15-22 uhenry inductor. The color coding on the inductor looks like orange-red-black to me, which indicates a 32uhenry inductor. Has anybody else had this problem? What problems am I likely to incur if I install this inductor? (I am a total amateur at this kit assembly stuff).

Thanks in advance -

Mark
--
Mark T. VandeWettering Telescope Information (and more)
Email: <markv@pixar.com> http://webspace.com/markv/
<markv@webspace.com> Clear Skies!

2973. Re: ten-tec 6mtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: frussle@erols.com
Message-ID: <333002ca.23562897@news.erols.com>
Source record: 96133

On 11 Mar 1997 07:05:00 GMT, serrup@baynet.net wrote:

>I,m going to purchase the TT 6m transverter kit (2m-6m) and
>am all eyes'n'ears re instructions and/or schematic ommisions/errors.
>What kind of real RF o/p would this unit have using FM???

Ten Tec claims this unit is really intended for 50-52 MHz and FM coverage is not specified or to be expected.

That said, my transverter is capable of transmitting to 53 MHz with no problems. I use my TS-50, with transmit frequencies unblocked, in FM mode, and it worked pretty well up to about 53 MHz. After that, the power dropped off, as did the receive sensitivity. Six meter simplex should be quite do-able.

e-mail me if you want further details.

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

2974. Australian QRP Home Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33270fb5.0@cheese.pcug.org.au>
Source record: 96134

Those who tried the Australian QRP Home Page, but gave up because of the large size of the document may wish to have another go.

Though the content of the page has not changed, the material is now far easier and quicker to access. As well you can go straight to where you want to go quicker, without having to wade through material of little interest.

The popular Novice Notes Online Service has also been upgraded.

73,

--

Peter Parker parkerp@pcug.org.au

Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK
Home Page: http://www.pcug.org.au/~parkerp/

2975. Foxhunt xmtr regulations

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Robert Lyons <boblyons@umich.edu>
Message-ID: <3327143A.6AB@umich.edu>
Source record: 96135

I'd like to adapt a published circuit for an FM broadcast-
band transmitter, to be used as a flea-powered foxhunt xmtr
on the 2M band. Can anyone tell me the rules regarding such
transmitters? For example - must the control operator be
present at all times, or are there provisions for automatic
operation, perhaps under the regs for operating a beacon?
There are a number of newly licensed sub-teenagers in the
neighborhood, and I think they'd enjoy a "micro-foxhunt" in
one of the neighborhood parks, if I can figure out how.

Bob Lyons, KI8AB
new to ham radio and totally ignorant of foxhunts.

2976. Plans of circuit diagrams for modems

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Leonardo Gustavo Scarafiocca <pentotal@impsat1.com.ar>
Message-ID: <33274918.3962@impsat1.com.ar>
Source record: 96136

I need help to find circuit diagrams for modems (TNC) for packet
operation.
in to the band VHF - UHF.

Please, contact to me to E-Mail: pentotal@impsat1.com.ar

Thank you.=

2977. HELP on programming HT-800

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Miro Cavar <sdfs@df.df>
Message-ID: <01bc2f1a$e9267c80$2ce11dc3@multimedia>
Source record: 96137

Hi! If somebody has or know where to find Radio service Software for
programing
Motorola HT-800 please send on E-Mail: bruno.saric@int.tel.hr

Thank You
Miro Cavar

2978. Re: hlp pls, i need change my tone voice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <UmsBfqASNzJzEwta@lfheller.demon.co.uk>
Source record: 96138
Cross-posted to: rec.radio.amateur.homebrew,es.rec.radio.amateur

In article <5g4o64$5r0$1@diana.ibernet.es>, Alfonso
<alfonsog@redestb.es> writes
>Hi, all.
>
>I need help to modify my tone voice. I have a problem with my voice,
>more people, don't think my age, no think my callsign, is similary a
>girl voice. I want down the frequency to be similary with a men.
>
>Do you know any chip, construccion or circuit to made this mod?
>
>Thanks for your help. The bests 73's EB3FYJ

OKI have a Speech Pitch Controller chip, the MSM6322GSK, that should do
what you want. It costs #10.20 (UK) from Maplin, and the circuit is in
their current catalogue. You can shift the pitch of input speech in 17
steps either one octave up or one octave down. Maplin is on 01702
554000.

Leon
--
Leon Heller, G1HSM
leon@lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home)
+44 (0) 1344 385556 (work)

2979. Heath info. & pieces/parts wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: "Roger H. Smith" <goldwing@iquest.net>
Message-ID: <01bc2f41$0e0639c0$adabf6ce@goldwing.iquest.net>
Source record: 96139
Cross-posted to: fido.ham-sale,in.ham-radio,misc.forsale.non-computer,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

Hello !

I've got an old Heath "HW-6502" 2 meter thumb-wheel H.T. (mfg. by
Standard Radio ?)

Im in search of the following parts/pieces :

1. - Owners manual (or good photo-copy)

2. - Ni-cad battery pack (any cond. as long as the shell is OK)

3. - Belt Clip

4. - Charger

I will pay with a USPS money order if the costs are reasonable.

Thanks & 73's ..... Roger N9PMC :-)

2980. FS: Kenwood YK-455C-1 500Hz Filter , Lower priced.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <3326f16c.1333009@news.interbusiness.it>
Source record: 96140
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 70 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

2981. Re: ICOM IC-R7100 commands?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <332766AE.FBF@cedar.net>
Source record: 96141
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Rob Janssen wrote:
>
> In <3326aef4.1185667@news.cmc.net> gfiber@news.cmc.net (Gary Fiber) writes:
>
> >ICOM America sells a book titled the CI-V Reference Manual for $ 15.00
> >plus shipping and handling. It does have the commands for the R-7100
> >included in that book.
>
> Thanks for the info!
> I'll try to order it...
>
> >Later radios now have the command sets
> >included in the instruction manual for each radio.
>
> That seems the logical thing to do. Pity they did not think of
> that before...
>

Don't get too happy. I just got an R-8500, and the listed control codes are <WRONG> They don't work. I wasted a whole day on it, then after much "please hold" from Icom, they tell me "Oh, you need the old codes, they are in our extra book."

Whathell is going on here? That RX wasn't on the shelf for more than 2 weeks, and they are telling me that the codes on the printed manual (that takes about a month lead-time) are NEWER than the software in the rig???

After waiting another day for fedex, finally I have the right data in hand. What a mess!

It's a nice rig, but as usual, the manuals bite.

2982. Re: HUMBUG Monitor Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: dd@adobe.com
Message-ID: <5g6trt$r5c@slack.corp.adobe.com>
Source record: 96142

In article <5g2ie0dqt1@news>,
Tom Molica Lazzaro <tlazzaro@oncomdis.on.ca> wrote:
>Would like to find an eprom with the monitor program used in the
>SBC-02 computer, that was featured in Kilobaud Klassroom, back in
>1980. My board is completed and only need the 2k monitor to run. If
>you no longer use yours and are willing to part with it - please
>advise.Thanks for reading my post,73 Tom.

It's still available from the author, Pete Stark.

See http://gramercy.ios.com/~stark for details.

2983. !FREE BIZ KIT FREE KIT FREE KIT!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: news@newnorth.net
Message-ID: <5g80t7$p70@chile.earthlink.net>
Source record: 96143

If you would like a FREE copy of a
just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

Please read this short message! I am giving
the kit away FREE for the next 5 days.

A typical day for an On Line Entreprenuer...

Wake up 9:00am, warm up a pot of coffee... you push a few
buttons... and your computer makes that familiar sreeek sound...
the connection is made. You check your e.mail, good news: you
have 17 new orders since you went to bed last night.
There is no need to rush... your morning commute only takes
15 seconds.

If you want to make money from the internet you MUST
get this just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARETER KIT"

This kit was designed to reveal the inner most marketing secrets
of the on line world. The only tools required are a computer and a
modem. In it, you will learn the following techniques used by
Professional Internet Marketers.

** The Income Potential from Internet Marketing can set you
free from the rat race and free from a tedious and stressful job.

** You can start part time from home. Work at your own pace

**You do not have to risk any money to get started in
this exploding industry

**No personal contacts are necessary. No face to face selling!
If you can use e.mail you should be making money hand over
fist on the internet

**Take advantage of this 21Century Technology, Today!

**This is a researched, proven, legitimate way to
tap into "THE GOLD RUSH OF THE 90'S"

And get this... When you get our amazing kit you will also
have UNRESTRICTED AND UNLIMITED REPRINT AND
RESELL RIGHTS.

You could earn thousands of dollars by reselling our amazing kit. Imagine the possibilities!!

For a FREE copy of the

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

you can e.mail the publisher's auto responder and recieve it within 30 seconds! Simply send an e.mail to:

detailsnow@answerme.com

Then simply print out the kit and you will be on your way to financial independence and free to live life!

Good Luck!!

2984. wtd: Orr's handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: "Roger A. McCarty" <rmccarty@deltanet.com>
Message-ID: <3327AA9F.6E66@deltanet.com>
Source record: 96144

Looking for Bill Orr's Handbook. If you have an extra copy to sale, I would appreciate hearing from you. Condition not important, as long as it is legible and complete.

Thanks

Roger KD6CC

2985. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Gorsline Family <gorslin@pathcom.com>
Message-ID: <3327A8A6.31AE@pathcom.com>
Source record: 96145
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

It's quite useable. The 100% shield keeps CATV service ingress and egress to a minimum and loss at 2m and 70cm is very acceptable - after all its to be used to 800MHz - I couldn't measure it with a Bird on a 100 foot run at 2m - no 440 slug. The impedence mismatch 50 to 75 is only a 1.3:1 SWR if you can actually measure the feedline versus all the other possibilities. It also works fine at HF - I've used only 5/8" heliax (flea market tail ends) or CATV for HF feedlines (to balun at antenna) for years - the 100% shield really cuts the static pickup from dimmers, acquarium thermostats, Fords driving down the street, etc. when you live in the city centre.

Trick on standard CATV drop cable is to use the F connector properly crimped and then an adaptor to UHF or N - the aluminum foil shield is hard to work with into one of these connectors directly. I learned this the hard way - it took Mac VE9IM / VE3OS to set me straight and lend me his crimping tool.

And the price per meter is usually right. 73, George VE3YV / K8HI

2986. Mastr II manuals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-12 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <332708DC.3D58@Bledsoe.net>
Source record: 96146

I'm looking for GE MASTR II vhf and uhf manuals. I called GE and hope
someone has them a little cheaper.
Thanks,
Sam KF4GQS

2987. Re: ten-tec 6mtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5g7ibo$4ao@news1.mnsinc.com>
Source record: 96049

Have either of you tried 6 metre AM at all?

Bry

frussle@erols.com (Jake Brodsky) whistled a happy tune like:

|>On 11 Mar 1997 07:05:00 GMT, serrup@baynet.net wrote:

|>>I,m going to purchase the TT 6m transverter kit (2m-6m) and
|>>am all eyes'n'ears re instructions and/or schematic ommisions/errors.
|>>What kind of real RF o/p would this unit have using FM???

|>Ten Tec claims this unit is really intended for 50-52 MHz and FM
|>coverage is not specified or to be expected.

|>That said, my transverter is capable of transmitting to 53 MHz with no
|>problems. I use my TS-50, with transmit frequencies unblocked, in FM
|>mode, and it worked pretty well up to about 53 MHz. After that, the
|>power dropped off, as did the receive sensitivity. Six meter simplex
|>should be quite do-able.

|>e-mail me if you want further details.

|>Jake Brodsky, AB3A mailto:frussle@erols.com
|>"Beware of the massive impossible!"

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

2988. Re: 10m-2m transverter project, where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5g7mlb$6k@mtinsc04.worldnet.att.net>
Source record: 96050

I have built a 14mhz - 2m transverter, but it is not well documented.
You may at least get some more ideas from my (relatively) well
documented 14 mhz - 6m transverter. Documentation is available on my
www page below.

73, Woody
--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2989. Re: baggybob's parts & stuff for experimenters & prototypers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: woody white <"eMail "@my.www.page.Mailto>
Message-ID: <5g7nb9$6k@mtinsc04.worldnet.att.net>
Source record: 96051
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew

Two comments....
I believe these are NOT very linear (designed for cellular service) and
may not provide acceptable service for AM ATV... FM - great!

I have used "out of band" bricks successfully in the ham bands, but on
some occations, had to tune the length of the input coax to make the
brick accept drive.

Have fun! Woody

<major snip>
> Motorola MHW803-1 blue brick power amp module. new $8 each
> 30dB gain with 1mW input. Optimized for 850MHz but will still deliver 2
> watts out at 900 MHz. 7.5 volt supply Use to boost power of Rabbit for ATV.

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

2990. collins 208u10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: maureenbh@aol.com
Message-ID: <19970313024400.VAA07312@ladder01.news.aol.com>
Source record: 96052

any information on the use of a coolins 208u10 or 208u3 on the ham bands would be appreciated. k2mmd

2991. F.S. - Tubes and many other items...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970313060700.BAA19704@ladder01.news.aol.com>
Source record: 96053

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #201-T.

2992. Eprom programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: robp@pi.bns.com.au
Message-ID: <332781c4.14521599@news.sa.iinet.net.au>
Source record: 96054

Hi All,

Could someone please point me in the right direction.

Looking information on a home brew eprom programmer suitable for the latest eproms (up to 1 meg) . maybe someone has a URl they could share?

Thanks,

Rob VK5PR

robp@pi.bns.com.au

2993. Re: Australian QRP Home Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: "Kenny A. Chaffin" <kenny@kacweb.com>
Message-ID: <3327E6CF.21AA@kacweb.com>
Source record: 96055

Peter Parker wrote:
>
> Those who tried the Australian QRP Home Page, but gave up because of the
> large size of the document may wish to have another go.
>
> Though the content of the page has not changed, the material is now far
> easier and quicker to access. As well you can go straight to where you
> want to go quicker, without having to wade through material of little
> interest.
>
> The popular Novice Notes Online Service has also been upgraded.
>
> 73,
>
> --
> ____
> Peter Parker parkerp@pcug.org.au
>
> Phone: (06) 285 1004 (ah)
> Amateur Radio: VK1PK
> Home Page: http://www.pcug.org.au/~parkerp/
> ____
Good.
I did look at the page and just shook my head in amazement that anyone
would put everything on one page, breaking a cardinal rule of web
design. Glad to see it's been fixed.

Best Wishes,
KAC - WB0E
Website Design, Programming, Hosting --> http://www.kacweb.com
FREE HAM RADIO SWAP LISTINGS AT: http://www.kacweb.com/swaps/radio/
kenny@kacweb.com

2994. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: Chris Nicholson <csnichol@mail.delcoelect.com>
Message-ID: <3327F5FC.4E7A@mail.delcoelect.com>
Source record: 96056

Dana Myers wrote:
>> >> What if you keyed a repeater with your transmitter that was legal below the
> >> maximum field strength and you are not licensed)? Things can get harry
> >> can't they :)
> >>
> >> Mark
> >
> >
> >Not really, This is straightforward, if you key a repeater you are
> >transmitting in that band and if you are not licensed to transmit in
> >that band you are illegal, regardless of the power of the transmitter.
> >i.e you may not key a transmitter in the 2 meter band unless you have a
> >valid license of at least technician class.
>
> Hmmmm... then what would you say about 2m <-> 10m FM links?
> You know, a 2m box coupled to a 10m box. A Tech can then cause
> the 10m box to transmit without being licensed to transmit
> in that band.
>
> I believe the answer is not so straightforward, at least not
> as you put it. I suspect the answer is that the operator of
> a Part 15 legal device would not be liable for kerchunking the
> ham repeater, though this might be considered interference.
>
> --
> * Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
> * (310) 348-6043 | not be interpreted or represented as *
> * Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *
Dana, We have several 2M repeaters that have switched to PL
squelch because of nearby scanner Local oscillators kerchunking the
system as the scanner runs. Remember 144.xxx + 10.7 (typ scanner i.f.)
equals 154.xxx (typical scanner rx freq.) So the potential is there
if you are unluckey enough to come up with the right combo in your area.
One group even offered to buy one gentelman a new scanner with a
different I.F. freq, He declined. As far the legal aspect goes anyone
who thinks the FCC will do anything about anything where a LARGE fine
is not involved your kidding yourself, we are on our own. As far as the
10M link goes I believe the repeater trustee is responsible for all
emmisions and the transmitter is operating under his call and
privledges so the tech can do his thing and come out 10m on this
machine. If I'm wrong the airwave cops will admonish me on this. (ha)
Chris N9LLO

2995. Re: Need 50-10-10-10 uF @ 350/350/350/25 V Cap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: jfreitag@gsosun1.gso.uri.edu
Message-ID: <jfreitag-1303970834520001@aspen.gso.uri.edu>
Source record: 96057
Cross-posted to: rec.antiques.radio+phono,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,sci.electronics.repair

In article <331F36DF.15FB7483@lucent.com>, Alex Schapira
<schapira@lucent.com> wrote:

> I'm looking for the above mentioned electrolytic cap to restore a
> Hallicrafters S-53A receiver. Its an aluminum can (twist tab mounting),
> 1 3/8" dia, 3" tall.

...
Yeah, nobody is making these things anymore. I did see a blurb in
rec.antiques.radio+phone a while back that there are one or two custom
rebuilders who will put new elements in your old can. Maybe someone can
come up with the name (maybe try Yahoo or Alta Vista for capacitor
rebuilders?)

J. Freitag

--
The opinions herein are those of the author and not any official policy of the University
of Rhode Island

2996. Re: ICOM IC-R7100 commands?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <332802ed.1687419@news.cmc.net>
Source record: 96058
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Wed, 12 Mar 1997 20:30:06 -0600, Dave VanHorn <dvanhorn@cedar.net>
wrote:

>Rob Janssen wrote:
>>
>> In <3326aef4.1185667@news.cmc.net> gfiber@news.cmc.net (Gary Fiber) writes:
>>
>> >ICOM America sells a book titled the CI-V Reference Manual for $ 15.00
>> >plus shipping and handling. It does have the commands for the R-7100
>> >included in that book.
>>
>> Thanks for the info!
>> I'll try to order it...
>>
>> >Later radios now have the command sets
>> >included in the instruction manual for each radio.
>>
>> That seems the logical thing to do. Pity they did not think of
>> that before...
>>
>
>
>Don't get too happy. I just got an R-8500, and the listed control
>codes are <WRONG> They don't work. I wasted a whole day on it, then
>after much "please hold" from Icom, they tell me "Oh, you need the
>old codes, they are in our extra book."
>
>Whathell is going on here? That RX wasn't on the shelf for more than
>2 weeks, and they are telling me that the codes on the printed manual
>(that takes about a month lead-time) are NEWER than the software in the
>rig???
>
>After waiting another day for fedex, finally I have the right data in
>hand. What a mess!
>
>It's a nice rig, but as usual, the manuals bite.
No the commands are correct except for one and that addendum should
have been included with your radio, if not contact ICOM for it. Many
software companies are not haveing troubles with wrong commands in the
R-8500.

Gary

2997. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <3328056a.2324495@news.cmc.net>
Source record: 96059

On Thu, 13 Mar 1997 07:41:32 -0500, Chris Nicholson
<csnichol@mail.delcoelect.com> wrote:

>Dana Myers wrote:
>>> >> What if you keyed a repeater with your transmitter that was legal below the
>> >> maximum field strength and you are not licensed)? Things can get harry
>> >> can't they :)
>> >>
>> >> Mark
>> >
>> >
>> >Not really, This is straightforward, if you key a repeater you are
>> >transmitting in that band and if you are not licensed to transmit in
>> >that band you are illegal, regardless of the power of the transmitter.
>> >i.e you may not key a transmitter in the 2 meter band unless you have a
>> >valid license of at least technician class.
>>
>> Hmmmm... then what would you say about 2m <-> 10m FM links?
>> You know, a 2m box coupled to a 10m box. A Tech can then cause
>> the 10m box to transmit without being licensed to transmit
>> in that band.
>>
>> I believe the answer is not so straightforward, at least not
>> as you put it. I suspect the answer is that the operator of
>> a Part 15 legal device would not be liable for kerchunking the
>> ham repeater, though this might be considered interference.
>>
>> --
>> * Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
>> * (310) 348-6043 | not be interpreted or represented as *
>> * Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *
> Dana, We have several 2M repeaters that have switched to PL
>squelch because of nearby scanner Local oscillators kerchunking the
>system as the scanner runs. Remember 144.xxx + 10.7 (typ scanner i.f.)
>equals 154.xxx (typical scanner rx freq.) So the potential is there
>if you are unluckey enough to come up with the right combo in your area.
>One group even offered to buy one gentelman a new scanner with a
>different I.F. freq, He declined. As far the legal aspect goes anyone
>who thinks the FCC will do anything about anything where a LARGE fine
>is not involved your kidding yourself, we are on our own. As far as the
>10M link goes I believe the repeater trustee is responsible for all
>emmisions and the transmitter is operating under his call and
>privledges so the tech can do his thing and come out 10m on this
>machine. If I'm wrong the airwave cops will admonish me on this. (ha)

> Chris N9LLO

Chris

Helper Instruments once made a portable service monitor. The bases for this monitor was a scanner. Helper merely blocked with a front panel plate the unecessary buttons such as the scan buttom. The scanner looked like an early version of a bearcat or regebcy. The monitor worked fine, used on for several years as a portable monitor for service calls. The monitor wirked as you described above from nearby scanners.

Gary

2998. Re: Heath info. & pieces/parts wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: n4jvp@ix.netcom.com
Message-ID: <332c6e50.1151054@nntp.ix.netcom.com>
Source record: 96060
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap

Possible starting points are
http://www.cyberventure.com/heathkit/default.html
and
http://members.aol.com/wwheco1/index.htm

On 12 Mar 1997 23:50:28 GMT, "Roger H. Smith" <goldwing@iquest.net>
wrote:

>Hello !
>
>I've got an old Heath "HW-6502" 2 meter thumb-wheel H.T. (mfg. by
>Standard Radio ?)
>
>Im in search of the following parts/pieces :
>
>1. - Owners manual (or good photo-copy)
>
>2. - Ni-cad battery pack (any cond. as long as the shell is OK)
>
>3. - Belt Clip
>
>4. - Charger
>
>
>I will pay with a USPS money order if the costs are reasonable.
>
>Thanks & 73's ..... Roger N9PMC :-)
>
>

2999. Re: Foxhunt xmtr regulations

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: Allen Wallace <allen_wallace@powertalk.dtint.com>
Message-ID: <33281ca8.0@news.itsnet.com>
Source record: 96061

In article <3327143A.6AB@umich.edu> Robert Lyons, boblyons@umich.edu
writes:
>I'd like to adapt a published circuit for an FM broadcast-
>band transmitter, to be used as a flea-powered foxhunt xmtr
>on the 2M band. Can anyone tell me the rules regarding such
>transmitters?

Put a voice or CW id on it, but I wouldn't bother with automatic control,
just keep a control operator within 10-15 minutes away. This should
suffice the control requirment.

3000. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: Demolition Man <NOSPAM.demoman@rollanet.org>
Message-ID: <33282D79.744D@rollanet.org>
Source record: 96062

> The 2-> 10 box is called a rptr (provided the 10mtr system is within
> 29.5-29.7) and is PERFECTLY legal for a TECH to use from
> 2mtrs...CROSSband rptrs have been around for years...as long as the
> CALLSIGN of the 10mtr tx is a General or above...
> Now below 29.5, its not a rptr....and cannot be retransmitting ANY 2mtr
> signal automatically.....
>
> Chris
> WB5ITT

depends on how automatic. i have a remote base on my 6m, 440mHz
machine.
while it certainly doesn't repeat all the time, it does when i want it
to.
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3001. Re: MODS for Icom IC-725 HF Transciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: Demolition Man <NOSPAM.demoman@rollanet.org>
Message-ID: <33282F2D.59F@rollanet.org>
Source record: 96063

Leith & Deborah Marshall wrote:
>
> Does anyone have documented mods to wide band transmit (for marine
> operation) this transciever. If so could you please e-mail these to me.
>
locat PLL board and cut diode D5
reset the micro [hold function & MW and turn power on]
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3002. Re: Help wanted for the Pixie-2 Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: Ed Loranger <loranger@sr.hp.com>
Message-ID: <3328485C.431C@sr.hp.com>
Source record: 96064

Hey! That's great your building this rig. I've
found very little information on similar, simple
projects for QRP. I've been all over the net
and most everyone wants you to BUY!

I would go ahead and put it in. This inductor
will most likely improve response in the 80 M. band.

If you wish, use a small low frequency torroid
and wind 6-10 turns of 22 AWG wire on it and see
what you get. It worked fine for me with 6 turns.

As a direct conversion receiver/xmtr, you'll notice
the oscillator beat on a nearby receiver. Also you
will probably get a nearby AM Radio Station if you dont
change the output capacitor to 100 pf. You absolutely
must use a resonant wire with this one. I found that
a 66 ft end fed or a dipole with 33 ft. legs works great.
If you play around with a short antenna you'll think
there's something wrong -- the local AM broadcast station
will be overpowering! Don't do any troubleshooting
until you've got it hooked up right.

One more thing, the keying wire is in series with
the output/mixer transistor and the DC resistance of
a long connection to the key will adversely affect
output power. Keep it short or start looking for
a switching transistor to bypass the 10 K ohm idling
resistor (it is used for receive mixing).

If you need any more information I can email
you the original circuits and a 700 Hz RIT/XIT mod
I found on the web. Unfortunately the mod forces
a +/- supply, requiring another battery.

72 de WE6W QRP .3 Watts QSX 7040 KHz.

--
mailto:loranger@sr.hp.com

3003. Electonics Prototype boards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: Brian Mork <mork@usa.net>
Message-ID: <3328449E.5CBE@usa.net>
Source record: 96065
Cross-posted to: sci.electronics.equipment,sci.electronics.repair,rec.radio.amateur.homebrew,misc.forsale.non-computer,alt.marketplace.funky-stuff.forsale

```
Protoboards for sale:

3 x stradle boards (48 rows of 5 connects on
each side of the center stradle)
4 x bus bars (same heigth as the wide boards)
Instructions & screws to mount all seven.

Mouser sells equivalent boards for about $29.37.
I'll sell you everything for $20+shipping, prepaid.

--
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available
```

3004. Re: ICOM IC-R7100 commands?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: Dave VanHorn <dvanhorn@cedar.net>
Message-ID: <3328817B.1DB2@cedar.net>
Source record: 96066
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

> >After waiting another day for fedex, finally I have the right data in
> >hand. What a mess!
> >
> >It's a nice rig, but as usual, the manuals bite.
> No the commands are correct except for one and that addendum should
> have been included with your radio, if not contact ICOM for it. Many
> software companies are not haveing troubles with wrong commands in the
> R-8500.
>
> Gary

It's more than one. I don't have either the rig or manual at this
location yet, they are with the programmer, but I'll detail what
was different as soon as I can.

Maybe I'm picky, but I called ICOM to verify the manuals, and
specifically
asked for addendums or changes, and was told there were none.
Much hair pulling later, they remembered this tech manual with
what they called "the old codes" and claimed the manual
documented the "new codes".

All I know at this point is the programmer is running just fine now,
and I expect a beta version probably next week.

3005. Re: ICOM IC-R7100 commands?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E700A3.63t@pe1chl>
Source record: 96067
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In <332802ed.1687419@news.cmc.net> gfiber@news.cmc.net (Gary Fiber) writes:

>No the commands are correct except for one and that addendum should
>have been included with your radio, if not contact ICOM for it. Many
>software companies are not haveing troubles with wrong commands in the
>R-8500.

Maybe someone can post the commands from an R-8500 manual, so I can see
if the R-7100 uses a subset of those commands?
(or even better: the R-7100 commands as listed in that Icom ref manual :-)

Rob
--
+----------------------------------+--------------------------------------+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--------------------------------------+

3006. Need help with a Beam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: a043971t@bcfreenet.seflin.org
Message-ID: <5g9vka$eae@nntp.seflin.org>
Source record: 96068

Hello All,
In several weeks there will be a foxhunt, I really want to win
but I need some help on building a 2m beam. I already have a loop but I
need something that I can get a trace on him with. Does anybody have any
ideas, please E-Mail me, thanks a lot

--
KF4MKU
73's to all

Joey Solomon
a043971t@bcfreenet.seflin.lib.fl.us
kf4mku@juno.com

Life is a sport, drink it up!!!

3007. Re: Foxhunt xmtr regulations

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5ga48e$cnt@techsrv1.tech>
Source record: 96069

Allen Wallace (allen_wallace@powertalk.dtint.com) wrote:
: In article <3327143A.6AB@umich.edu> Robert Lyons, boblyons@umich.edu
: writes:
: >I'd like to adapt a published circuit for an FM broadcast-
: >band transmitter, to be used as a flea-powered foxhunt xmtr
: >on the 2M band. Can anyone tell me the rules regarding such
: >transmitters?
:
: Put a voice or CW id on it, but I wouldn't bother with automatic control,
: just keep a control operator within 10-15 minutes away. This should
: suffice the control requirment.

It's pretty simple to build a 10min. timer with a 555 IC also, that way
when the radio is triggered after 10min you either have a CW id or voice
id.

TTYL,
Mike

--
/\
\ Michael Long || President /
/ Callsign: N3YPA || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/

3008. Cordless telephone as a remote for HF radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: david hand <dhand@gdi.net>
Message-ID: <3327EC7F.F1A@gdi.net>
Source record: 96070

The thought occures to me that it shhould be possible to use a cordless phone as the basis to buiild a remote system for my FT990.

The audio goes both ways and the TT pad could be decoded to tune the radio. Has it been done? How well did it work?

Dave Hand WB4HYP
dhand@microdes.com

3009. FREE BIZ KIT FREE BIZ KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: amerin01@interserv.com
Message-ID: <5g9l1j$l53@lal.interserv.com>
Source record: 96071

If you would like a FREE copy of a
just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

Please read this short message! I am giving
the kit away FREE for the next 5 days.

A typical day for an On Line Entreprenuer...

Wake up 9:00am, warm up a pot of coffee... you push a few
buttons... and your computer makes that familiar sreeek sound...
the connection is made. You check your e.mail, good news: you
have 17 new orders since you went to bed last night.
There is no need to rush... your morning commute only takes
15 seconds.

If you want to make money from the internet you MUST
get this just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARETER KIT"

This kit was designed to reveal the inner most marketing secrets
of the on line world. The only tools required are a computer and a
modem. In it, you will learn the following techniques used by
Professional Internet Marketers.

** The Income Potential from Internet Marketing can set you
free from the rat race and free from a tedious and stressful job.

** You can start part time from home. Work at your own pace

**You do not have to risk any money to get started in
this exploding industry

**No personal contacts are necessary. No face to face selling!
If you can use e.mail you should be making money hand over
fist on the internet

**Take advantage of this 21Century Technology, Today!

**This is a researched, proven, legitimate way to
tap into "THE GOLD RUSH OF THE 90'S"

And get this... When you get our amazing kit you will also
have UNRESTRICTED AND UNLIMITED REPRINT AND
RESELL RIGHTS.

You could earn thousands of dollars by reselling our amazing kit. Imagine the possibilities!!

For a FREE copy of the

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

you can e.mail the publisher's auto responder and recieve it within 30 seconds! Simply send an e.mail to:

detailsnow@answerme.com

Then simply print out the kit and you will be on your way to financial independence and free to live life!

Good Luck!!

3010. >FREE NET BIZ STARTER KIT FREE NET BIZ STARTER KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: amerin01@interserv.com
Message-ID: <5g9psg$n95@lal.interserv.com>
Source record: 96072

If you would like a FREE copy of a
just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

Please read this short message! I am giving
the kit away FREE for the next 5 days.

A typical day for an On Line Entreprenuer...

Wake up 9:00am, warm up a pot of coffee... you push a few
buttons... and your computer makes that familiar sreeek sound...
the connection is made. You check your e.mail, good news: you
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This kit was designed to reveal the inner most marketing secrets
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** The Income Potential from Internet Marketing can set you
free from the rat race and free from a tedious and stressful job.

** You can start part time from home. Work at your own pace

**You do not have to risk any money to get started in
this exploding industry

**No personal contacts are necessary. No face to face selling!
If you can use e.mail you should be making money hand over
fist on the internet

**Take advantage of this 21Century Technology, Today!

**This is a researched, proven, legitimate way to
tap into "THE GOLD RUSH OF THE 90'S"

And get this... When you get our amazing kit you will also
have UNRESTRICTED AND UNLIMITED REPRINT AND
RESELL RIGHTS.

You could earn thousands of dollars by reselling our amazing kit. Imagine the possibilities!!

For a FREE copy of the

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

you can e.mail the publisher's auto responder and recieve it within 30 seconds! Simply send an e.mail to:

detailsnow@answerme.com

Then simply print out the kit and you will be on your way to financial independence and free to live life!

Good Luck!!

3011. ------>>>>>>CASH IN ON THE NET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: amerin01@interserv.com
Message-ID: <5g9uos$p4a@lal.interserv.com>
Source record: 96073

If you would like a FREE copy of a
just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

Please read this short message! I am giving
the kit away FREE for the next 5 days.

A typical day for an On Line Entreprenuer...

Wake up 9:00am, warm up a pot of coffee... you push a few
buttons... and your computer makes that familiar sreeek sound...
the connection is made. You check your e.mail, good news: you
have 17 new orders since you went to bed last night.
There is no need to rush... your morning commute only takes
15 seconds.

If you want to make money from the internet you MUST
get this just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARETER KIT"

This kit was designed to reveal the inner most marketing secrets
of the on line world. The only tools required are a computer and a
modem. In it, you will learn the following techniques used by
Professional Internet Marketers.

** The Income Potential from Internet Marketing can set you
free from the rat race and free from a tedious and stressful job.

** You can start part time from home. Work at your own pace

**You do not have to risk any money to get started in
this exploding industry

**No personal contacts are necessary. No face to face selling!
If you can use e.mail you should be making money hand over
fist on the internet

**Take advantage of this 21Century Technology, Today!

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tap into "THE GOLD RUSH OF THE 90'S"

And get this... When you get our amazing kit you will also
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You could earn thousands of dollars by reselling our amazing kit. Imagine the possibilities!!

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"THE COMPLETE INTERNET BUSINESS STARTER KIT"

you can e.mail the publisher's auto responder and recieve it within 30 seconds! Simply send an e.mail to:

detailsnow@answerme.com

Then simply print out the kit and you will be on your way to financial independence and free to live life!

Good Luck!!

3012. FREE COMPLETE NET BIZ STARTER KIT FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: amerin03@interserv.com
Message-ID: <5gad9n$1n5@lal.interserv.com>
Source record: 96074

If you would like a FREE copy of a
just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

Please read this short message! I am giving
the kit away FREE for the next 5 days.

A typical day for an On Line Entreprenuer...

Wake up 9:00am, warm up a pot of coffee... you push a few
buttons... and your computer makes that familiar sreeek sound...
the connection is made. You check your e.mail, good news: you
have 17 new orders since you went to bed last night.
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detailsnow@answerme.com

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Good Luck!!

3013. INTERNET HOME WORKERS NEEDED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: amerin03@interserv.com
Message-ID: <5gag2l$2pn@lal.interserv.com>
Source record: 96075

If you would like a FREE copy of a
just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

Please read this short message! I am giving
the kit away FREE for the next 5 days.

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buttons... and your computer makes that familiar sreeek sound...
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detailsnow@answerme.com

Then simply print out the kit and you will be on your way to financial independence and free to live life!

Good Luck!!

3014. !NET HOME WORKERS NEEDED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-13 00:00:00 UTC
From: amerin03@interserv.com
Message-ID: <5gajvd$491@lal.interserv.com>
Source record: 96076

If you would like a FREE copy of a
just released business kit called:

"THE COMPLETE INTERNET BUSINESS STARTER KIT"

Please read this short message! I am giving
the kit away FREE for the next 5 days.

A typical day for an On Line Entreprenuer...

Wake up 9:00am, warm up a pot of coffee... you push a few
buttons... and your computer makes that familiar sreeek sound...
the connection is made. You check your e.mail, good news: you
have 17 new orders since you went to bed last night.
There is no need to rush... your morning commute only takes
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Good Luck!!

3015. Re: ICOM IC-R7100 commands?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <3328d0f6.4980565@news.cmc.net>
Source record: 96077
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

On Thu, 13 Mar 1997 16:36:43 -0600, Dave VanHorn <dvanhorn@cedar.net>
wrote:

>> >After waiting another day for fedex, finally I have the right data in
>> >hand. What a mess!
>> >
>> >It's a nice rig, but as usual, the manuals bite.
>> No the commands are correct except for one and that addendum should
>> have been included with your radio, if not contact ICOM for it. Many
>> software companies are not haveing troubles with wrong commands in the
>> R-8500.
>>
>> Gary
>
>It's more than one. I don't have either the rig or manual at this
>location yet, they are with the programmer, but I'll detail what
>was different as soon as I can.
>
>Maybe I'm picky, but I called ICOM to verify the manuals, and
>specifically
>asked for addendums or changes, and was told there were none.
>Much hair pulling later, they remembered this tech manual with
>what they called "the old codes" and claimed the manual
>documented the "new codes".
>
>All I know at this point is the programmer is running just fine now,
>and I expect a beta version probably next week.

The CI-V reference manual listed commands for all prevoius radios that
had the CI-V command set available to them.

It is recommended to those whom need some more assistance with the
command set that the radio instruction manual provides. The CI-V
Reference Manual goes further than the product instruction manual does
in explaining the commands and how they are used.

The CI-V reference manual is for out of date radios. Now ALL of the
commands are in the radio instruction manual. One will need this CI-V
Reference manual for writing programs for radios prior that the
IC-820H.

And yes all of the available commands are in the R-8500 manual and
are correct except for ONE command. ICOM is correct there are no
updates for the command set on the R-8500. I know of 4 programmers
who are NOT have any difficulity programming the R-8500 with the

supplied command set in the instruction manual. Geez even U.S. government agencies are finding the command set to work fine.

I would be interested in your findings, please report them to 75540.525@compuserve.com

Gary

No-Bullshit told or listened to here

3016. Manuell for HW-8 ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: Uwe Cappeller <cappelle@mailer.uni.marburg.de>
Message-ID: <5gbe1pldt2@surz03fi.HRZ.Uni-Marburg.DE>
Source record: 96078

Thank for reading this message!

I am searching a manuall an the connecting diagramm for a Heathkit
HW-8. Can anybody help me ?

73/55 de Uwe
DL5FDK

3017. WANTED: Any info on Lettine Radio 6m a-m xmtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5gbkh9$168@sf18.dseg.ti.com>
Source record: 96079
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I was given (for free) an old Lettine Radio 6-meter a-m transmitter
this week. It's rough, but potentially restorable. It's crystal-
controlled, uses a 6146 in the PA, a 6V6 speech amp, and two 6V6's
in the modulator. Does anyone have any information on this unit?
I don't know what the model number is (the paint is flaked off in
that area).

What the heck... if I can't find any info on it, it will supply
lots of great parts for my junkbox...

73 de K5DH

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

3018. Wanted: Manual TenTec Corsair II

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <332b667e.1318364@news5.inter.NL.net>
Source record: 96080

Hello OM, I have bought an TenTec Corsair II, but do not have the manual
and/or service manual. Who knows how to become this manual ? I can pay
by creditcard or by sending green stamps.
Thanks in advance,

Bart Mudde PA3GGM
Ds. Schoutenlaan 3
4797 CC Willemstad
The Netherlands

73 es cuagn de Bart PA3GGM.

3019. Re: Cordless telephone as a remote for HF radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: bill harris <billharr@pop.flash.net>
Message-ID: <5gbr2b$1h3$2@excalibur.flash.net>
Source record: 96081

david hand <dhand@gdi.net> wrote:
>The thought occures to me that it shhould be possible to use a cordless
>phone as the basis to buiild a remote system for my FT990.
>
>The audio goes both ways and the TT pad could be decoded to tune the
>radio. Has it been done? How well did it work?
>
As an experiment, I connected a cordeless phone to my phone patch. By
setting the rig on vox I could talk/listen through the cordless phone
from about a block away. It worked quite well, altough I didn't have any
way to change frequencies, but no reason it could not be done.

K5MIL

3020. please help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: cool guy <cool@cool.net>
Message-ID: <01bc302b$705cfb00$cc5004c7@toiletry>
Source record: 96082

This is not really amature radio, but I know you probably know how to do this.

I want to build a small AM or FM transmitter. I want to have it transmit around
a mile and as small as possible. Does anyone have schematics for something like that?
Or just want to help a guy who has been looking for months and cant find anything he can use.

3021. Texas TIC108?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: chalpm@hqlab.ICO.Olivetti.COM
Message-ID: <199703131941.LAA15917@atcnet.ICO.Olivetti.Com>
Source record: 96083

I have a component Texas TIC108 TO220 case, but I don't know the characteristic? It is a SCR or TRIAC???

Thanks

73 de IW1DZD

3022. IC-706

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: Freeman Cheong <freeman@macau.ctm.net>
Message-ID: <33294772.4185@macau.ctm.net>
Source record: 96084

Hello, Doug:

I took the rig(IC-706) have no change to government to get
approval but failed. The officer said that my rig's receive frequency
must lower 146Mhz. I removed D60 and
installed it at D58. The transmit frequency can change to 144-146Mhz but
receive change
nothing.I removed D58 and install it at D57.The HF transmit frequency
have little
change and VHF within 144-146Mhz.The receive frequency still have no
change.I think that the D57,D58,D59,D60 just change the transmit
frequency.I think it will have some
diode to change receive frequency. Would you send me some information
about the diode
that the microprocesser use to change frequency?
If I can not change the receive frequency that suitable to
grovernment, my rig
will become a rubbish.I spent about 4 months and HK$7300 for it :-(.
Best Regards, Freeman(XX9ER)

3023. IC706

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: Freeman Cheong <freeman@macau.ctm.net>
Message-ID: <33294855.20E7@macau.ctm.net>
Source record: 96085

Hello, Doug:

I took the rig(IC-706) have no change to government to get
approval but failed. The officer said that my rig's receive frequency
must lower 146Mhz. I removed D60 and
installed it at D58. The transmit frequency can change to 144-146Mhz but
receive change
nothing.I removed D58 and install it at D57.The HF transmit frequency
have little
change and VHF within 144-146Mhz.The receive frequency still have no
change.I think that the D57,D58,D59,D60 just change the transmit
frequency.I think it will have some
diode to change receive frequency. Would you send me some information
about the diode
that the microprocesser use to change frequency?
If I can not change the receive frequency that suitable to
grovernment, my rig
will become a rubbish.I spent about 4 months and HK$7300 for it :-(.
Best Regards, Freeman(XX9ER)

3024. Re: WE6W homepage updated.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: Ed Loranger <loranger@sr.hp.com>
Message-ID: <33299C52.280C@sr.hp.com>
Source record: 96086

Whoops!!! I need two //.

http://www.qsl.net/we6w

I think we definately need RIT for the Pixie2
if we all build it.

--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee
mailto:loranger@sr.hp.com
http://www.qsl.net/we6w

3025. WE6W homepage updated.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: Ed Loranger <loranger@sr.hp.com>
Message-ID: <33299BC0.54FB@sr.hp.com>
Source record: 96087

http:/www.qsl.net/we6w

Ive got a project and all of my Ham
Bookmarks there.

--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee
mailto:loranger@sr.hp.com
http://www.qsl.net/we6w

3026. Re: Cable Television Coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: mramos@originet.COM.BR
Message-ID: <199703141854.PAA16107@netra02.origin.com.br>
Source record: 96088

>Gorsline Family Wrote:
>
> It's quite useable. The 100% shield keeps CATV service ingress and
> egress to a minimum and loss at 2m and 70cm is very acceptable - after
> all its to be used to 800MHz - I couldn't measure it with a Bird on a
> 100 foot run at 2m - no 440 slug.

Wright. The 1/2, 3/4 or more inches CATV "hardline" today are
1GHz rated. I sweept some 75 ohm cable, from 1MHz to 1GHz and found
in some cases a kind of "ringing" between 500 and 800MHz. This ringing
means bad cable construction.
A 100 feet of 1/2 cable have just 1.59dB loss at 450MHz; the same
lenght of 3/4 inch cable have 1.08dB at the same frequency. It's 1GHz loss
is 2.46 and 1.68dB. So, just cut such cables in electric 1/2 wavelenghts
that
the line mismatch go away.

> The impedence mismatch 50 to 75 is
> only a 1.3:1 SWR if you can actually measure the feedline versus all the
> other possibilities. It also works fine at HF - I've used only 5/8"
> heliax (flea market tail ends) or CATV for HF feedlines (to balun at
> antenna) for years - the 100% shield really cuts the static pickup from
> dimmers, acquarium thermostats, Fords driving down the street, etc. when
> you live in the city centre.
>
> Trick on standard CATV drop cable is to use the F connector properly
> crimped and then an adaptor to UHF or N - the aluminum foil shield is
> hard to work with into one of these connectors directly. I learned this
> the hard way - it took Mac VE9IM / VE3OS to set me straight and lend me
> his crimping tool

There is a CATV acessory called "splice-block". This block fits
the CATV standard 'PIN" connectors. It's threads are the same used at PL
259 and N connectors. What I did? Dissassembled some back-to-back PL
259 and N connectors, removed the center pin, solder the PIN CATV center
conductor to it and attatched to this "splice-block". Clean job,
mechanichally
well solved, water and RF proof and return loss guaranteed up to 1GHz
(according with the manufacturers).
Remember that most cable spans means that the CATV companhy
is unable to use all the reel content (normally 760 meters). So, sometimes
there is 30, 25, 45 meter left apart, may be some damage on it that make
them
useless for broadband applications but usefull for us.
For RG59 and RG11 there is BNC an N connectors avialable, crimping

family.

Regards,
Marcus Ramos
PY3CRX
Sao Paulo-Brazil
Hbrewing ATV, SHF, UHF ....

3027. Re: Need help with a Beam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: Ed Loranger <loranger@sr.hp.com>
Message-ID: <3329AFBB.25A8@sr.hp.com>
Source record: 96089

```
This is a multi-part message in MIME format.

--------------24C5640E22BE
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I found this yesterday at:

http://www.geocities.com/SiliconValley/2775/
Ed.
--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee
mailto:loranger@sr.hp.com
http://www.qsl.net/we6w

--------------24C5640E22BE
Content-Type: application/postscript; name="2m_quad.ps"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="2m_quad.ps"

%!PS-Adobe-3.0
%%BoundingBox: 54 72 558 720
%%Creator: Mozilla (NetScape) HTML->PS
%%DocumentData: Clean7Bit
%%Orientation: Portrait
%%Pages: 3
%%PageOrder: Ascend
%%Title: Optimum Spaced 2 Meter Quad
%%EndComments
%%BeginProlog
[ /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef
/.notdef
/.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef
/.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef
/.notdef /.notdef /space /exclam /quotedbl /numbersign /dollar /percent /ampersand
/quoteright
/parenleft /parenright /asterisk /plus /comma /hyphen /period /slash /zero /one
/two /three /four /five /six /seven /eight /nine /colon /semicolon
/less /equal /greater /question /at /A /B /C /D /E
/F /G /H /I /J /K /L /M /N /O
/P /Q /R /S /T /U /V /W /X /Y
/Z /bracketleft /backslash /bracketright /asciicircum /underscore /quoteleft /a /b /c
/d /e /f /g /h /i /j /k /l /m
/n /o /p /q /r /s /t /u /v /w
/x /y /z /braceleft /bar /braceright /asciitilde /.notdef /.notdef /.notdef
/.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef /.notdef
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/space /exclamdown /cent /sterling /currency /yen /brokenbar /section /dieresis /copyright
/ordfeminine /guillemotleft /logicalnot /hyphen /registered /macron /degree /plusminus
/twosuperior /threesuperior
/acute /mu /paragraph /periodcentered /cedilla /onesuperior /ordmasculine /guillemotright
/onequarter /onehalf
/threequarters /questiondown /Agrave /Aacute /Acircumflex /Atilde /Adieresis /Aring /AE
/Ccedilla
/Egrave /Eacute /Ecircumflex /Edieresis /Igrave /Iacute /Icircumflex /Idieresis /Eth
/Ntilde
/Ograve /Oacute /Ocircumflex /Otilde /Odieresis /multiply /Oslash /Ugrave /Uacute
/Ucircumflex
/Udieresis /Yacute /Thorn /germandbls /agrave /aacute /acircumflex /atilde /adieresis
/aring
/ae /ccedilla /egrave /eacute /ecircumflex /edieresis /igrave /iacute /icircumflex
/idieresis
/eth /ntilde /ograve /oacute /ocircumflex /otilde /odieresis /divide /oslash /ugrave
/uacute /ucircumflex /udieresis /yacute /thorn /ydieresis] /isolatin1encoding exch def
/c { matrix currentmatrix currentpoint translate
3 1 roll scale newpath 0 0 1 0 360 arc setmatrix } bind def
/F0
/Times-Roman findfont
dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse} forall
/Encoding isolatin1encoding def
currentdict end
definefont pop
/f0 { /F0 findfont exch scalefont setfont } bind def
/F1
/Times-Bold findfont
dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse} forall
/Encoding isolatin1encoding def
currentdict end
definefont pop
/f1 { /F1 findfont exch scalefont setfont } bind def
/F2
/Times-Italic findfont
dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse} forall
/Encoding isolatin1encoding def
currentdict end
definefont pop
/f2 { /F2 findfont exch scalefont setfont } bind def
/F3
/Times-BoldItalic findfont
dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse} forall
/Encoding isolatin1encoding def
```

```
currentdict end
definefont pop
/f3 { /F3 findfont exch scalefont setfont } bind def
/F4
/Courier findfont
dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse} forall
/Encoding isolatin1encoding def
currentdict end
definefont pop
/f4 { /F4 findfont exch scalefont setfont } bind def
/F5
/Courier-Bold findfont
dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse} forall
/Encoding isolatin1encoding def
currentdict end
definefont pop
/f5 { /F5 findfont exch scalefont setfont } bind def
/F6
/Courier-Oblique findfont
dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse} forall
/Encoding isolatin1encoding def
currentdict end
definefont pop
/f6 { /F6 findfont exch scalefont setfont } bind def
/F7
/Courier-BoldOblique findfont
dup length dict begin
{1 index /FID ne {def} {pop pop} ifelse} forall
/Encoding isolatin1encoding def
currentdict end
definefont pop
/f7 { /F7 findfont exch scalefont setfont } bind def
/rhc {
{
currentfile read {
dup 97 ge
{ 87 sub true exit }
{ dup 48 ge { 48 sub true exit } { pop } ifelse }
ifelse
} {
false
exit
} ifelse
} loop
} bind def
```

```
/cvgray { % xtra_char npix cvgray - (string npix long)
dup string
0
{
rhc { cvr 4.784 mul } { exit } ifelse
rhc { cvr 9.392 mul } { exit } ifelse
rhc { cvr 1.824 mul } { exit } ifelse
add add cvi 3 copy put pop
1 add
dup 3 index ge { exit } if
} loop
pop
3 -1 roll 0 ne { rhc { pop } if } if
exch pop
} bind def

/smartimage12rgb { % w h b [matrix] smartimage12rgb -
/colorimage where {
pop
{ currentfile rowdata readhexstring pop }
false 3
colorimage
} {
exch pop 8 exch
3 index 12 mul 8 mod 0 ne { 1 } { 0 } ifelse
4 index
6 2 roll
{ 2 copy cvgray }
image
pop pop
} ifelse
} def
/cshow { dup stringwidth pop 2 div neg 0 rmoveto show } bind def
/rshow { dup stringwidth pop neg 0 rmoveto show } bind def
%%EndProlog
%%Page: 1 1
%%BeginPageSetup
/pagelevel save def
54 0 translate
%%EndPageSetup
newpath 0 72 moveto 504 0 rlineto 0 648 rlineto -504 0 rlineto closepath clip newpath
161.7 703.4 moveto
18 f3
(The Tech Bench Elmers) show
185.9 686.7 moveto
14 f3
(Amateur Radio Society) show
165.5 653.9 moveto
18 f3
(Two Meter Wavelength) show
100 633.5 moveto
```

```
18 f3
(Optimum Spaced Cubical Quad Antenna) show
186.9 618.9 moveto
12 f0
(By: ) show
207.2 618.9 moveto
12 f0
(John Wendt WA6BFH) show
25.2 609.8 moveto
453.6 0 rlineto 0 -1.4 rlineto -453.6 0 rlineto closepath fill
0 592.3 moveto
12 f0
(In 1976 at the VHF/UHF Conference in Santa Maria, California, a conversation occurred
which) show
0 579 moveto
12 f0
(discussed the merits of various beam antenna designs. During this discussion the comment
was made,) show
0 565.7 moveto
12 f0
("quads don't work on VHF"! This comment spurred an overnight design and assembly project
that) show
0 552.4 moveto
12 f0
(resulted in this 4 element optimum spaced quad beam. This same antenna design won the
antenna gain) show
0 539.1 moveto
12 f0
(measurement contest in the category of highest gain for the shortest boom length. It came
in with a) show
0 525.8 moveto
12 f0
(signal gain of 10.1 dBd. The next highest gain antenna was an Oliver Swan \(later to
become KLM\)) show
0 512.5 moveto
12 f0
("bandpass" "log periodic" type yagi of 13 dB's with a boom better than twice as long. )
show
0 485.9 moveto
12 f0
(The antenna should be assembled on electrically insulating material such as white
polyvinylchloride) show
0 472.6 moveto
12 f0
("PVC" pipe. The first antenna of this type was fabricated of wooden furring strips, and 12
gauge copper) show
0 459.3 moveto
12 f0
(wire. The dimensions are included in this information package along with recommended
design tips.) show
```

```
0 446 moveto
12 f0
(The antenna will provide a fine signal for any two meter home station, and has also worked
well in the) show
0 432.7 moveto
12 f0
(past for mobile or portable applications, as well as transmitter hunts! ) show
0.3 404 moveto
14 f3
(Element dimensions) show
117.3 404 moveto
12 f0
( ) show
0 377 moveto
12 f0
(Using #12 American Wire Gauge \(AWG.\) THHN type copper wire like that used to wire
electrical) show
0 363.7 moveto
12 f0
(receptacles in home 115 Volt AC wiring, the wire lengths will be: ) show
18.1 341.2 moveto
3.3 3.3 c fill
28 337.1 moveto
12 f0
(Reflector \(Ref.\) 86 inches \(making a square loop that is 21.5 inches per side\) ) show
18.1 327.9 moveto
3.3 3.3 c fill
28 323.8 moveto
12 f0
(Driven Element \(D.E.\) 81.5 inches \(or 20.375 inches per side\) [Note feedpoint
polarization] ) show
18.1 314.6 moveto
3.3 3.3 c fill
28 310.5 moveto
12 f0
(1st. Director \(Dir. #1\) 78 inches \(19.5 inches per side\) ) show
18.1 301.3 moveto
3.3 3.3 c fill
28 297.2 moveto
12 f0
(2nd. Director \(Dir. #2\) 75 inches \(18.75 inches per side\) ) show
0 270.6 moveto
12 f0
(Leave the insulation on the wire! Strip off only a 1/2 inch at each end of the wire to
either join and) show
0 257.3 moveto
12 f0
(solder the loop elements for the Reflector and Directors, or to solder on the SO-239 or
other female) show
0 244 moveto
```

```
12 f0
(coaxial connector for the Driven element. The antenna will match 50 Ohm transmission line
directly) show
0 230.7 moveto
12 f0
(with no other device needed. An RF Choke of several turns of coaxial cable is recommended
for) show
0 217.4 moveto
12 f0
(symmetric antenna aiming. ) show
0 190.8 moveto
12 f0
(After cross spreaders have been fabricated that are slightly longer than 1/4 th the
element dimensions,) show
0 177.5 moveto
12 f0
(they should be mounted on the antenna's boom. Let me emphasize again that all structural
portions of) show
0 164.2 moveto
12 f0
(the antenna must be fabricated from non-conductive materials. It is recommended to build
the first such) show
0 150.9 moveto
12 f0
(antenna you attempt from wood. Fabricating all pieces can be done with simple hand tools,
and the) show
0 137.6 moveto
12 f0
(element "spreaders" can be cross notched and secured to the boom with 1/4 X 3 inch bolts,
nuts, and) show
0 124.3 moveto
12 f0
(lock washers. The element spacings are as follows: ) show
18.1 101.8 moveto
3.3 3.3 c fill
28 97.7 moveto
12 f0
(Reflector to Driven Element = 15.25 inches ) show
18.1 88.5 moveto
3.3 3.3 c fill
28 84.4 moveto
12 f0
(Driven Element to Director #1 = 14.75 inches ) show
pagelevel restore
showpage
%%Page: 2 2
%%BeginPageSetup
/pagelevel save def
54 0 translate
%%EndPageSetup
```

```
newpath 0 72 moveto 504 0 rlineto 0 648 rlineto -504 0 rlineto closepath clip newpath
18.1 713.3 moveto
3.3 3.3 c fill
28 709.2 moveto
12 f0
(Director #1 to Director #2 = 36.50 inches ) show
0 680.5 moveto
14 f3
(Construction and Electrical Considerations) show
250.8 680.5 moveto
12 f0
( ) show
0 653.5 moveto
12 f0
(On the drawing with this article you will note the fabrication technique used for the
wooden constructed) show
0 640.2 moveto
12 f0
(antenna. A 1 1/2 inch TV antenna type "U-bolt" is used to mount the boom to the supporting
vertical) show
0 626.9 moveto
12 f0
(mast. 1 inch by 1 inch square stock was used for the boom, and 3/4 inch by 1 inch wooden
strips were) show
0 613.6 moveto
12 f0
(used for the element spreaders. ) show
0 587 moveto
12 f0
(If the antenna is to be vertically polarized for use on FM \(Frequency Modulation\) or AM
\(Amplitude) show
0 573.7 moveto
12 f0
(Modulation\) the feedpoint connector should be installed as shown on the drawing. If
Single Sideband) show
0 560.4 moveto
12 f0
(\(SSB\) or Continuous Wave \(CW\) where horizontal signal polarization is used, the
antenna should be) show
0 547.1 moveto
12 f0
(rotated 90 degrees from that position shown. Thus for SSB or CW the spreaders would be
vertical, and) show
0 533.8 moveto
12 f0
(more to the point, the side of the Driven element where the coax connector is seen, would
be parallel to) show
0 520.5 moveto
12 f0
(the ground! ) show
```

```
0 493.9 moveto
12 f0
(Finally by positioning the coax cable used, running it back to the boom along the driven
element's) show
0 480.6 moveto
12 f0
(spreader, an "RF Choke" type "Balun" can be wound around the boom using about 7 turns of
coax.) show
0 467.3 moveto
12 f0
(Belden RG-213/U or RG-58/AU are recommended. Hold this "choke balun" in place with
electricians) show
0 454 moveto
12 f0
(tape and or plastic "tie-wraps". If the smaller RG-58 is utilized, total coax length
should not exceed 25) show
0 440.7 moveto
12 f0
(feet. Longer runs of this relatively "lossy" cable, will throw away signal gain wastefully
on both receive) show
0 427.4 moveto
12 f0
(and transmit! This smaller cable will also compromise the antenna's power handling
capability. Using) show
0 414.1 moveto
12 f0
(RG-213 the antenna can handle several hundred watts of power. ) show
25.2 391.7 moveto
453.6 0 rlineto 0 -1.4 rlineto -453.6 0 rlineto closepath fill
0 374.2 moveto
12 f0
(Click here for a drawing of the antenna) show
188.2 374.2 moveto
12 f0
( ) show
25.2 365.1 moveto
453.6 0 rlineto 0 -1.4 rlineto -453.6 0 rlineto closepath fill
200.4 335.9 moveto
24 f1
(Next Page) show
0 264.8 moveto
12 f0
(Return to top of page) show
0 251.5 moveto
12 f0
(Return to newsletter Table of Contents) show
25.2 242.4 moveto
453.6 0 rlineto 0 -1.4 rlineto -453.6 0 rlineto closepath fill
0 205.5 moveto
18 f1
```

```
(Other Pages: Tech Bench Elmers) show
gsave
/rowdata 12 string def
0 177.6 translate
8.4 6.3 scale
12 9 8 [12 0 0 -9 0 9]
{ currentfile rowdata readhexstring pop }
image
FFFF4DFFFFFFFFFFFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF353030353548FFFFFFFF353030
4D544135242948FFFF0511355B5D5B4830111D41593529354D594135243041FFFFFFFF35293035
3541FFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF4DFFFFFFFFFFFFFFFFFF
grestore
8.4 177.6 moveto
12 f0
( ) show
11.4 177.6 moveto
12 f0
(Tech Bench Elmers Home Page) show
gsave
/rowdata 12 string def
0 164.3 translate
8.4 6.3 scale
12 9 8 [12 0 0 -9 0 9]
{ currentfile rowdata readhexstring pop }
image
FFFF4DFFFFFFFFFFFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF353030353548FFFFFFFF353030
4D544135242948FFFF0511355B5D5B4830111D41593529354D594135243041FFFFFFFF35293035
3541FFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF4DFFFFFFFFFFFFFFFFFF
grestore
8.4 164.3 moveto
12 f0
( ) show
11.4 164.3 moveto
12 f0
(Web Searches) show
gsave
/rowdata 12 string def
0 151 translate
8.4 6.3 scale
12 9 8 [12 0 0 -9 0 9]
{ currentfile rowdata readhexstring pop }
image
FFFF4DFFFFFFFFFFFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF353030353548FFFFFFFF353030
4D544135242948FFFF0511355B5D5B4830111D41593529354D594135243041FFFFFFFF35293035
3541FFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF4DFFFFFFFFFFFFFFFFFF
grestore
8.4 151 moveto
12 f0
( ) show
11.4 151 moveto
```

```
12 f0
(Antenna Test Range Results: 27 Jan 96) show
gsave
/rowdata 12 string def
0 137.7 translate
8.4 6.3 scale
12 9 8 [12 0 0 -9 0 9]
{ currentfile rowdata readhexstring pop }
image
FFFF4DFFFFFFFFFFFFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF353030353548FFFFFFFF353030
4D544135242948FFFF0511355B5D5B4830111D41593529354D594135243041FFFFFFFF35293035
3541FFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF4DFFFFFFFFFFFFFFFFFF
grestore
8.4 137.7 moveto
12 f0
( ) show
11.4 137.7 moveto
12 f0
(Beam Antenna design contest results: 24 May 96) show
gsave
/rowdata 12 string def
0 124.4 translate
8.4 6.3 scale
12 9 8 [12 0 0 -9 0 9]
{ currentfile rowdata readhexstring pop }
image
FFFF4DFFFFFFFFFFFFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF353030353548FFFFFFFF353030
4D544135242948FFFF0511355B5D5B4830111D41593529354D594135243041FFFFFFFF35293035
3541FFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF4DFFFFFFFFFFFFFFFFFF
grestore
8.4 124.4 moveto
12 f0
( ) show
11.4 124.4 moveto
12 f0
(Why are antennas built to look like they do?) show
gsave
/rowdata 12 string def
0 111.1 translate
8.4 6.3 scale
12 9 8 [12 0 0 -9 0 9]
{ currentfile rowdata readhexstring pop }
image
FFFF4DFFFFFFFFFFFFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF353030353548FFFFFFFF353030
4D544135242948FFFF0511355B5D5B4830111D41593529354D594135243041FFFFFFFF35293035
3541FFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF4DFFFFFFFFFFFFFFFFFF
grestore
8.4 111.1 moveto
12 f0
( ) show
```

```
11.4 111.1 moveto
12 f0
(Transmission Lines and Matching Systems) show
gsave
/rowdata 12 string def
0 97.8 translate
8.4 6.3 scale
12 9 8 [12 0 0 -9 0 9]
{ currentfile rowdata readhexstring pop }
image
FFFF4DFFFFFFFFFFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF353030353548FFFFFFFF353030
4D544135242948FFFF0511355B5D5B4830111D41593529354D594135243041FFFFFFFF35293035
3541FFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF4DFFFFFFFFFFFFFFFFFF
grestore
8.4 97.8 moveto
12 f0
( ) show
11.4 97.8 moveto
12 f0
(MCW "Morse Code" practice net) show
gsave
/rowdata 12 string def
0 84.5 translate
8.4 6.3 scale
12 9 8 [12 0 0 -9 0 9]
{ currentfile rowdata readhexstring pop }
image
FFFF4DFFFFFFFFFFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF353030353548FFFFFFFF353030
4D544135242948FFFF0511355B5D5B4830111D41593529354D594135243041FFFFFFFF35293035
3541FFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF4DFFFFFFFFFFFFFFFFFF
grestore
8.4 84.5 moveto
12 f0
( ) show
11.4 84.5 moveto
12 f0
(Pizza & Beer Meetings) show
pagelevel restore
showpage
%%Page: 3 3
%%BeginPageSetup
/pagelevel save def
54 0 translate
%%EndPageSetup
newpath 0 72 moveto 504 0 rlineto 0 648 rlineto -504 0 rlineto closepath clip newpath
gsave
/rowdata 12 string def
0 709.2 translate
8.4 6.3 scale
12 9 8 [12 0 0 -9 0 9]
```

```
{ currentfile rowdata readhexstring pop }
image
FFFF4DFFFFFFFFFFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF353030353548FFFFFFFF353030
4D544135242948FFFF0511355B5D5B4830111D41593529354D594135243041FFFFFFFF35293035
3541FFFFFFFFFFFF3C3048FFFFFFFFFFFFFFFFFF4DFFFFFFFFFFFFFFFFFF
grestore
8.4 709.2 moveto
12 f0
( ) show
11.4 709.2 moveto
12 f0
(Links to other useful Amateur Radio Web sites) show
237.7 709.2 moveto
12 f0
( ) show
25.2 700.1 moveto
453.6 0 rlineto 0 -1.4 rlineto -453.6 0 rlineto closepath fill
pagelevel restore
showpage
%%EOF

--------------24C5640E22BE
Content-Type: image/gif; name="4lquad.gif"
Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="4lquad.gif"

<encoded_portion_removed>
CjPQpRSvlC9hxpRJpttMmzdx5qShRmdPnz+BBhU6lGhRo0eRJlW6lGlTp0+hhokAADs=
--------------24C5640E22BE--
```

3028. Re: Foxhunt xmtr regulations

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5gcgur$a9p@news.Hawaii.Edu>
Source record: 96090

Robert Lyons, boblyons@umich.edu
>I'd like to adapt a published circuit for an FM broadcast-
>band transmitter, to be used as a flea-powered foxhunt xmtr
>on the 2M band. Can anyone tell me the rules regarding such
>transmitters?

Will it be xtal control? If not, I'd worry about how stable such
a device would be. The folks searching for such a "fox" will be
a bit disappointed if the fox's signal keeps wondering in and
out of their HT's passband. Maybe conduct the fox hunt *on* the
broadcast band and let everyone use Walkman's!
Jeff KH2PZ

3029. FREE: 8051 SBC development system

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: Mike Swaney <mikesw@pop3.harborcom.net>
Message-ID: <3329F5C9.AAF@pop3.harborcom.net>
Source record: 96091

I have an 8051 Intel SBC assembled from a kit. It appears to be well constructed but requires an outboard P/S. It has a TTY type membrane keypad, a two line alpha display, RS-232 port, cassette port, and more. I have the original manual for it in a binder. If you want to get into this device on a budget this might be just what you need. The priority mail rate for this should not be more than $7. Call Mike after 6PM weekdays / whenever on weekends (216) 257-6352 or email me here.

3030. RF parts/tubes/capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-14 00:00:00 UTC
From: Vancouver Electronics <ab7on@paclink.com>
Message-ID: <3329C352.52B@paclink.com>
Source record: 96092

Vancouver Electronics.....can furnish parts for your home brew projects.
We stock many used variable capacitors, tubes and other components. See
our web page at: http://home.paclink.com/users/ab7on/

3031. Re: 2 meter cw qrp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc314b$d7ebe300$7b60b6cd@cbx-nt>
Source record: 95998

Ramsey makes a good little 2 meter Xtal controled FM Mike. Just nip the mike and key the final multiplier. Its real small using surface mounted parts, so I hope you have a good iron!

I use the thing for tracking my High Power Rockets.

Why are you teaching them code anyways? :-)

Sounds like you are doing a great job of teaching them Tech!

Regards

Christopher Cox
KC8FRJ
TRA#4901

Rohn <rohn@pubrats.com> wrote in article <5fsoeg$iv3$1@cobra.minn.net>...
> I was wondering if anyone knew of a source for schematics (or
> preferably a kit) for a two (or six or 440) meter cw qrp transceiver?
>
> I've elmered two (and a third on his way) new hams into the no-code
> license and now we're working on their upgrades to Tech+ and beyond...
> in my experience, sending code is the quickest way to burn it into
> your memory (not to mention removing the fears of that first HF QSO)
> so I'm looking for something that will allow them to practice with
> each other over a short distance (a couple of miles from house to
> house).
>
> Thanks, and 73's
> rohn (n0rtx)
>
>

3032. Re: please help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: falvosa@borg.com
Message-ID: <5gehib$ok2@ns2.borg.com>
Source record: 95999
Body handling: 1 inline base64-encoded payload block was not displayed

"cool guy" <cool@cool.net> wrote:

>This is not really amature radio, but I know you probably know how to do
>this.

>I want to build a small AM or FM transmitter. I want to have it transmit
>around
>a mile and as small as possible. Does anyone have schematics for something
>like that?
>Or just want to help a guy who has been looking for months and cant find
>anything he can use.

Sounds like you should look into the 1,750m band (160kHz to 190kHz).
It should be fairly easy to build a DSB AM transceiver for this band
(and if you block AF from the mic, you should be able to use it for
morse code [which will reach farther than AM, since you're putting
more energy into the carrier, instead of the sidebands]). Should be
fairly cheap, too.

I am currently trying to build my own HF rig; however, it'll also
support the 1750m band as well (just because I'm curious!).

E-mail me, and I'll send you my block diagram, and what schematics I
have so far... :) Be sure to tell me what image format you prefer
(GIF, IFF ILBM, etc.).

==========
"Tongue Tied and Twisted, Just an Earthbound Misfit..." - Pink Floyd

Long live the AMIGA!! HAM Radio: KC5TJA/2, Tech +, 145.450MHz Repeater
http://www.borg.com/~falvosa Utica, NY [FN23]

Project Leader: Dolphin Operating System (mailing list: ddg@qzx.com)

Version: 2.6.2

[Inline base64-encoded payload not displayed]

=Iue9

3033. NEW webpage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: kf4hyb@totally_useless.com
Message-ID: <5gel5s$eav@camel2.mindspring.com>
Source record: 96000
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.equiptment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
http://www.geocities.com/SouthBeach/Sands/1961
Lots of info-links, monthly update features page
```

3034. Looking for oil-filled capacitor!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: Ulf Holt <ulfh@image.no>
Message-ID: <01bc3158$37e57940$227aeac2@default>
Source record: 96001

Need an oilfilled capacitor for my PA project. Need 25-35 mF at 3Kv. Does anyone know where I can get it?

Please mail me (ulfh@image.no)

Cheers and 73

de LA2SL

Ulf Holt

3035. Micor Convesion Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: "David R. Hubbell" <hubbell@ptdprolog.net>
Message-ID: <332AE35A.2EA7@ptdprolog.net>
Source record: 96002

I have a mobile 55w micor that I would like to modify to ham 440 bands
and use as a repeater. If you have converted the Micor or have info on
the conversion I would love to have an email @ hubbell@ptdprolog.net

Thanks for your time.
Dave Hubbell N2KTO
_\\\//_
("0-0")
N2KTO-------------------------------ooo0--(_)--0ooo-----------
-> David R. Hubbell e-mail: hubbell@ptdprolog.net <-
-> Sparta, NJ <-
-> 146.985 131.8pl if in NJ <-

3036. Transformer Recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: falvosa@borg.com
Message-ID: <5geq75$t41@ns2.borg.com>
Source record: 96003
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew
Body handling: 1 inline base64-encoded payload block was not displayed

I'm looking for a transformer, with a two-to-one _winding_ ratio, that can handle both HF and VHF frequencies. Schematic as follows:

```
__
) __
__) (
) (__
__)
```

As you can see, the winding with the greater turns needs to be center tapped for my application. The transformer needs to be able to handle about 15W to 20W of RF power for safety reasons: I'm going to pump no more than 10W through it.

If anyone has a recommendation, please e-mail me or follow up on this newsgroup. I'm looking in particular for part number, manufacturer or order-house, price, and how I can contact them. Many thanks in advance!

```
================================================================================
```
"Tongue Tied and Twisted, Just an Earthbound Misfit..." - Pink Floyd

Long live the AMIGA!! HAM Radio: KC5TJA/2, Tech +, 145.450MHz Repeater
http://www.borg.com/~falvosa Utica, NY [FN23]

Project Leader: Dolphin Operating System (mailing list: ddg@qzx.com)

Version: 2.6.2

[Inline base64-encoded payload not displayed]

=Iue9

3037. Re: collins 208u10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <332AE294.5385@erols.com>
Source record: 96004

MaureenBH wrote:
>
> any information on the use of a coolins 208u10 or 208u3 on the ham bands
> would be appreciated. k2mmd

Assuming that this is not a trolling dx-pedition, suggestions:

1) Have lots of AC power available.
2) Install forced air cooling.
3) Don't use small gauge wire for the antenna.
4) Move to the country.
5) Don't use your real amateur call-sign; or
6) Remove Final Amp tubes and only use the exciter.

On the serious side, if these are the same rigs I've seen in military
COMSTAs,
they are a little bit on the QRO side for Ham applications. If I'm not
mistaken, they are 10 KW and 3 KW (Output!) respectively. I suppose you
could throttle them back a bit. The AC power requirements tend to be on
the
commercial end - 240/3-Phase or some such thing. The cooling,
especially
for the bigger rig, requires a lot of air movement. Aside from that,
they
would probably loaf along just fine in the average contest pileup. ;-}

73 Dave K7HMP

3038. Help w/WAVETEK programmable attn

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: ed picha <edpi@interaccess.com>
Message-ID: <332AEEE9.1012@interaccess.com>
Source record: 96005

Hey folks...

I picked up a WAVETEK 5P2520-LEX programmable attenuator
at a hamfest recently. Anyone have specs or data sheet for it?
Thanks and 73...N9EP

3039. WTB: KEG-O-RATOR AND/OR BAR TAP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: Cody Crnkovich <crnkovcm@miamiu.muohio.edu>
Message-ID: <01bc319a$c09a6600$8c1d3586@croweljk.muohio.edu>
Source record: 96006
Cross-posted to: alt.binaries.hebrew.mac,alt.brewing,alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

I am looking for a keg-o-rater, if anyone has one for sale, please e-mail
me at:

crnkovcm@miamiu.muohio.edu

If you do not have a keg-o-rator, but have a bar tap, also e-mail me.

Thanks,

Cody Crnkovich

3040. Canberra Com.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: "Helge Yngvar Berg." <hyberg@online.no>
Message-ID: <01bc3197$28b1e0a0$9c64d4c1@helge>
Source record: 96007

I need help for getting starting a program with name Turbologg from
canberra communications (versjon 2) in windows 95, my "windows printer"
kant write QSL kard.
I se forward to an response.

LA6DG.

3041. Re: Looking for oil-filled capacitor!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: netking@dircon.co.uk
Message-ID: <5gfb7cfrv2@newsserver.dircon.co.uk>
Source record: 96008

In article <01bc3158$37e57940$227aeac2@default>,
"Ulf Holt" <ulfh@image.no> wrote:
>Need an oilfilled capacitor for my PA project. Need 25-35 mF at 3Kv. Does
>anyone know where I can get it?
>
>Please mail me (ulfh@image.no)
>
>Cheers and 73
>
>de LA2SL
>
>Ulf Holt
Check out the site at http://www.high-voltage-assoc.com/
[High Voltage Association]
They include companies like Plastic Capacitors Ltd, who are well known
for high voltage capacitors like the ones you want.
Amateur radio sources (rallies, clubs, suppliers, magazine ads) exist for
these items second hand, but beware older types which may contain hazardous
PCB (poly-chlorinated biphenyl) instead of oil. It might also be worth
looking for some second hand possibly non-working high voltage power supplies
containing suitable capacitors through Amateur sources.
==========
Colin Seymour G4NNA
http://www.he.net/~netking/index.html
http://www.users.dircon.co.uk/~netking/

3042. crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: rbare <rbare@usa.net>
Message-ID: <332B3455.6AB9@usa.net>
Source record: 96009

I'm looking for 40 meter xtals for a Ramsey QRP transmitter. Anyone know where I can get them "off the shelf?". Thanks, Jerry KB8UBG.

3043. Electronic Components and Test Equipment for Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: harlan@deltanet.com
Message-ID: <5gg6jc$7pd$4@news02.deltanet.com>
Source record: 96010

If you are interested in purchasing ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO COMPONENTS or ELECTRONIC TEST EQUIPMENT,
please request our current listing, to be delivered via email.

Thank you!

harlan@deltanet.com.

3044. GE Mods?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <332B4112.24A0@Bledsoe.net>
Source record: 96011

I have lost my link to the GE MASTR II Modifications. (The ones with the graphic illustrations) Any help recovering this site would be greatly appreciated.
Thanks,
Sam Johnson
KF4GQS

3045. Re: wtd: Orr's handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: Vince <WA2RSX@worldnet.att.net>
Message-ID: <332B73FA.65DB@worldnet.att.net>
Source record: 96012

I have the 19th Editon of The Radio Handbook (Editors and Engineers)
available. It is in good condition.

Roger A. McCarty wrote:
>
> Looking for Bill Orr's Handbook. If you have an extra copy to sale, I
> would appreciate hearing from you. Condition not important, as long as
> it is legible and complete.
>
> Thanks
>
> Roger KD6CC

3046. motorola pager modifications?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <332B6C00.2A63@rollanet.org>
Source record: 96013

Any of you homebrewers out there know anything about pagers? i'm gonna recrystal this one [a yard sale find with no docs!!] for use with tnc and such. nice CQ vhf article on this subject.

the question is: how do i find out its activation code. i remember seeing somewhere that there is a way to make it give me the information. i don't even know the model number. it has the standard beep and vibration type alerts. a backlight and displays the time.

it does say 152.4800 and 1200 baud on the back so it's a vhf type. any help out there?

--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3047. Re: FS: Hallicrafters and other Items:SOLD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: gwilljo@cwo.com
Message-ID: <5gd86c$brf@news.eli.net>
Source record: 96093
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5g09vf$j90@news.eli.net>, gwilljo@cwo.com says...
>
>FOR SALE:
>HEATHKIT SB301 and SB401. Both with manuals and all cables. --
>Includes Desk Microphone (Turner 454C), Heathkit Keyer. The SB401
>needs finals. It worked until the finals went. $500.00 firm. You
>pick up in Sacramento.
>
>NATIONAL NCX-3 (20/40/80 METER PHONE/CW/SSB Transceiver) with External
>Power Supply/Speaker and Manual. Needs work. All tubes test good
>with TV-7D/U. Sometimes when it is first powered on the receiver
>works. Other times it seems to be stuck in transmit mode. $110.00
Firm.
>You pick up in Sacramento.
>
>SILTRONIX 1011D "Comanche" 10/11 Meter Transceiver with Manual.
>The Siltronix Model 1011D SSB Transceiver is an AM/SSB transceiver on
>the 10 meter amateur band (28.5 through 29.0 and a tunable Citizens
>Band receiver. Power is > 300 watts PEP SSB and 60 Watts on AM.
>includes Manual. Needs re-alignment as it was once "detuned" for use
>in novice half of ten meter band. $250.00 Firm. You pick up in
>Sacramento.
>
>PARTING.
>
>HALLICRAFTERS Model S-40B chassis for parts (no tubes no cabinet)
>$20.00. Plus shipping and handling from zipcode 95822.
>
>JACKSON 640 Test oscillator for parts or find Dial Pointer for
>restoration. 10.00 plus shipping and handling from zipcode 95822
>
>ARC-5 R-27 - Good for parts or possible restoration? Includes tubes.
>All but one tests good on TV7-D/U.
>15.00 plus shipping and handling from zipcode 95822.
>
>Greg Jones
>(916) 449-3056
>KB6WKW
>

3048. Re: FS: HEATHKIT:SOLD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: gwilljo@cwo.com
Message-ID: <5gd887$brf@news.eli.net>
Source record: 96094
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5g0a2d$j90@news.eli.net>, gwilljo@cwo.com says...
>
>FOR SALE:
>HEATHKIT SB301 and SB401. Both with manuals and all cables. --
>Includes Desk Microphone (Turner 454C), Heathkit Keyer. The SB401
>needs finals. It worked until the finals went. $500.00 firm. You
>pick up in Sacramento.
>
>NATIONAL NCX-3 (20/40/80 METER PHONE/CW/SSB Transceiver) with External
>Power Supply/Speaker and Manual. Needs work. All tubes test good
>with TV-7D/U. Sometimes when it is first powered on the receiver
>works. Other times it seems to be stuck in transmit mode. $110.00
Firm.
>You pick up in Sacramento.
>
>SILTRONIX 1011D "Comanche" 10/11 Meter Transceiver with Manual.
>The Siltronix Model 1011D SSB Transceiver is an AM/SSB transceiver on
>the 10 meter amateur band (28.5 through 29.0 and a tunable Citizens
>Band receiver. Power is > 300 watts PEP SSB and 60 Watts on AM.
>includes Manual. Needs re-alignment as it was once "detuned" for use
>in novice half of ten meter band. $250.00 Firm. You pick up in
>Sacramento.
>
>PARTING.
>
>HALLICRAFTERS Model S-40B chassis for parts (no tubes no cabinet)
>$20.00. Plus shipping and handling from zipcode 95822.
>
>JACKSON 640 Test oscillator for parts or find Dial Pointer for
>restoration. 10.00 plus shipping and handling from zipcode 95822
>
>ARC-5 R-27 - Good for parts or possible restoration? Includes tubes.
>All but one tests good on TV7-D/U.
>15.00 plus shipping and handling from zipcode 95822.
>
>Greg Jones
>(916) 449-3056
>KB6WKW
>

3049. F.S. HV Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: "Mark C. Olson" <molson@win.bright.net>
Message-ID: <01bc30fd$4cd94da0$LocalHost@molson.cray.com>
Source record: 96095
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.equipment

35 mFd, 2000 Volt DC capacitors for sale
$10 ea. plus shipping. Caps are 6"H x 3 3/4"W x 4 1/2"D, weigh 5.2 lb.
includes mounting brackets
reply to email address below, and include your Zip code to determine
shipping $.
--
==========
molson@win.bright.net
daytime (work) 715-726-8218 voice-mail
night (home) 715-568-5207

Mark Olson N9LTJ
17114-120th Street
Bloomer, WI 54724

3050. Re: please help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-15 00:00:00 UTC
From: rbright@nti.net
Message-ID: <332a08da.41220364@news.wwisp.com>
Source record: 96096

"cool guy" <cool@cool.net> wrote:

>This is not really amature radio, but I know you probably know how to do
>this.
>
>I want to build a small AM or FM transmitter. I want to have it transmit
>around
>a mile and as small as possible. Does anyone have schematics for something
>like that?
>Or just want to help a guy who has been looking for months and cant find
>anything he can use.
>

Go to Wenzel Associates (http://www.wenzel.com/pages/mystrylb.htm)
to find info on building both AM and FM transmitters. Look under RF
transmitter circuits.

Randy

3051. FS:Misc electron tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: triodeel@aol.com
Message-ID: <19970316015200.UAA14113@ladder01.news.aol.com>
Source record: 96014

Antique, Unique & European Tubes
Orig box unless otherwise noted "WB" white box. All unused NOS
except where noted. Items we can't test sold subject to your testing
EF37 (British 6J7 equiv) grey 6 pcs WB
6L6 metal RCA 20 pcs
874 (4 pin voltage reg) 26
7054/8077 10
6080WC 3
EA76 Ampx 4
5V3/5AU4 USA Poss sub 5U4-GB 35
EF80 Misc >25
6686/E81L 4
E90CC Sie 10
6350 (USA) 5
6/30L2 Mazda (UK) 10
6360 4
EL821 Ampx 4
6227/E80L 7
6R4/EC91 Ampx 6
6197 20
8106 5
JAN-5725 >50
EF800 Telfunken 2
5824 10
EL803-s TF 10
5755 10
6688/E180F Valvo 9, Rayth 6
1629 3
7056 22
7060 11 pcs
T-200, sim to 211 but 200W, 2550V rating, 1 pc only
6AR5 5
8136 5
6C6 20
5847/404A WE 11 WB
6D6 10
923 3
715B Raytheon 3 pc
328A Sylv 4
5691 Sylvania 11
337A Sylv 4
HY75 Hytron 1 pc
403B Ericsson >20
4B32 3

6FE5 "hot " sub for 6V6 30 pcs
VVC-60-20 Eimac vacuum capacitor 1
VC-100 vacuum capacitor 1
822 Taylor OB but used 2

TW-150 Taylor used 2
805 Taylor OB appears unused 1
375A 1 WB, looks OK, can't test
8458/YL1240 Siemens WB don't have test data 1
6352 Philips, WB, looks OK
6E5 RCA 5
EM34/6CD7 Mullard 1
DM70/1M3 Mullard 3
6J5-GT Raytheon, KenRad
7C5, (=6V6-GT loktal base) 15 pc
12SN7-GT Tungsol, 1960 date code 30
6K6-GT USA 40
CK 5702 8
5643 13
8056 28393 3
7895 Sylv 11
7587 2
6CW4 Zenith (GE) 15
6AG5 <100 pcs
6AL5/E91AA/5726 >200
6C5 RCA/GE >100
6F5 Rca & others >50
6GK5 >400
6CB6A >100
6AU8 >100
6DT6 >100
6AX4 400 OEM pk
12AX4 100
6F5 RCA >50
6F8-G >50
6SL7-GT GE 20
12FQ7 Japan >50
5965A GE OB >50
5965 GE WB 30
5965 RCA OB 40
6AW8 >100
6005/6AQ5/EL90 >150
19AX4-GTA >65
5725W JAN >50
7258 (6AN8A with 12V fil) 50
5696 >50
12AV7 Syl 30
6HA5/EC900 >100
6GC5 >100
6JC6A >100

6BN8 >25
6GF7 RCA OEM pk >50
6ER5/EC95 >50
6AF4A/6DZ4 >25
R-465 Hammatsu Photocell 50 pc
6FE5 30 pc
12AB5 Sylv(Webcor) 100 pc (6973 but 12V fil)
6GK5 GE (UK & USA mfr) >400
6BN4 >25
Ned Carlson, 773-871-7459 after 12 CT,
PLEASE NOTE OUR NEW AREA CODE.
Visa/MC/Amex/Discover accepted.

3052. WTB: "RADIOMAN 3 & 2"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: dewonder@aol.com
Message-ID: <19970316030600.WAA18051@ladder01.news.aol.com>
Source record: 96015

hello;

i am looking for a copy of the early 1950's to early '60's Navy training manual RADIOMAN 3 &2. will also consider up to early '70's edition and RM 1 & C.

thanks and 73,

Bob, KC5LHR (former navy etr2)

3053. Convert AWA RT80 to 438Mhz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: Peter <gremlin@iaccess.com.au>
Message-ID: <01bc31cb$3e5f8220$954a05cb@gremlin>
Source record: 96016
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I wish to convert a A.W.A. Model RT80 Type 2-M 82004 transceiver with a frequency coverage of 450 - 485Mhz to 438Mhz.
If anyone has had experience with this task I would appreciate any advise and or references that can assist. I believe that a change of crystals and modest retune may be all that is required.

Regards
Peter Miles
VK3YSF
E-mail Address
gremlin@iaccess.com.au

3054. Anyone familiar with this feeder line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: dougd@lrbcg.com
Message-ID: <5ggjbk$hov@news.dx.net>
Source record: 96017
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

BELDEN "CITY COLOR" SHIELDED TWIN-LEAD TV WIRE

Two 26 AWG 7x34 stranded copper-covered steel conductors with Beldfoil shield.

Doug - KC8CGX

--
Sandusky CB Club - Sandusky OH 44870
http://user.aol.com/ralph234/cb-page/cbclub.htm
Gourmet Foods to impress the Boss!
http://www.lrbcg.com/dougd/gourmet.htm
<mailto:dougd@lrbcg.com>

3055. Looking for keplerian elements on the Net.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: Geert PIRENS <pass@glo.be>
Message-ID: <01bc3206$c33d5360$6fb630ce@pass>
Source record: 96018

Hello

I'm looking for keplerian elements ofr amateur sat's and weather sat's and
TV sat's

Can someone tell me where I can find it on the Net?

Thanks for ya help!

Pirens G. ONL2057

3056. Re: Transformer Recommendation?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: Hal Rosser <hmrosser@csranet.com>
Message-ID: <332C30B6.369F@csranet.com>
Source record: 96019
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.homebrew

Samuel A. Falvo II wrote:
>
> I'm looking for a transformer, with a two-to-one _winding_ ratio, that
> can handle both HF and VHF frequencies. Schematic as follows:
> Samuel
you can make your own 4-to-one balun.
use a ferrite torroid core and bifillar windings.
the ARRL antenna handbook has drawings and instructions.
regards
Hal W4PMJ

3057. Wanted: Super Keyer II or Logikey K-1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: John Lockhart <jlockj@minn.net>
Message-ID: <01bc3216$c9bb5ce0$bac99dcc@default>
Source record: 96020

Anyone have a nicely assembled Super Keyer II or
Logikey K-1 keyer they don't need? A friend of mine
likes mine, so I thought I'd try to find one for him.
Please let me know the condition and price. Thanks!

73,

John W0DC
St. Paul, Minnesota

3058. FS Nichrome wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <332C05F5.13ED6989@acsu.buffalo.edu>
Source record: 96021
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

For Sale Nichrome wire

.028 diameter 9.5lb spool

also have :

Chromel-C #22 10.3 lb spool

Chromel-C #19 7.2 lb spool

Alumel #20 5.3 lb spool

Manganin .025 2.7 lb spool

Great find for someone in the parasitic suppressor business/ amplifier building/ thermocouple or research arena.

Best offer.

(for the price police....so what is it worth? and would you know what it is?)

Jim (N2GO)

3059. new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5gh495$78r@camel0.mindspring.com>
Source record: 96022

Are there any investors that can talk to an inventor
without trying to grab the goodies free?

I haven't seen any.

I, BTW, am WB0NRU, and my QTH is domewhat
displaced. I live in Tulsa, 5-land. My call became
a zero area in '75 or so, and I was five years or more
learning not to give my old 4-call.

So, When I moved to 5 country, I kept the zero call.

Nothing wrong, of course, with my
brain
brai
bra
br

but I do
lose track.

For this reason, I like most other prolific inventors,
cannot sell or manage a business, wherewith
leaving myself in the cold.

I have discovered a way to xmit music over a
bandspread of =< 100 Hz. Note that is Hertz
not KiloHertz.

I cannot talk well in a face-off, so I blow it every time.
Any suggestions?

I have already heard the one about find a salesman.

My prob is that I must first sell that person on the idea.
If I COULD sell them, I wouldn't need them.

Catch 22

Hope to hear from someone soon.

Thanx

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

3060. Re: Looking for keplerian elements on the Net.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <332c170c.4201454@news.flash.net>
Source record: 96023

On 16 Mar 1997 12:34:11 GMT, "Geert PIRENS" <pass@glo.be> wrote:

>Hello
>
>
>I'm looking for keplerian elements ofr amateur sat's and weather sat's and
>TV sat's
>
>Can someone tell me where I can find it on the Net?
Try www.amsat.org, they've got them all.
Kerry, WD5ABC

3061. Re: WTB: KEG-O-RATOR AND/OR BAR TAP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <332c16ab.4103961@news.flash.net>
Source record: 96024
Cross-posted to: alt.binaries.hebrew.mac,alt.brewing,alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

On 15 Mar 97 15:45:01 -0500, "Cody Crnkovich"
<crnkovcm@miamiu.muohio.edu> wrote:

>I am looking for a keg-o-rater, if anyone has one for sale, please e-mail
>me at:
>
>crnkovcm@miamiu.muohio.edu
>
>If you do not have a keg-o-rator, but have a bar tap, also e-mail me.
>
>Thanks,
>
>Cody Crnkovich

Cody,
You have a lot of newsgroups in your header, please check them out
more closely next time. rec.RADIO.amateur.homebrew is now about
brewing suds, but home-built radios!
Kerry

3062. Re: WTB: KEG-O-RATOR AND/OR BAR TAP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: Brian Burke <burkefam@icss.net>
Message-ID: <332C1B9C.609@icss.net>
Source record: 96025
Cross-posted to: alt.binaries.hebrew.mac,alt.brewing,alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

Cody Crnkovich wrote:
>
> I am looking for a keg-o-rater, if anyone has one for sale, please e-mail
> me at:
>
> crnkovcm@miamiu.muohio.edu
>
> If you do not have a keg-o-rator, but have a bar tap, also e-mail me.
>
> Thanks,
>
> Cody Crnkovich

Cody, this is a different kind of homebrew newsgroup. We consume our
beer from glass 807 vacuum tubes, not kegs. Brian

3063. wts fox-tango stuff for ft101

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <332BDC2A.4BA1@atl.org>
Source record: 96026

Filters:

YF-31H1.8 unused. original box. $55
3180kHz CF, 1.8kHz 6db BW
Yeasu XF-30A (original filter from 101) $30
3180kHz CF, "SSB filter"

Assorted boards, no docs, 'best guess description':

8BLA (mixer?)
small board labeled "cascade 2"
8AIR double balanced mixer
"dbm mod" same 1496 as above
two more 1496 based dbm board
board labeled "holding double moxer"

Memo from N4ML with 3180kHz xtal and note about 901 notch
filter.

all seven boards and xtal $55

Everything above $125.00 including postage (48 states).

Or trade for HF gear, dead or alive, US, Canadian, Italian, or UK
manufacture.

-bob
wb4mnf

3064. Re: FREE: 8051 SBC development system

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: Mike Swaney <mikesw@pop3.harborcom.net>
Message-ID: <332C7189.139E@pop3.harborcom.net>
Source record: 96027

This system is no longer available.

3065. Re: ten-tec 6mtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: Charles.Mccurdy@1492.conchbbs.com
Message-ID: <ecb_9703162231@conchbbs.com>
Source record: 96028

Hi when you do look at the transformer coils real good i had to redo 1 of my
rf transformers t5.

73s kc5cxu

--
|Fidonet: Charles Mccurdy 1:106/1492
|Internet: Charles.Mccurdy@1492.conchbbs.com
|
| Standard disclaimer: The views of this user are strictly his own.

3066. Re: ten-tec 6mtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: "Brien G. McCrea" <brienm@worldnet.att.net>
Message-ID: <332CC921.2AA7@worldnet.att.net>
Source record: 96029

Jake Brodsky wrote:
>
> On 11 Mar 1997 07:05:00 GMT, serrup@baynet.net wrote:
>
> >I,m going to purchase the TT 6m transverter kit (2m-6m) and
> >am all eyes'n'ears re instructions and/or schematic ommisions/errors.
> >What kind of real RF o/p would this unit have using FM???
>
> Ten Tec claims this unit is really intended for 50-52 MHz and FM
> coverage is not specified or to be expected.
>
> That said, my transverter is capable of transmitting to 53 MHz with no
> problems. I use my TS-50, with transmit frequencies unblocked, in FM
> mode, and it worked pretty well up to about 53 MHz. After that, the
> power dropped off, as did the receive sensitivity. Six meter simplex
> should be quite do-able.
>
> e-mail me if you want further details.
>
> Jake Brodsky, AB3A mailto:frussle@erols.com
> "Beware of the massive impossible!"

Jake,

What Ten-Tec really means is that they have designed and tested it for
50-52 MHz. The spectral purity of the output is not guaranteed from
52-54 MHz although it will transmit in that range. Before using it
above 52 Mhz one should check that its spectral purity (with a spectrum
analyzer) to insure that it meets part 97 regulations.

Brien
KE7WB

3067. BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: Martyn Watts <100722.3014@CompuServe.COM>
Message-ID: <5gh2bp$59t$2@mhade.production.compuserve.com>
Source record: 96030

I&#65533;m trying to build a substantial (35-50A, 13.8 V) PSU for my radio as an experiment. My only problem is that I can&#65533;t find a suitable regulator for it. If anyone out there can help me with a circuit diagram for a suitable regulator or another way of doing it, I&#65533;d be very grateful. I have the transformer, diodes, caps etc

TIA David

E-mail via

MWATTS@COMPUSERVE.COM or
WHITGIFTSC@AOL.COM

--
M Watts PhD. Mega power with an IQ of 197

3068. Re: Surplus LDF5 7/8 Coax, Sydney

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: Glen & Julie Scott <gas@onaustralia.com.au>
Message-ID: <01bc31cd$0f332cc0$LocalHost@default>
Source record: 96031
Cross-posted to: aus.electronics,aus.radio.amateur.digital,aus.radio.amateur.misc,aus.radio.amateur.wicen,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

Too late, nobody wants it, we now chop it up into 800mm lengths and it's
off to the scrap metal merchant with the other offcut cables.

> Cheers
>
> Glen
>
> gas@onaustralia.com.au
>
> http://www.ozemail.com.au/~bobcam/gjs.html

3069. Wanted AL

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-16 00:00:00 UTC
From: "Richard F. Gillette" <r.f.gillette@ieee.org>
Message-ID: <332C1F7D.5F8D@ieee.org>
Source record: 96032

```
This is a multi-part message in MIME format.

--------------27787DF03B2A
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I am looking for do-it-self AL screen sash, but for a
Jalousie Window/s. I figure HAMs that build look at
any AL stock they see, so I posted here. I cannot
find same in the Chicago area, I figure in the warmer
parts more Jalousies, hence screen parts. THANKS
--
Richard F. Gillette PE, W9PE, Board Member, Harper CC \\////
RF gillette inc. PO Box 1605, Palatine, IL 60078-1605 ( oo )
r.f.gillette@ieee.org, v)847-526-2626, f)847-526-2944 ooOO=={}==OOoo=

--------------27787DF03B2A
Content-Type: image/gif; name="SCREEN.GIF"
Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="SCREEN.GIF"

<encoded_portion_removed>
--------------27787DF03B2A--
```

3070. Ge Exec Rcvr Info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: "John R. Flint" <jflint@sprintmail.com>
Message-ID: <332E0F83.2126@sprintmail.com>
Source record: 95948

I'm looking for a Manual/schematic for a GE exec receiver model 4ER48A10. This is a high band solid state receiver that I want to convert to the low split of 130 to 150 Mhz. If you have any info I would appreciate a email.

73's

John
KA0LDB

3071. Re: 900 mhz amateur operation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: wdmilner@atcon.com
Message-ID: <5gjjt3$nh5$3@thor.atcon.com>
Source record: 95949

lar01@sprynet.com (larry) wrote:

>recently, I bought a 800 mhz cordless phone.
>In the process of selecting it and bying it and using it, so far, I
>have been wondering if this phone could be used as a transceiver in
>the 900 mhz amateur band.

Larry you sure it's 800 MHz? All I've seen are 900's.

73, Dean

Dean, VE1CBF VE1CBF@VE1CBF.ns.ca
wdmilner@atcon.com FN96VC

- - ... ... - -

3072. 900 MHz power question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: Les <lcarlson@northernnet.comX>
Message-ID: <01bc326d$f99ef6e0$ac1e92d0@lcarlson.northernnet.com>
Source record: 95950

Any ideas on where one might look or ask to get information to
increase
the distance a 900 MHz cordless home telephone could operate
between the handset and the base.
I live in a rural setting and work in several different out
buildings. None of which are over 100 feet apart. A brand new
fully charged battery in
my 900 MHz phone will barely allow operation between hand set
and base. After the new battery has been used a couple of
weeks, and even if it is
fully charged, operation of the phone breaks up. I normally let
the battery
near fully discharge before fully recharging.
What I'm wondering is if it is possible to connect an
additional 1 1/2
volt rechargeable battery in series? Will this (without ruining
any
circuitry) allow the phone to have a greater more reliable
range?

Thanks,
Les

"Bulk e-mailers can be thwarted by adding an
unnecessary 'character' to your e-mail return address.
-Remove the trailing 'X' from
my address if you wish to reply."

Hillary commenting on the release of subpoenaed documents:
"I'm not going to have some reporters
pawing through our papers.
We are the president."
--

3073. Re: Anyone familiar with this feeder line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: dougd@lrbcg.com
Message-ID: <332cc470.2645487@199.190.65.4>
Source record: 96033

dougd@lrbcg.com (Doug D) wrote:

>BELDEN "CITY COLOR" SHIELDED TWIN-LEAD TV WIRE
>
>Two 26 AWG 7x34 stranded copper-covered steel conductors with Beldfoil shield.
>
>

This feeder line is sort of football-shaped - don't even think about
using it for anything but TV.

Doug

3074. Re: what is nickel metal hydride

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: Marvin Moss <mmoss@gelac.mar.lmco.com>
Message-ID: <332D285B.202C@gelac.mar.lmco.com>
Source record: 96034

larry wrote:
>
> greetings
> i just purchased a cordless phone, 800 mhz, and just realised that it
> uses a nickel metal hydride battery. I am not complaining. It is
> just that how I am going to have to learn about nicket metal hydride
> batteries, hi.
> So far I am developing an expertice on nicad batteries,
> http://home.sprynet.com/sprynet/lar01/nicad.htm
> now I am going to have to learn about these new? ones, hi.
> Larry ve3fxq

Your page on NICAD batteries is very good in fact great. I would suggest a paragraph reviewing the different chips now available to build a reconditioner/charger. I have tried "zapping" batteries also but find that once they have an internal short, clearing the short means that that battery will then have an internal resistive path that shortens the time that the battery will hold the self-charge. This may not be very clear. I hope you can figure out what I tried to say.

Marvin

3075. Cryptic coil description

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: ajass@tabaqui.informatik.rwth-aachen.de
Message-ID: <5gjfjv$550$1@news.rwth-aachen.de>
Source record: 96035

Hallo,

in one of the ARRL-Microwave handbooks, there are coil description
which are absolut cryptic to me.

What means: 4t, 28 swg e.c.w. ?
or 2.5t, 28 swg t.c.w. ?

I guess the t stands for the number of turns. But what is the rest?
Any hints are appreciated.

With best regards
Andreas

3076. Re: Calc. (K) factor.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: Ray Brown <r_brown@getonthe.net>
Message-ID: <01bc3291$ef397c60$b5af32cf@r_brown.getonthe.net>
Source record: 96036

CHRISTOPHER MCCALL <s004cnm@discover.wright.edu> wrote in article
<Pine.OSF.3.93.970311153444.9189A-100000@alpha.wright.edu>...
> On Sat, 8 Mar 1997, H.Silvia wrote:
>
>
> > Subject: Calc. (K) factor.
> >
> > Hi I'm working on J-Pole ant length calculations and am having a
> > difficult time calculating the K factor ratio of wavelength by dia..
> > The antenna and arrl manuals do not explain the calculation formuala
> > enough for me to integrate (the formula itself) into my c++ program as
a
> > variable based on material widths.
> >
> > 73 de Henry KE4WBW
> I've used the formula (1/2 wave in ft.)/freq of interest=dipole
> int ft. Then Dipole in ft. converted to inches. Dipole in inches/(O.D. of
> conductor in inches=K ratio. Use the K in a look up data table to find K
> factor. I round K ratio to fit nearest .01 of K factor. Ie. ratio 441 =
> .94 factor (disclamer those are not valid numbers; I just pulled out of
my
> head for illustration). I've implemented this on my HP-48 G calculator.
My
> feelings on the whole thing is your Calcs. can be exact as significant
> figures allow, but a fudge factor still needs to be introduced in final
> physical implementation and SWR tune up, due to height over terrain,
> ground conductivity, feedline loss, etc... Anyone that knows of a better
> graph (I' m using the one out of '90 Handbook) or better method of calc,
> please let me know. Hopefully more precision= less fudge.

I'm trying to figure out if you two are really trying to figure out the
"K-factor", aka the effective earth's radius factor, or the "V", aka the
velocity factor.

A typical K factor varies from a range of 1.25 to 1.45 in the winter
months, to a range of 1.25 to 1.9 during the summer months.

A typical Velocity factor can vary from 0.66 (for some polyethylene
coaxial cables) to 0.95 (for 300-ohm, 1/2-inch parallel line, with air
dielectric).

What'cha lookin' for? :-)

Ray KB0STN

3077. Re: ten-tec 6mtr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: Ray Brown <r_brown@getonthe.net>
Message-ID: <01bc3292$b5af2660$b5af32cf@r_brown.getonthe.net>
Source record: 96037

> I,m going to purchase the TT 6m transverter kit (2m-6m) and
> am all eyes'n'ears re instructions and/or schematic ommisions/errors.
> What kind of real RF o/p would this unit have using FM???

Eric, once the kit is built and aligned, it produces 10W output, any mode, depending on which mode you feed it! It's a bit rough if you feed it more than 5 or 6 watts, especially SSB. I have one, I built it myself. I am in the stages of tuning it up, but it does hear and speak. It's just that it needs to hear better and speak louder. (grin)

Ray KB0STN

3078. TRADE: 7025 and 7050 KHz FT-243 crystals for others on 40m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5gjj5v$48e@sf18.dseg.ti.com>
Source record: 96038
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have one each 7025 KHz and 7050 KHz FT-243 crystals that I'd like
to TRADE for others on 40m CW frequencies. LMK what you have.

73!

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

3079. Re: Anyone familiar with this feeder line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5gjjd1$48e@sf18.dseg.ti.com>
Source record: 96039
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5ggjbk$hov@news.dx.net>, dougd@lrbcg.com says...
>
>BELDEN "CITY COLOR" SHIELDED TWIN-LEAD TV WIRE
>Two 26 AWG 7x34 stranded copper-covered steel conductors with Beldfoil
>shield. Doug - KC8CGX
>

It's 300 Ohm television twinlead.

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

3080. Curtis 8043 pinning

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: pen <jpen@lucent.com>
Message-ID: <332D673F.41C67EA6@lucent.com>
Source record: 96040

Hello,

I'm looking for the technical details of the Curtis 8043
keyer chip.

Can someone help me?

Jacob PA3FYE

3081. WTB RF-CAD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <332DA807.729C@aeneas.net>
Source record: 96041

I'm looking for a used copy of RF-CAD Electronics Design Program
by Joe Reinsert and Gary Field. I'd buy it new, but I probably
won't use it that much. If you have it and want to sell it, give
me the price.
Thanks, Mark

3082. Re: Cryptic coil description

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5gk954$ooq@hpcvsnz.cv.hp.com>
Source record: 96042

Andreas Junklewitz (ajass@tabaqui.informatik.rwth-aachen.de) wrote:
: Hallo,

: in one of the ARRL-Microwave handbooks, there are coil description
: which are absolut cryptic to me.

: What means: 4t, 28 swg e.c.w. ?
: or 2.5t, 28 swg t.c.w. ?

: I guess the t stands for the number of turns. But what is the rest?

28 swg is the wire size... "swg" seems a bit ambiguous. AWG would
be the standard American wire gauge, about 0.0126 inches = 0.32mm
diameter. But swg could be the British standard wire gauge, just
slightly larger for number 28.

e.c.w. would be enamelled copper wire (polyurethane, etc.)
t.c.w. would be tinned copper wire, uninsulated
(b.c.w. would presumably be bare copper wire.)

I don't think much of publications that use abbreviations without
providing a definition or at least a pointer to definitions.

--
Cheers,
Tom
tomb@lsid.hp.com

3083. Re: Cryptic coil description

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: Ed Loranger <loranger@sr.hp.com>
Message-ID: <332D9D3E.6AF@sr.hp.com>
Source record: 96043

Andreas Junklewitz wrote:
>
> Hallo,
>
> in one of the ARRL-Microwave handbooks, there are coil description
> which are absolut cryptic to me.
>
> What means: 4t, 28 swg e.c.w. ?
> or 2.5t, 28 swg t.c.w. ?
>
> I guess the t stands for the number of turns. But what is the rest?
> Any hints are appreciated.
>
> With best regards
> Andreas

It might help if we knew the value of the inductor.

Best guess: 4t... 4turns, 28 standard wire gauge
evenly spaced, wound clockwise.

2.5T.. 2.5 turns 28 standard wire gauge,
tightly wound clockwise.....

No flames pse. Trying to help fellow HAM.
-Ed
--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee
mailto:we6w@qsl.net
http://www.qsl.net/we6w

3084. OHR 100 Xcvr on 40 Meters.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: Ed Loranger <loranger@sr.hp.com>
Message-ID: <332DA23C.34B6@sr.hp.com>
Source record: 96044

Ok, I bought the kit yesterday afternoon and worked about
6 total hours. I'm done building and am going to align this
radio tonight. (Can't wait to test it out!)

I've found review on the Oak Hills redearch Classic and
sprint etc, but would like to find a review on this XCVR.
Also any know upgrades and MODS that have been proven
useful.

Any help out there?
-Ed
--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee
mailto:we6w@qsl.net
http://www.qsl.net/we6w

3085. Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <FE2SbbA+YYLzEwti@ifwtech.demon.co.uk>
Source record: 96045

Please can somebody from the USA answer a question that has been puzzling me for some time.

The conventional soft-start circuit for a large power supply uses a current-limiting resistor in series with the mains supply, and after a few seconds this resistor is shorted by a relay contact.

Why do US publications almost always show two resistors, one in each supply line?

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

3086. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <he6MxvAD5bLzEw4v@lfheller.demon.co.uk>
Source record: 96046

In article <5gh2bp$59t$2@mhade.production.compuserve.com>, Martyn Watts
<100722.3014@CompuServe.COM> writes
>I'm trying to build a substantial (35-50A, 13.8 V) PSU for my
>radio as an experiment. My only problem is that I can't find a
>suitable regulator for it. If anyone out there can help me with
>a circuit diagram for a suitable regulator or another way of
>doing it, I'd be very grateful. I have the transformer, diodes,
>caps etc
>

How about a uA723 chip and several power transistors in parallel.
2N3055s are nice and cheap. Don't put your expensive radio on it until
you have added over-voltage protection, and checked that it works.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk WWW: www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3087. Re: Cryptic coil description

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-17 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <lewNRxAr6bLzEwYu@lfheller.demon.co.uk>
Source record: 96047

In article <5gjfjv$550$1@news.rwth-aachen.de>, Andreas Junklewitz
<ajass@tabaqui.informatik.rwth-aachen.de> writes
> Hallo,
>
>in one of the ARRL-Microwave handbooks, there are coil description
>which are absolut cryptic to me.
>
>What means: 4t, 28 swg e.c.w. ?
>or 2.5t, 28 swg t.c.w. ?
>
>I guess the t stands for the number of turns. But what is the rest?
>Any hints are appreciated.
>

swg = Standard Wire Gauge
e.c.w. = enamelled copper wire
t.c.w. = tinned copper wire

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk WWW: www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3088. Re: Looking for keplerian elements on the Net.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <332E379E.1C60@cam.org>
Source record: 95951

Geert PIRENS wrote:
>
> Hello
>
> I'm looking for keplerian elements ofr amateur sat's and weather sat's and
> TV sat's
>
> Can someone tell me where I can find it on the Net?

http://128.54.16.15:80/amsat/keps/menu.html

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

3089. Re: Anyone familiar with this feeder line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Steve Ellington <n4lq@iglou.com>
Message-ID: <332DDC30.3946@iglou.com>
Source record: 95952
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Doug D wrote:
>
> BELDEN "CITY COLOR" SHIELDED TWIN-LEAD TV WIRE
>
> Two 26 AWG 7x34 stranded copper-covered steel conductors with Beldfoil shield.
>
> Doug - KC8CGX
>
> --
> Sandusky CB Club - Sandusky OH 44870

Yes. It's been around for about 25 years. It was designed for tv antennas and intended to be used instead of coax where a balanced feedline was desired. It's impedance is 300 ohms. Loss is greater than cheap twin lead but less than coax especially if you add in the losses from baluns which are necessary at each end of coax. It can be run over power lines, next to metal gutters or even on the ground. It is not satisfactory for transmitting purposes.

Steve N4LQ

3090. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <332e4c22.1034127@news.lin.foa.se>
Source record: 95953

HI
Is there any anybody else out there having had problems with the 723
when RF is present. Remember building a small 4 amp supply using the
metal can version of 723 and a 3055. The p.s. did reduce the output
voltage when I held my H.T above the circuit. At least I'm happy the
voltage went down-wards.....
We have several lab p.s. here using 723 and they all have problems
with RF.

Anyone have a solution for this ? (Using different chip is cheating).
73 Lasse SM5GLC
Leon Heller <leon@lfheller.demon.co.uk> wrote:

>In article <5gh2bp$59t$2@mhade.production.compuserve.com>, Martyn Watts
><100722.3014@CompuServe.COM> writes
>>I m trying to build a substantial (35-50A, 13.8 V) PSU for my
>>radio as an experiment. My only problem is that I can t find a
>>suitable regulator for it. If anyone out there can help me with
>>a circuit diagram for a suitable regulator or another way of
>>doing it, I d be very grateful. I have the transformer, diodes,
>>caps etc
>>
>
>
>How about a uA723 chip and several power transistors in parallel.
>2N3055s are nice and cheap. Don't put your expensive radio on it until
>you have added over-voltage protection, and checked that it works.
>
>Leon
>--
>Leon Heller
>Amateur radio callsign: G1HSM
>Email: leon@lfheller.demon.co.uk WWW: www.lfheller.demon.co.uk
>Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3091. Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Claudio Fornaro <fornaro@athena.polito.it>
Message-ID: <332E58B6.41C6@athena.polito.it>
Source record: 95954

Hi all,
I'd want to build a "home made" radio receiver for AM (or even SW...) by putting
together pieces that can be found at home, that is you have not to buy them in an
electronic shop.
To explain better: I intend to build capacitors (maybe with alluminium sheets and
plastic bags), inductors (copper wire), the crystal is a problem... one usually
has no galena crystal at home... the loudspeaker maybe is a bigger one...
Has anyone ever seen such a project made or has s/he any idea about building it?
Thanks in advance.
Claudio

3092. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <332E5D42.143B@rcru.rl.ac.uk>
Source record: 95955

Ian White, G3SEK wrote:
>
> Please can somebody from the USA answer a question that has been
> puzzling me for some time.
>
> The conventional soft-start circuit for a large power supply uses a
> current-limiting resistor in series with the mains supply, and after a
> few seconds this resistor is shorted by a relay contact.
>
> Why do US publications almost always show two resistors, one in each
> supply line?
'In Practice' columnist for RadCom (RSGB)

Perhaps it is because the old USA wiring allowed either side to be live (Hot) or neutral. The ARRL step start design uses a diode from HOT to charge a capacitor via a resistor. The capacitor is connected to chassis ground. The relay coil connects across the capacitor. Why they connect to ground and not neutral is not clear, I would have thought it was a sure recipie for tripping the Earth leakage circuit breakers. Why not just connect between live and neutral?

This whole circuit is on the soft side of the step start so, if there is a big voltage drop across the hot resistor, say a fault in the EHT, the relay won't come over - the fuse wont blow either - highly dangerous. OK, so the bang is not so big, but it lasts a lot longer.

I think what is supposed to happen is the initial surge is taken care of by the time constant of the primary resistors and filter caps, this brings the PSU up to nearly full EHT, then we wait for the relay capacitor to charge up before full mains is applied to the transformer.

What would happen if there was only 1 resistor and the mains was the wrong way round? The surge relay would see the voltage drop across the neutral resistor, and possibly operate. This would of course remove the supply to said relay, causing it to cut out again, restoring its supply, one big oscillator. The second resistor prevents this happening. The supply simply won't work properly as the EHT will collapse when asked to supply power.

3093. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <332df1a9.339981@netnews.worldnet.att.net>
Source record: 95956

Hi Ian,

On Mon, 17 Mar 1997 17:58:22 +0000, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

>Please can somebody from the USA answer a question that has been
>puzzling me for some time.
>
>The conventional soft-start circuit for a large power supply uses a
>current-limiting resistor in series with the mains supply, and after a
>few seconds this resistor is shorted by a relay contact.
>
>Why do US publications almost always show two resistors, one in each
>supply line?

Because in the USA we are required to limit the electrons flowing back
into the power line, as well as those flowing out, to the same speed.

The reason is we do not want to unbalance the power grid of the USA,
and cause another regional blackout.

73 Tom (early posting, but why wait for April?)

3094. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <332e9499.30972015@netnews.worldnet.att.net>
Source record: 95957

OK, I'll be serious!

On Tue, 18 Mar 1997 09:15:46 +0000, Mike Willis <"mjw "@rcru.rl.ac.uk>
wrote:
>
>Perhaps it is because the old USA wiring allowed either side to be live
>(Hot) or neutral. The ARRL step start design uses a diode from HOT to
>charge a capacitor via a resistor. The capacitor is connected to chassis
>ground. The relay coil connects across the capacitor. Why they connect
>to ground and not neutral is not clear, I would have thought it was a
>sure recipie for tripping the Earth leakage circuit breakers. Why not
>just connect between live and neutral?

Your idea is much safer! In one Handbook article for 3-500's they
connect the filament transformer primary directly to the chassis!!!
To cover up that mistake, they tell the builder to insulate the
chassis from the cabinet! Can you imagine building a high power PA
with the chassis insulated from the cabinet? How do we get those
SO-239's out without a chassis connection?

>This whole circuit is on the soft side of the step start so, if there
>is a big voltage drop across the hot resistor, say a fault in the EHT,
>the relay won't come over - the fuse wont blow either - highly
>dangerous. OK, so the bang is not so big, but it lasts a lot longer.

>I think what is supposed to happen is the initial surge is taken care of
>by the time constant of the primary resistors and filter caps, this
>brings the PSU up to nearly full EHT, then we wait for the relay
>capacitor to charge up before full mains is applied to the transformer.

>What would happen if there was only 1 resistor and the mains was the
>wrong way round? The surge relay would see the voltage drop across
>the neutral resistor, and possibly operate. This would of course remove
>the supply to said relay, causing it to cut out again, restoring its
>supply, one big oscillator. The second resistor prevents this happening.
>The supply simply won't work properly as the EHT will collapse when
>asked to supply power.

While the resistors smoke!!!

A better way to do it is to connect the surge relay across the
transformer primary, use only one resistor, and short it when the
PRIMARY reaches near full voltage. Of course the resistor should be
fused with a slow blow fuse in case the supply is shorted (or the
relay fails) at start up.

Not the best circuit they describe, is it?

NO power line return should ever be connected to the chassis in any way, even for a relay and ESPECIALLY for a transformer!!! Fried ham is best in a pan, not a ham shack.

73 Tom

3095. hp349a help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Franco Spinella <spinella@pisa.infn.it>
Message-ID: <332E7551.6F04@pisa.infn.it>
Source record: 95958

Hi friends,
I've recently bought an old UHF noise source from HP,
model 349A. Unfornately I didn't found the power supply, nor the manual.
Inside the box thereis a glass tube, probably a gas discharge tube
with hot cathode. I'd like very much to know something about how to
build the power supply, and eventually in which frequency range
the "object" should work.
Does someone has some informations ?
Thanks a lot.

Franco IW5DUM
--

Dr. Franco Spinella
INFN, Italian Institute for Nuclear Physics
Work : Via vecchia livornese 1291
56010 S. Piero a Grado Pisa Italy
tel: 003950880203 fax: 003950880317
Home : Scali Olandesi 52
57125 Livorno Italy
tel 0039586884901
Email: spinella@pisa.infn.it

God is real unless declared integer ....

3096. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5gl3hc$fsp@apple.telalink.net>
Source record: 95959

Chris Nicholson <csnichol@mail.delcoelect.com> wrote:
>Dana Myers wrote:
>>> >> What if you keyed a repeater with your transmitter that was legal below the
>> >> maximum field strength and you are not licensed)? Things can get harry

So far, Part 15 unlicensed devices are not allowed in the ham bands.
Any intentional unlicensed transmission in our bands, regardless of
power, is illegal. (the FCC had considered lifting that ban, but I
think that threat has been staved off)

>> Hmmmm... then what would you say about 2m <-> 10m FM links?
>> You know, a 2m box coupled to a 10m box. A Tech can then cause
>> the 10m box to transmit without being licensed to transmit
>> in that band.

This used to be illegal. Seems to me it was 5-6 years ago they made a
change with the specific intent of allowing this situation.

73 Doug

3097. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Ed Loranger <loranger@sr.hp.com>
Message-ID: <332ED865.6ABA@sr.hp.com>
Source record: 95960

Ian, It is possible to get surges from either
line to a Common point, such as ground. It is much
safer to protect High-to-Common, High-to-Neutral, and
Neutral-to-common; than just High-to Neutral and High to
Common.

-Ed
--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee
mailto:we6w@qsl.net
http://www.qsl.net/we6w

3098. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: falvosa@borg.com
Message-ID: <5gmf0q$6gn@ns2.borg.com>
Source record: 95961
Body handling: 1 inline base64-encoded payload block was not displayed

desmith@telalink.net (Doug Smith) wrote:

>>> Hmmmm... then what would you say about 2m <-> 10m FM links?
>>> You know, a 2m box coupled to a 10m box. A Tech can then cause
>>> the 10m box to transmit without being licensed to transmit
>>> in that band.

>This used to be illegal. Seems to me it was 5-6 years ago they made a
>change with the specific intent of allowing this situation.

IF you are a tech no code, THIS IS STILL ILLEGAL. Only those with
suitable license class can use such an HV/VHF cross-band repeater.

==========
"Tongue Tied and Twisted, Just an Earthbound Misfit..." - Pink Floyd

Long live the AMIGA!! HAM Radio: KC5TJA/2, Tech +, 145.450MHz Repeater
http://www.borg.com/~falvosa Utica, NY [FN23]

Project Leader: Dolphin Operating System (mailing list: ddg@qzx.com)

Version: 2.6.2

[Inline base64-encoded payload not displayed]

=Iue9

3099. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: stevem@vax.area.com
Message-ID: <5gmpsg$pqg@nixon.area.com>
Source record: 95962

In article <199703102037.PAA25086@pop.uky.edu>,
William L. Fuqua III <wlfuqu00@pop.UKy.EDU> wrote:
> Part 15 does not allow any unlicensed intentional radiators
>(transmitters) in
>any of the ham bands at any power level. Just checked it this morning.
>
>73
>Bill wa4lav
>
> William L. Fuqua III P.E. E-mail WLFUQU00@POP.UKY.EDU
>Phone (606) 257-4155
> Department of Physics and Astronomy CP-177 Chem. Phys. Bldg.
> University of Kentucky , Lexington, Ky 40506-0055
>
>
>

Bill (and other recent posts) are not correct on this issue.
Part 15.247 and 15.249 (the numbers may not be exact) allow
unlicensed use of spread spectrum and certain non-spread devices
in the Amateur bands at 900MHz, 2.4GHz and 5.7GHz. These are
usually Wireless LANS, newer cordless phones and other consumer
and commercial items. You can also make your own devices for
these bands without license and operate them under Part 15 rules.

I think some individuals may be looking at old copies of the
Part 15 section.

Steve Muther WF6R
stevem@w6yx.stanford.edu
stevem@area.com

3100. ! New HighTech CD-ROM released for 97 !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: amsoft@epix.net
Message-ID: <5gmujg$q6j@news1.epix.net>
Source record: 95963
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.cb,rec.radio.scanner,rec.radio.shortwave,rec.radio.swap

ORIGINATOR: AmSoft
AUTHOR: Pete deVolpi, KC3TL
E-MAIL: amsoft@epix.net
TELEPHONE: 717-938-8249
FACSIMILE: 717-938-6767
WWW SITE: http://hamster.ivey.uwo.ca/~amsoft/

- -

AmSoft announces the 1997 release of "The World of Ham Radio
CD-ROM.
The World of Ham Radio contains the World's largest collection
of amateur radio software, and the most recent FCC amateur radio
license database available anywhere. Track all US and Foreign
Licensees authorized to operate by the FCC. More than 1,000,00
callsigns are found in seconds with this CD-ROM. The current
database includes calls issued up to 14 January 1997. Find hams
by full or partial call sign, prior call sign, last name, first
name, State, City or zip codes. Create your mailing lists or just
print single labels from this FCC Callsign database program.
DOS, Windows 3.x, and *Windows 95 compatible lookups on this
CD-ROM.
Every issue comes with the AmCall auto-logging station logbook
which uses this callsign database. Compatible with most other
amateur radio software packages available today. Also includes
all the "Vanity Flood Gate assignments, plus the missing 3,500
"Vanity Assignment still Available" calls.

There are over 2150 amateur radio modification files included on
this CD-ROM logically arranged by manufacturer, and model number.
That's over 800 new mods since our last issue.

This CD-ROM is non invasive to your drives, this means no hard
drive usage unless you decide to use it.

A Complete user interface "CDVIEW" for the Ham Radio Software
library eliminates the need for you to use DOS commands and
hard drive space. CDVIEW includes Instant online help and
program documentation by pressing the (I) key on your keyboard.
CDVIEW will make it very easy for you to move through and
operate
the massive 20,000+ file compilation. These files could easily fill
822+ Megabytes of space if they were not on this convenient

CD-ROM.
Users can preview new ham software directly on the CD-ROM
without
requiring a hard drive, many of the software programs run directly
from the CD-ROM. You can use the CD-ROM to place files onto
removable diskettes, or to install files onto your computer.

For more information visit: http://hamster.ivey.uwo.ca/~amsoft/
or contact AmSoft direct from the information at the top of this
notice.

- -

This announcement is only posted in amateur radio and electronics
related newsgroups. It is only posted 1 time per year as a means
of public announcement of a new product related to these specific
newsgroups.

- -

For a FREE AmSoft newsletter published bi-monthly please send
"SUBSCRIBE" to amsoft@epix.net

3101. Re: hlp pls, i need change my tone voice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Andy <muldowne@wilde.oit.umass.edu>
Message-ID: <01bc33dc$5a87c440$47b37780@oit.umass.edu.umass.edu>
Source record: 95964
Cross-posted to: rec.radio.amateur.homebrew,es.rec.radio.amateur

Leon Heller <leon@lfheller.demon.co.uk> wrote in article
<UmsBfqASNzJzEwta@lfheller.demon.co.uk>...
> In article <5g4o64$5r0$1@diana.ibernet.es>, Alfonso
> <alfonsog@redestb.es> writes
> >Hi, all.
> >
> >I need help to modify my tone voice. I have a problem with my voice,
> >more people, don't think my age, no think my callsign, is similary a
> >girl voice. I want down the frequency to be similary with a men.
> >
> >Do you know any chip, construccion or circuit to made this mod?
> >
> >Thanks for your help. The bests 73's EB3FYJ
>
> OKI have a Speech Pitch Controller chip, the MSM6322GSK, that should do
> what you want. It costs #10.20 (UK) from Maplin, and the circuit is in
> their current catalogue. You can shift the pitch of input speech in 17
> steps either one octave up or one octave down. Maplin is on 01702
> 554000.
>
> Leon
> --
> Leon Heller, G1HSM
> leon@lfheller.demon.co.uk
> Tel: +44 (0) 118 947 1424 (home)
> +44 (0) 1344 385556 (work)
>
You could also try an octaver guitar effect. Just an idea.

3102. FS: Kenwood YK-455C-1 500Hz Filter , Lower priced.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <332efcd7.209253@news.interbusiness.it>
Source record: 95965
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 70 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

3103. Re: Help wanted for the Pixie-2 Transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Andy <muldowne@wilde.oit.umass.edu>
Message-ID: <01bc33dc$93a950e0$47b37780@oit.umass.edu.umass.edu>
Source record: 95966

Mark VandeWettering <markv@pixar.com> wrote in article
<5g6u09$da@pixar.com>...
>
> I was assembling the Pixie-2 transeiver kit that I got last weekend
(these kits are
> made up by HSC). All was going well, until I went to install the
inductors. L2 and
> L3 are fine, but L1 is supposed to be a 15-22 uhenry inductor. The color
coding
> on the inductor looks like orange-red-black to me, which indicates a
32uhenry inductor.
> Has anybody else had this problem? What problems am I likely to incur if
I install
> this inductor? (I am a total amateur at this kit assembly stuff).
>
> Thanks in advance -
>
> Mark
> --
> Mark T. VandeWettering Telescope Information (and more)
> Email: <markv@pixar.com> http://webspace.com/markv/
> <markv@webspace.com> Clear Skies!
>
I had a similar problem. I ended up just installing it and it works fine.
Hope that it works for you too!

3104. Test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: ROBERTC@PII.COM
Message-ID: <s32e9b52.041@pii.com>
Source record: 95967

Test

3105. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580001803971339180001@news.europa.com>
Source record: 95968

In article <FE2SbbA+YYLzEwti@ifwtech.demon.co.uk>, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:

:Please can somebody from the USA answer a question that has been
:puzzling me for some time.
:
:The conventional soft-start circuit for a large power supply uses a
:current-limiting resistor in series with the mains supply, and after a
:few seconds this resistor is shorted by a relay contact.
:
:Why do US publications almost always show two resistors, one in each
:supply line?
:
:
:73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
: 'In Practice' columnist for RadCom (RSGB)

I'm here looking at the schematic for my monster 8877 amp. I also have two
resitors. It appears to be the easiest way to have inrush protection with
a dual primary transformer meant for 110v and 220v. So you guys in europe
don't have to worry about this. My amp automatically switches the input
voltage depending on what line connector is attached. I use one of those
monster industrial twist lock with 4 lines and one ground.

Also, I see that for 110v, the resistors are in parallel, while for 220v
they are in series, so that makes some intuitive sense.

I have a QuickCam, so if you want, I can attach picture of schematics as JPEG.

Rob.

ps. linear is in storage, wish it was here, but last time it was in use,
smoked neighbors TV and cost me $100

3106. Seeking Bel radar detectors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Michael Grigoni <msg@waste.org>
Message-ID: <332F543C.4249@waste.org>
Source record: 95969

Greetings:

I need to acquire Bel Micro-Eye Vista or Vantage (ca. 1987) X/K band
radar detectors (at least the RF board) for use in a data link project;
We have few surplus venues in our market and hamfests are few and
far between. All help is much appreciated.

Michael Grigoni
Cybertheque Museum
(msg@waste.org)

3107. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5gn290$49e@apple.telalink.net>
Source record: 95970

falvosa@borg.com (Samuel A. Falvo II) wrote:
(referring to 10m=>2m crossband repeaters)
>IF you are a tech no code, THIS IS STILL ILLEGAL. Only those with
>suitable license class can use such an HV/VHF cross-band repeater.

I can't cite the specific reg (I will if I remember to reread this thread on my other machine in front of my copy of the rules) but I'm 99% sure it *is* legal for a no-code tech to be repeated on 10 meters. The only requirement is that the repeater input (the frequency on which you transmit) is a legal frequency under your license.

At the time the change was passed, there was no such thing as a no-code license. (actually even now, Tech Pluses don't have privileges in the 10m FM band) There was also an issue over the first Oscar satellites, which also retransmitted 2m signals into the 10m band.

Again, I'd double check a copy of the FCC regs before risking your license, but I'm 99% sure it's legal for Tech to be repeated on 10 meters.

73 Doug

3108. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>
Message-ID: <332F61BB.16AF@postoffice.worldnet.att.net>
Source record: 95971

Doug Smith wrote:
>
> falvosa@borg.com (Samuel A. Falvo II) wrote:
> (referring to 10m=>2m crossband repeaters)
> >IF you are a tech no code, THIS IS STILL ILLEGAL. Only those with
> >suitable license class can use such an HV/VHF cross-band repeater.

Absolutely untrue. Section 97.205 allows for crossband repeater
operation. There are two tests that must be met. the input frequency
of the repeater the tech is operating on must be within his license
priveleges (i.e. 2 meters) and the control operator of the second
repeater (in Samuel's example 10 meters) must hold an appropriate
license.

In Samuel's example, the tech licensee may operate a 2 to 10 meter
crossband repeater, the only other condition to be met is that the
control operator on the 10 meter repeater must hold at least a general
class license. See the General Class license Manual (ARRl) page 1-6
>
> I can't cite the specific reg (I will if I remember to reread this
> thread on my other machine in front of my copy of the rules) but I'm
> 99% sure it *is* legal for a no-code tech to be repeated on 10 meters.
> The only requirement is that the repeater input (the frequency on
> which you transmit) is a legal frequency under your license.

The section is 97-205

>
> At the time the change was passed, there was no such thing as a
> no-code license. (actually even now, Tech Pluses don't have
> privileges in the 10m FM band) There was also an issue over the first
> Oscar satellites, which also retransmitted 2m signals into the 10m
> band.
>
> Again, I'd double check a copy of the FCC regs before risking your
> license, but I'm 99% sure it's legal for Tech to be repeated on 10
> meters.
>
> 73 Doug

--
****
****

73 de
KC8DGU

Tom Isgro
OHIO

10-X #68364 QRP-L #945 ARS #203 FIST #2360
C.A.T.T #2115 NORCAL ARRL

****
****

3109. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: Gerald Lynas <lynasp2@airmail.net>
Message-ID: <332EE500.330C@airmail.net>
Source record: 95972

Lars Moell wrote:
>
> HI
> Is there any anybody else out there having had problems with the 723
> when RF is present. Remember building a small 4 amp supply using the
> metal can version of 723 and a 3055. The p.s. did reduce the output
> voltage when I held my H.T above the circuit. At least I'm happy the
> voltage went down-wards.....
> We have several lab p.s. here using 723 and they all have problems
> with RF.
>
> Anyone have a solution for this ? (Using different chip is cheating).
> 73 Lasse SM5GLC
> Leon Heller <leon@lfheller.demon.co.uk> wrote:
>
> >In article <5gh2bp$59t$2@mhade.production.compuserve.com>, Martyn Watts
> ><100722.3014@CompuServe.COM> writes
> >>I'm trying to build a substantial (35-50A, 13.8 V) PSU for my
> >>radio as an experiment. My only problem is that I can't find a
> >>suitable regulator for it. If anyone out there can help me with
> >>a circuit diagram for a suitable regulator or another way of
> >>doing it, I'd be very grateful. I have the transformer, diodes,
> >>caps etc
> >>
> >
> >
> >How about a uA723 chip and several power transistors in parallel.
> >2N3055s are nice and cheap. Don't put your expensive radio on it until
> >you have added over-voltage protection, and checked that it works.
> >
> >Leon
> >--
> >Leon Heller
> >Amateur radio callsign: G1HSM
> >Email: leon@lfheller.demon.co.uk WWW: www.lfheller.demon.co.uk
> >Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)
I don't have a solution for the 723 but we experienced the same symptoms
on 15 volt power supplies which we install in radio transmitters. Every
time the step start relays close on the transmitter, the "regulated" 15
volts bounces about 3 volts (and kills the overvoltage protection
circuit.) We talked to Motorola and other suppliers with no success.
Guess that chip and any rf or transient don't mix.

3110. ?? TR-7200 A mike pinouts ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: jtz <rapuppa@lightspeed.net>
Message-ID: <332F586A.65E5@lightspeed.net>
Source record: 95973

hi i recently aquired a kenwood tr 7200
sans 1 mike & cord. & after rooting through
some boxes of... well i found a mike and correct
plug for the radio yet i know not the pinout.
can someone help? wires as follows
mike side> 2 black
1 white
1 red
plug > 20 40
10 3 0
notch: ^
thanx in advance
73 rapuppa

3111. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <2NJOpEAAsxLzEw6A@ifwtech.demon.co.uk>
Source record: 95974

Tom Rauch wrote:
>A better way to do it is to connect the surge relay across the
>transformer primary, use only one resistor, and short it when the
>PRIMARY reaches near full voltage. Of course the resistor should be
>fused with a slow blow fuse in case the supply is shorted (or the
>relay fails) at start up.
>
>Not the best circuit they describe, is it?

Well, that's how it seemed to me too. I can see the point in surge-limiting each line if the transformer has a center-tapped primary which is connected to neutral, but it seems pointless to use "two of everything" when the transformer has only a 0-230V primary and neutral isn't involved.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

3112. Need old H.P. Appnotes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-18 00:00:00 UTC
From: viny Coppola <76103.723@CompuServe.COM>
Message-ID: <5gn2cn$g7k$1@mhadf.production.compuserve.com>
Source record: 95975

I am looking for old app notes H.P. 62A,62B, and 62C. H.P. has been

unable to help.

Thanks,

Vinnie N1VC

3113. HF "VOX" for 2m preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: root@localhost
Message-ID: <5gobsr$cmq@nyheter.chalmers.se>
Source record: 95898

Hi everyone!
Could anyone point out sources and/or ideas for typical "HF VOX"
circuits used in VHF [pre]amps (i.e. switch out preamp when HF comes
its way, switch in PA, without using a separate transmit signal from
the rig)? I can't find anything on this topic in my books.
Thanks in advance,
/hcb

P.S. Please reply by mail also, since I can't spend all day reading
news without pissing off my boss!

Hans-Christian Becker
hcb at phc dot chalmers dot se -- no spamming wanted!
Dept. of Physical Chemistry
Chalmers University of Technology

Physical Chemist, Ham Radio Operator (SM6TLH) & Macintosh Geek
If I only knew how to get this #$! signature feature working!

3114. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <dQ6jyjAeGFMzEwHy@lfheller.demon.co.uk>
Source record: 95899

In article <3339d406.1580203192@news.sci.fi>, =?iso-8859-1?q?Paul_Kein=E4nen?= <keinanen@sci.fi> writes
>larsm@lin.foa.se (Lars Moell) wrote:
>
>
>>BTW. Use more modern transistors than the 2N3055 as they tends to
>>loose beta when delivering high current!
>
>The 2N3055 is quite usable for up to 4 A per transistor. For a 40 A
>power supply, you would need 10 of these in parallel, but you have to
>be prepared to feed 2 A of base current into this circuit. (However,
>using only four 2N3055s to deliver 40 A, would require 8 A of base
>current, since the current gain drops to 5).
>
>The worst problem with 2N3055 is that the Vbe and Vce(sat) voltages
>increase quite rapidly above 4 A collector current, forcing the use of
>a higher transformer secondary voltage, which in turn increase the
>power dissipation in the series pass transistors.

I acquired lots of MJ11016 power darlingtons when they were thrown away at work. They are good for about 30 A max. each, and the beta (1000) should be OK with 10 A going through them. I keep meaning to use these in a PS.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk WWW: www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3115. Re: Cryptic coil description

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970319214900.QAA16022@ladder01.news.aol.com>
Source record: 95900

In article <332D9D3E.6AF@sr.hp.com>, Ed Loranger <loranger@sr.hp.com> writes:

>>
>> What means: 4t, 28 swg e.c.w. ?
>> or 2.5t, 28 swg t.c.w. ?
>>

4 turns, 28 gauge enamel coated wire
2.5 turns, 28 gauge teflon coated wire
my best guesses.
Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

3116. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970319214900.QAA16021@ladder01.news.aol.com>
Source record: 95901

In article <he6MxvAD5bLzEw4v@lfheller.demon.co.uk>, Leon Heller
<leon@lfheller.demon.co.uk> writes:

>
>How about a uA723 chip and several power transistors in parallel.
>2N3055s are nice and cheap. Don't put your expensive radio on it until
>you have added over-voltage protection, and checked that it works.
>
>

You will be not be able to drive 2N3055 devices directly from a 723.
Better to use 2N3771 pass regulators -- much better beta. You still
will need an additional pass stage between the 723 and 3771s.

Pete
1 851034065 0 0 aol.newsgroups.bugs:
1 851034065 0 0 aol.newsgroups.help:
1 851034065 0 0 aol.newsgroups.suggestions:
1 851034065 0 0 aol.newsgroups.test:
1 851034065 0 0 news.announce.newusers:
1 851034065 0 0 news.answers:
1 851034065 0 0 news.groups.reviews:

1 852179113 0 0 news.answers:
1 852179113 0 0 news.groups.revieB?
1 852179011 0 0 soc.culture.new-zealand? 61487

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

3117. Poky Toky!! Help please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Steve Simpson <Steve@chubs.demon.co.uk>
Message-ID: <VSpeNFA2vHMzEwGe@chubs.demon.co.uk>
Source record: 95902
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Hi all,
I have two little handhelds called Poky Toky's they operate on 144.550 mhz FM. They have an output of about 10mW I think.

The problem I have is 144.55 is used by packet around here and I'd really like to re-rock them for another frequency.
This is where the fun starts. The RX IF is 10.7 followed by .455 and a 10.240 rock is used to do this, nothing strange here. But the RX rock in the first LO has 19.122 mhz on it??? Now I can't make that go in to 144.55 anyway I try. Also the TX rock is in the 20 meg area (I can't remember exactly at the moment) This also doesn't seem to divide into 144.55.

Has anyone come across Poky Toky's before or perhaps they can do better maths than me and work out the Xtal equation for me? I'm at my wits end over this one.

Thanks all,

--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
G-QRP Club Member 9631
Visit Radio World -
HTTP://www.chubs.demon.co.uk

3118. FS/FT: Lettine Radio model 242 (1950s 6m a-m transmitter) PROJECT RIG

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5gpl3u$blh@sf18.dseg.ti.com>
Source record: 95903
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

For sale or trade:

Lettine Radio model 242 six-meter a-m transmitter, 1950s vintage.
Crystal controlled, 6146 PA, plate-modulated by pair of 6V6s.

*** THIS IS A PROJECT RADIO, OTHERWISE KNOWN AS A "FIXER-UPPER" ***

It appears to be complete, although there are no tubes (they tested
bad, so I threw 'em away). The front panel and cabinet are ROUGH
but restorable. The panel will need to be stripped, painted, and
re-lettered. The cabinet will also need to be stripped and painted.
Inside, it's not real bad. The chassis should clean up nicely, and
underneath is surprisingly clean and free of mud-dauber tubes, etc.
Obviously, all of the old rolled paper and electrolytic capacitors
will need to be replaced, and I suspect some resistors will also,
but that's standard procedure when restoring any old rig like this.

This transmitter was found in a barn by a non-ham. It was offered
first to other local hams, who all turned it down. I accepted it
only to keep it from going to the landfill. I figured someone out
there would be willing to restore it and give it a good home.

I honestly have no idea what something like this is worth, so make
me an offer, and please don't be afraid to insult me. I assure you
that I am not "trolling for suckers" to see if I can snag big bucks
on this, 'cuz there ain't no way it would EVER bring big bucks!

I'd be willing to trade it for a fixer-upper novice rig (Heath, Eico,
Drake, Knight, etc), or parts for building "glowbugs" (especially
air variables, B & W 3011 and 3015 coil stock, small milliammeters,
plug-in coil forms and sockets, etc). Whatcha got that I could use?

BTW, the manual is available from W7FG Vintage Manuals for under $10.

73 from the Dallas / Fort Worth area!

--
Dean W. Hemphill Email: k5dh@qsl.net
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI),
builder of "glowbugs", restorer of dirty old radio equipment, etc.
. . . . . .

3119. Re: FS/FT: Lettine Radio model 242 (1950s 6m a-m transmitter) PROJECT RIG

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5gq872$14h@camel2.mindspring.com>
Source record: 95904
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

k5dh@dlep1.itg.ti.com (Mustang Maniac) wrote:

>For sale or trade:

>Lettine Radio model 242 six-meter a-m transmitter, 1950s vintage.
>Crystal controlled, 6146 PA, plate-modulated by pair of 6V6s.

>*** THIS IS A PROJECT RADIO, OTHERWISE KNOWN AS A "FIXER-UPPER" ***

Our club, the KCRC, raffled a 2 meter AM transceiver away. It was one
of those classic Gonset Communicatiors. The only problem is who
are you going to communicate with. Operating 6 meter AM even with a
clean signal is going to take full control of channel 2 on all nearby
TVs.
One of our young novices won the set so I warned him NOT to play with
the innards of it when alone because of the high voltages that could
even still be there long after it is unplugged. He was amazed. (better
amazed than dead) You of course would not be surprised that most hams
know very little about hight voltage curcuits. I hope to make a club
project out of restoring the rig. Perhaps you can do that with your
radio in case someone finds a "real treasure". Knowing how to replace
the non-tube items such as the capacitors is an art in itself.
- Tony WW2W
http://www.pipeline.com/~acatalan/
veni, veni, signi !!!

3120. Re: WTB: KEG-O-RATOR AND/OR BAR TAP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5gq7rt$7fb@mtinsc03.worldnet.att.net>
Source record: 95905
Cross-posted to: alt.binaries.hebrew.mac,alt.brewing,alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

Well.... A bunch of barrels welded end to end for a 1/4 wave vertical
should have a nice bandwidth! <g>

Woody

Steven Kerns wrote:
>
> I once loaded up a 1/4 barrel, not a good match to 50 ohms........
>
> Steve N3FTI
>
> In article <01bc319a$c09a6600$8c1d3586@croweljk.muohio.edu>,
> crnkovcm@miamiu.muohio.edu says...
> >
> >I am looking for a keg-o-rater, if anyone has one for sale, please e-mail
> >me at:
> >
> >crnkovcm@miamiu.muohio.edu
> >
> >If you do not have a keg-o-rator, but have a bar tap, also e-mail me.
> >
> >Thanks,
> >
> >Cody Crnkovich
> >

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3121. Value of 1N714 Zener??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Grant Youngman <nq5t@gte.net>
Message-ID: <3330AEFE.335F@gte.net>
Source record: 95906

Anyone know the voltage and power rating of a 1N714 zener?

Doesn't show up in any reference I have laying around.

Thanks ..

Grant Youngman / NQ5T
nq5t@gte.net
http://home1.gte.net/nq5t/index.htm

3122. Re: Poky Toky!! Help please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Robert Ogburn <rogburn@pacbell.net>
Message-ID: <3330B282.5C1B@pacbell.net>
Source record: 95907
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Steve Simpson wrote:
>
> Hi all,
> I have two little handhelds called Poky Toky's they operate on 144.550
> mhz FM. They have an output of about 10mW I think.
>
> The problem I have is 144.55 is used by packet around here and I'd
> really like to re-rock them for another frequency.
> This is where the fun starts. The RX IF is 10.7 followed by .455 and a
> 10.240 rock is used to do this, nothing strange here. But the RX rock in
> the first LO has 19.122 mhz on it??? Now I can't make that go in to
> 144.55 anyway I try. Also the TX rock is in the 20 meg area (I can't
> remember exactly at the moment) This also doesn't seem to divide into
> 144.55.
>
> Has anyone come across Poky Toky's before or perhaps they can do better
> maths than me and work out the Xtal equation for me? I'm at my wits end
> over this one.
>
> Thanks all,
>
> --
> Steve "Chubby" Simpson
> Radio/Night Club D.J.
> Steve@chubs.demon.co.uk
> G-QRP Club Member 9631
> Visit Radio World -
> HTTP://www.chubs.demon.co.uk

.....

well,
144.55 = (19.240 * 7) + 10.7
low side injection, 7X multiplier

bob

3123. Re: hp349a help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: dave eckhardt <davee@hp5800.desk.hp.com>
Message-ID: <3330574E.6778@hp5800.desk.hp.com>
Source record: 95908

Franco Spinella wrote:
>
> Hi friends,
> I've recently bought an old UHF noise source from HP,
> model 349A. Unfornately I didn't found the power supply, nor the manual.
> Inside the box thereis a glass tube, probably a gas discharge tube
> with hot cathode. I'd like very much to know something about how to
> build the power supply, and eventually in which frequency range
> the "object" should work.
> Does someone has some informations ?
> Thanks a lot.
>
> Franco IW5DUM
> --
> --
> Dr. Franco Spinella
> INFN, Italian Institute for Nuclear Physics
> Work : Via vecchia livornese 1291
> 56010 S. Piero a Grado Pisa Italy
> tel: 003950880203 fax: 003950880317
> Home : Scali Olandesi 52
> 57125 Livorno Italy
> tel 0039586884901
> Email: spinella@pisa.infn.it
> --
> God is real unless declared integer
....**

Dr. Spinella:

I presume the box you have is slightly smaller than fist-sized? If so,
the tube is the "classic" vacuum diode noise source. It was intended to
be used with the old (number I don't remember even though I have one at
home) vacuum tube noise figure meter. Its range is nominally HF to
about 400 MHz and produces (nominally) 5.2 dB of excess noise when
biased in the normal fashion with about 120 to 150 volts on the plate.
The output, of course, is the BNC connector which is ac coupled to the
plate. The thing presents a relatively stable 50+/- j0 ohm source
impedance over the useful frequency range. You should note that the ENR
(excess noise ratio) is stable for only about the first 50 hours of
operation until some of the cathode material deposites itself onto the
plate and begins to produce "non-standard" diode noise characteristics.
The plate voltage and/or the cathode bias was typically switched on and
off (chopped) at a 400 to 1000 Hz rate to give a "noise on/noise off"
signal to the receiver or front end under test. The rest of the noise

figure meter from HP simply compared these two measured values, did the arithmatic and took the difference, and read out (analog) the noise figure. You can make a nice gated (or continuous) noise source out of it, but the solid state noise diodes (from NoiseCom, for example) are a more stable and wider frequency range solution to a good noise source. A typical solid state noise diode (the cheap variety) is good from nearly audio to 2 - 3 GHz and all voltages are < 15 vdc (or chopped) with no impedance stabilization network needed if its mounted in an intelligent microwave manner. Hope this helps.

Dave - W6LEV

3124. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: dave eckhardt <davee@hp5800.desk.hp.com>
Message-ID: <33305024.76BA@hp5800.desk.hp.com>
Source record: 95909

Claudio Fornaro wrote:
>
> Hi all,
> I'd want to build a "home made" radio receiver for AM (or even SW...) by
> putting
> together pieces that can be found at home, that is you have not to buy
> them in an
> electronic shop.
> To explain better: I intend to build capacitors (maybe with alluminium
> sheets and
> plastic bags), inductors (copper wire), the crystal is a problem... one
> usually
> has no galena crystal at home... the loudspeaker maybe is a bigger
> one...
> Has anyone ever seen such a project made or has s/he any idea about
> building it?
> Thanks in advance.
> Claudio----------

Claudio:

Also being a mineral collector, I never had trouble with a galena
crystal. However, you need it. I would suggest you contact on of your
rock and mineral clubs, or possibly the geology depqrtment of your
nearby university. You don't need a big, showy piece. Probably
they would be glad to give you a few small chunks. It is not
a rare mineral. If you could also locate a nearby rock and mineral
store or dealer, they would probably do the same for you. However, if
you reall want to completely "roll your own", contact the geology
department as before, but ask them where you might collect some galena
yourself. Its fun, and you just might gain another hobby! By the way,
iron pyrite, oxided iron filings, powdered ZnS (zinc sulfide, or the
mineral sphalerite - many times associated with pyrite and galena) also
work to a lesser extent. Good Luck!

Dave - W6LEV
r

3125. Re: Anyone familiar with this feeder line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: dave eckhardt <davee@hp5800.desk.hp.com>
Message-ID: <33305293.62CF@hp5800.desk.hp.com>
Source record: 95910
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Doug D wrote:
>
> BELDEN "CITY COLOR" SHIELDED TWIN-LEAD TV WIRE
>
> Two 26 AWG 7x34 stranded copper-covered steel conductors with Beldfoil shield.
>
> Doug - KC8CGX
>
> --
> Sandusky CB Club - Sandusky OH 44870
> http://user.aol.com/ralph234/cb-page/cbclub.htm
> Gourmet Foods to impress the Boss!
> http://www.lrbcg.com/dougd/gourmet.htm
>
<mailto:dougd@lrbcg.com>**********

Doug:

Yes, I used it ages ago not totally understanding what it was supposed to do. It is basically shielded 300-ohm balanced transmission line. If everything from the antenna to the receiver were truely balanced at all frequencies, there would be no need for the shield. The shield is supposed to keep common mode "noise" (like HF amateur transmitters) out of the transmission line, and, therefore, the TV receiver. A fully balanced transmission has no need for a shield. If the shield is properly terminated at both ends, its marginally successful. The shield is too thin to effectively shield magnetics fields generated much below 20 MHz. Where do you "terminate" the shield at the TV antenna end? Who knows! In reality, just use "normal" twin lead and forget the additional expense and bulk of the shielded stuff.

Dave - W6LEV

3126. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5gq7fi$7fb@mtinsc03.worldnet.att.net>
Source record: 95911

I have built several PwrSups using the 723 all work great with no RF problems, 1.8 - 28 MHz w/KW amp following exciter. Also used w/ no problem up to 440 MHz running 100wt. out and 900 @ 18 wts. Good construction practice is reccommended. If the regulator is so "slow" that bypassing is unneccessary, it's transient response will llikely be poor. My biggest supply I rate at 80 amps continuous. There are 4 2N5302 (30 amp, 200 wt) transistors driven darlington mode by a 5th 5302 and a 723. The 4 parallel devices are balanced with high current low value emitter resistors. They are mounted to a large forced air cooled heat sink (fan on thermal switch). This supply is about 20 years old and still going strong. A "crowbar" over-voltage/ fast, high current fuse is in the output. Short circuit protection is sorta like a solid state overcurrent latch connected to the 723. If you short the 13.6 v, 80 amp supply it just turns off the output (not even a good spark, no fuse blown). Push a button to reset.....

If I were to do it again, I would consider stacking three high current (surplus) 5 volt (floating) switcher supplies. If so, attention must be paid to RFI shielding. ...The linear generates no RF noise.

Martyn Watts wrote:
>
> I m trying to build a substantial (35-50A, 13.8 V) PSU for my
> radio as an experiment. My only problem is that I can t find a
> suitable regulator for it. If anyone out there can help me with
> a circuit diagram for a suitable regulator or another way of
> doing it, I d be very grateful. I have the transformer, diodes,
> caps etc
>
> TIA David
>
> E-mail via
>
> MWATTS@COMPUSERVE.COM or
> WHITGIFTSC@AOL.COM
>
> --
> M Watts PhD. Mega power with an IQ of 197

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722

.

3127. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5gq7nv$7fb@mtinsc03.worldnet.att.net>
Source record: 95912

I do hope you meant to say connect a N.O. relay in SERIES with the
transformer primary, across the current limiting resistor. Relay to
short the resistor when the surge subsides....

Woody

<snip>
> A better way to do it is to connect the surge relay across the
> transformer primary, use only one resistor, and short it when the
> PRIMARY reaches near full voltage. Of course the resistor should be
> fused with a slow blow fuse in case the supply is shorted (or the
> relay fails) at start up.
>
> Not the best circuit they describe, is it?
>
> NO power line return should ever be connected to the chassis in any
> way, even for a relay and ESPECIALLY for a transformer!!! Fried ham is
> best in a pan, not a ham shack.
>
> 73 Tom

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3128. Trap/Balun losses

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: "Roger A. McCarty" <rmccarty@deltanet.com>
Message-ID: <3330B264.4D7D@deltanet.com>
Source record: 95913
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Perhaps someone would like to comment on this. I have read what seems to be, two conflicting reports regarding trap and/or balun losses. To wit;

From the ARRL Antenna Handbook, 1994. Page 11-28, paragraph 3;

"If 1500 watts of transmitter power is going into an antenna, a loss of 0.5db amounts to 163 watts. This would create a significant amount of heat in the six traps that are on average in a TH6DXX, amounting to 27 watts per trap. If the loss were as high as 1db, this would be 300 watts total, or 50 watts per trap. Common sense says that if overall loss were greater than 0.5 db, the traps would act more like big firecrackers than resonant circuits!"

Note the power loss reference dissipated in the traps.
now this,

from QST March 1977, page 76 paragraph 8;

(refering to the Tucker T-3000 antenna tuner) "The situation got much worse in the balanced mode, where power losses ranged from 35% to an astonishing 99% across 160 meters and 60% or higher on 80 meters for low impedance loads."

This leads me to place a LARGE question mark behind everything alleged as factual in this article. It doesn't matter what power level you may consider, for example 100 watts. According to the writer, 99 watts will be dissipated by the balun. 99 WATTS!! at 1KW, 990 watts will be dissipated by the balun! Come on!

I own a Tucker/Vectronics Tuner and I use a balanced line fed antenna system everyday on 75 meters. From practical experience I can tell you this is pure nonsense. Similar or other perspectives are invited.

Roger KD6CC

3129. More input please!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: tadunlap@kellnet.com
Message-ID: <332f582a.6716217@news.supernews.com>
Source record: 95976

I have just put up a North Central Ohio SKYWARN website. Please visit it and either e-mail any suggestions or comments, or leave them on my guest book. I'd like to make this site informative and interesting. Please help with your comments. Thanks.

Todd...
KC8EDS
tadunlap@kellnet.com
HOMEPAGE: http://www.qsl.net/kc8eds

3130. WTB:schematic for GE Pheonix

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: bigjim@voicenet.com
Message-ID: <5gnj9b$br3@news1.voicenet.com>
Source record: 95977
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I am in search of a schematic diagram or a service manual for a GE pheonix UHF radio. I need to modify the FM limiter so i can do 25KHZ wideband audio transmissions for ATV. I will purchase it or pay for photocopies. Thanks, Jim bigjim@voicenet.com

3131. FS: New 3-500Z Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5gntni$6f1$2@news3.microserve.net>
Source record: 95978

Hello,

I have four EIMAC SK-410 tube sockets for sale.

They are new in the boxes with all hardware.

$20.00 ea (includes UPS Shiping)

Steve N3FTI
skerns@mail.talon.net
610-404-0100 Work

3132. Avionics techs and installers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Glenn Haddon <glennh@smartlink.net>
Message-ID: <01bc3423$c10ebec0$2e3476cc@Smartlink.smartlink.net>
Source record: 95979
Cross-posted to:
rec.aviation.marketplace,rec.aviation.misc,rec.aviation.piloting,rec.aviation.products,rec.radio.amateur.homebrew,us.jobs.offered

```
Avionics techs needed by the largest 135 operator.
Experienced ramp/bench tech with needed in Oakland.
Installers and bench techs with strong electronics background needed in
Burbank Ca.
Good saleries good benifits.
Contact glennh@smartlink.net for info.
```

3133. Re: WTB: KEG-O-RATOR AND/OR BAR TAP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5gntd4$6f1$1@news3.microserve.net>
Source record: 95980
Cross-posted to: alt.binaries.hebrew.mac,alt.brewing,alt.homebrewing,rec.crafts.brewing,rec.radio.amateur.homebrew

I once loaded up a 1/4 barrel, not a good match to 50 ohms........

Steve N3FTI

In article <01bc319a$c09a6600$8c1d3586@croweljk.muohio.edu>,
crnkovcm@miamiu.muohio.edu says...
>
>I am looking for a keg-o-rater, if anyone has one for sale, please e-mail
>me at:
>
>crnkovcm@miamiu.muohio.edu
>
>If you do not have a keg-o-rator, but have a bar tap, also e-mail me.
>
>Thanks,
>
>Cody Crnkovich
>

3134. Re: please help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: davidf@feist.com
Message-ID: <332f714b.27388832@news>
Source record: 95981

"cool guy" <cool@cool.net> wrote:

>This is not really amature radio, but I know you probably know how to do
>this.

>I want to build a small AM or FM transmitter. I want to have it transmit
>around
>a mile and as small as possible. Does anyone have schematics for something
>like that?
>Or just want to help a guy who has been looking for months and cant find
>anything he can use.

if you are talking about pirate radio, try alt.pirate.radio....they'll
tell you what you want to know.

3135. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <33358682.1560359779@news.sci.fi>
Source record: 95982

larsm@lin.foa.se (Lars Moell) wrote:

>HI
>Is there any anybody else out there having had problems with the 723
>when RF is present. Remember building a small 4 amp supply using the
>metal can version of 723 and a 3055. The p.s. did reduce the output
>voltage when I held my H.T above the circuit. At least I'm happy the
>voltage went down-wards.....

Just speculating, but since the output voltage always dropped when the RF was present, it might enter the circuit from the current limiting (short circuit protection) circuit. In a typical 723 circuit, the output current flows through a small current sensing resistor (typically much less than 1 ohm in a big PSU) and then to output terminal of the PSU (with long external leads attached). An internal NPN is connected across the current sensing resistor, emitter ("Current sense" terminal of the 723) to the lower end of the resistor (PSU output terminal) and the base ("Current limit" terminal of the 723) to the upper end (the series pass transistor end). When the voltage drop exceed 0.7 V, the internal transistor conducts, robbing some current from the internal differential amplifier, reducing the output voltage.

If in some way a large _differential_ RF voltage is developed across the Current limit and Current sense terminals, the internal transistor acts as an rectifier, the negative half-cycle is cut off and the positive half-cycle increase the current through the current sense transistor shunting the differential amplifier and reducing output voltage.

If the current sense resistor is near the series pass transistor (at the heat sink) and far away from the 723 regulator board, the interconnection leads (and the self inductance of the wire wound high power current sense resistor) form a quite effective antenna, since it is a considerable part of a quarter wavelength at 2 m.

The eliminate this source of RFI, use a twisted pair for Current Sense and Current Limit wires, since this will greatly reduce the _differential_ voltage picked up by the lines. You could even use ferrites at the 723 end of the 723 to even further reduce the differential voltage without affecting the DC-conditions. This is a safe place to insert ferrites, since this part of the circuit is not in the feedback loop during normal operation (non-short circuit condition).

However, be very careful about inserting ferrites or RF-bypass capacitors into the voltage sense feedback loop, since this can compromise the stability of the loop even during normal operation.

As I said, this is just speculating, but hopefully it will help someone to troubleshoot their problems, at least by eliminating one source.

Paul OH3LWR

3136. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <332fb7f9.642897@news.lin.foa.se>
Source record: 95983

I'm pretty confident that it is possible to construct a p.s. using the
723 in a RF-application. Anyone remember the PS7 for the Drake TR7?
They used the 723 and apparently it does work!

Somehow I would feel more secure using a circuit that is behaving
properly without any special decoupling etc.

Some years ago I did bulid a 25 Amp supply using a descrete design
from the OZ ham magazine. Worked like a charm and was scalable up to
more than 50 amps.

My conclution is: stay away from the 723 and you be out of trouble!

BTW. Use more modern transistors than the 2N3055 as they tends to
loose beta when delivering high current!

73 Lasse SM5GLC

keinanen@sci.fi (Paul Kein&#65533;nen) wrote:

>larsm@lin.foa.se (Lars Moell) wrote:
>
>>HI
>>Is there any anybody else out there having had problems with the 723
>>when RF is present. Remember building a small 4 amp supply using the
>>metal can version of 723 and a 3055. The p.s. did reduce the output
>>voltage when I held my H.T above the circuit. At least I'm happy the
>>voltage went down-wards.....
>
>Just speculating, but since the output voltage always dropped when the
>RF was present, it might enter the circuit from the current limiting
>(short circuit protection) circuit. In a typical 723 circuit, the
>output current flows through a small current sensing resistor
>(typically much less than 1 ohm in a big PSU) and then to output
>terminal of the PSU (with long external leads attached). An internal
>NPN is connected across the current sensing resistor, emitter
>("Current sense" terminal of the 723) to the lower end of the resistor
>(PSU output terminal) and the base ("Current limit" terminal of the
>723) to the upper end (the series pass transistor end). When the
>voltage drop exceed 0.7 V, the internal transistor conducts, robbing
>some current from the internal differential amplifier, reducing the
>output voltage.
>
>If in some way a large _differential_ RF voltage is developed across
>the Current limit and Current sense terminals, the internal transistor
>acts as an rectifier, the negative half-cycle is cut off and the

>positive half-cycle increase the current through the current sense
>transistor shunting the differential amplifier and reducing output
>voltage.
>
>If the current sense resistor is near the series pass transistor (at
>the heat sink) and far away from the 723 regulator board, the
>interconnection leads (and the self inductance of the wire wound high
>power current sense resistor) form a quite effective antenna, since it
>is a considerable part of a quarter wavelength at 2 m.
>
>The eliminate this source of RFI, use a twisted pair for Current Sense
>and Current Limit wires, since this will greatly reduce the
>_differential_ voltage picked up by the lines. You could even use
>ferrites at the 723 end of the 723 to even further reduce the
>differential voltage without affecting the DC-conditions. This is a
>safe place to insert ferrites, since this part of the circuit is not
>in the feedback loop during normal operation (non-short circuit
>condition).
>
>However, be very careful about inserting ferrites or RF-bypass
>capacitors into the voltage sense feedback loop, since this can
>compromise the stability of the loop even during normal operation.
>
>As I said, this is just speculating, but hopefully it will help
>someone to troubleshoot their problems, at least by eliminating one
>source.
>
>Paul OH3LWR
>

3137. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <332fd64c.1271942@netnews.worldnet.att.net>
Source record: 95984

On Tue, 18 Mar 1997 13:39:18 -0800, jupiter@europa.com wrote:

>Also, I see that for 110v, the resistors are in parallel, while for 220v
>they are in series, so that makes some intuitive sense.

With ten ohm resistors, maximum inrush power would be the same on 240
v and 120 v, so that makes sense. But the circuits Ian was looking at
have a 240 volt only primary.

I think the inrush stuff is minor compared to safety issues.

73 Tom

3138. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3339d406.1580203192@news.sci.fi>
Source record: 95985

larsm@lin.foa.se (Lars Moell) wrote:

>BTW. Use more modern transistors than the 2N3055 as they tends to
>loose beta when delivering high current!

The 2N3055 is quite usable for up to 4 A per transistor. For a 40 A power supply, you would need 10 of these in parallel, but you have to be prepared to feed 2 A of base current into this circuit. (However, using only four 2N3055s to deliver 40 A, would require 8 A of base current, since the current gain drops to 5).

The worst problem with 2N3055 is that the Vbe and Vce(sat) voltages increase quite rapidly above 4 A collector current, forcing the use of a higher transformer secondary voltage, which in turn increase the power dissipation in the series pass transistors.

Paul OH3LWR

3139. Great ham radio web site!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5gonl5$20h@news1.mnsinc.com>
Source record: 95986
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Have a look at -

http://www.mnsinc.com/bry/hamfiles.htm

and

http://www.mnsinc.com/bry/hamlynx.htm

It's all been updated lately with LOTS of new information & links!!

Categorized by various subjects so you don't have to hunt much for what you need. Regards - Bry

73 from Bry (((Amateur Radio G3XLQ / AF4K)))
http://www.mnsinc.com/bry/
E-mail: bry@mnsinc.com *** REMOVE ".NO_SPAM" to reply ***
Home of MEGALIST ham radio files, SWL info. etc. etc.
You MAY NOT use my email address for unsolicited Email!

3140. Re: Great ham radio web site!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: RDJ <RDJ@leisure.tim>
Message-ID: <333018C1.77AE@leisure.tim>
Source record: 95987
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

de K3TSX

Nice page but why the canary yellow and the light blue/green large-text
headers? Contrast (and, thus, readability) are awful!

--
"In framing a government...you must, first, enable the
government to control the governed and, in the next place,
oblige it to control itself." --- James Madison

3141. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Steve Simpson <Steve@chubs.demon.co.uk>
Message-ID: <LYL5vpAh69LzEw8d@chubs.demon.co.uk>
Source record: 95988
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics,sci.electronics.design,uk.radio.amateur

In article <332EE500.330C@airmail.net>, Gerald Lynas
<lynasp2@airmail.net> writes
>on 15 volt power supplies which we install in radio transmitters. Every
>time the step start relays close on the transmitter, the "regulated" 15
>volts bounces about 3 volts (and kills the overvoltage protection
>circuit.) We talked to Motorola and other suppliers with no success.
>Guess that chip and any rf or transient don't mix.

I need to make a 15 volt PSU supplying around 10 amps continues. Does anyone have any cheap off the shelf ideas. Perhaps using one of the LM series of regulators and 3055's. Even a simple zener diode type affair will probably do.

I've never really got involved with PSU's before but I feel I need to move on from batteries!! :->

Can anyone help or perhaps point me in the direction of a suitable circuit please?

Regards
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
G-QRP Club Member 9631
Visit Radio World -
HTTP://www.chubs.demon.co.uk

3142. MS1307 FET Spec help please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Steve Simpson <Steve@chubs.demon.co.uk>
Message-ID: <L4D5nnAD59LzEweG@chubs.demon.co.uk>
Source record: 95989
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics,sci.electronics.design,uk.radio.amateur

I found an MS1307 FET (I think) in my junk box and I wondered if anyone has the pin out and spec. for it?

Thanks in advance,
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
G-QRP Club Member 9631
Visit Radio World -
HTTP://www.chubs.demon.co.uk

3143. electronic memory keyer schematic wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: cthompso@north.nsis.com
Message-ID: <5gohgm$c7$1@thor.atcon.com>
Source record: 95990

I am looking for a simple electronic keyer with a bit of memory, a schematic or a source where I can get one would be great. Thanks VE1CT

3144. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33301C5F.53AA@crpl.cedar-rapids.lib.ia.us>
Source record: 95991
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics,sci.electronics.design,uk.radio.amateur

Steve Simpson wrote:
>
> In article <332EE500.330C@airmail.net>, Gerald Lynas
> <lynasp2@airmail.net> writes
> >on 15 volt power supplies which we install in radio transmitters. Every
> >time the step start relays close on the transmitter, the "regulated" 15
> >volts bounces about 3 volts (and kills the overvoltage protection
> >circuit.) We talked to Motorola and other suppliers with no success.
> >Guess that chip and any rf or transient don't mix.
>
> I need to make a 15 volt PSU supplying around 10 amps continues. Does
> anyone have any cheap off the shelf ideas. Perhaps using one of the LM
> series of regulators and 3055's.

The 1997 ARRL Handbook, chapter 11, has a similar power supply that you might like.

Bill W0IYH

3145. Re: WTB:schematic for GE Pheonix

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Cliff Soderback <Cliff-s@worldnet.nospam.att.net>
Message-ID: <01bc3486$bdd2c4a0$5c7993cf@cliffs>
Source record: 95992
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Jim <bigjim@voicenet.com> wrote in article
<5gnj9b$br3@news1.voicenet.com>...
> I am in search of a schematic diagram or a service manual for a GE
> pheonix UHF radio. I need to modify the FM limiter so i can do 25KHZ
> wideband audio transmissions for ATV. I will purchase it or pay for
> photocopies. Thanks, Jim bigjim@voicenet.com
>
>
Jim:
Check www.ericsson.com(they bought out GE). They have
manuals available for nearly all GE radios. Do a search by model number
to obtain the number of the manual you need then call the 800 number
to order.

Cliff, W7VVA

3146. Paul Kluwe

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970319183501.NAA06240@ladder01.news.aol.com>
Source record: 95993

Hey Paul, thanks for the schematics. Found that I had to go into the PTO box after all, couldn't get to everything from the outside.

Built the frequency lock from QEX February 1996, and incorporated it using the FSK diode. It locks within a few seconds, and will hold one of those beauties within a Hz or 2 for DAYS!

(Doesn't do a thing for the backlash in an old one however, the DDS is a big improvement in that respect.)

Thanks again

W4ZCB

3147. Laser SSB/NBFM/CW CCW/BPSK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: daveaa1a@ssih.com
Message-ID: <5gpapi$onc@xensei3.xensei.com>
Source record: 95994

Gudday,

Rough guess with 3mw diode is some efficiency factor and I peg it to 1mw or the equivalent of 0 dbm on the sig gen.
From there the RELATIVE db range can be seen by substituting the sig. gen. output range versus the diode shining dead into the detector.. I measure about 124 dbm range and it looks the equivalent of about 3 uv. sensitivity to me.

My best front end to date is the VTP diode reverse biased with a 82k resistor back to filtered 9 vdc.. coupled with a .1 to the gate of a mpf-102 which sees a 1 meg to gnd. A 1.2k resistor in the drain lead, bypased and the source resistance of 500 ohm coupled via a .1 into the DBMixer with a L.O. of 4 mhz. gives me s-1 noise floor on the TS930 receiver at 4++ mhz. with the VLF converter running..

The main advantage of subcarrier I see is greatly diminished base band sounds from noisey lights, car headlights, rain drops, ambient, etc.. At 40 khz things get pretty quiet and i track a 124 dbm difference there between the full ON signal from the laser diode into the pin detector at dark/noisey signal and this sounds more like a communications receiver sensitivity/dynamic range all the time..

I am using the transverter IN/OUT from the hf rig to limit the power during transmit which can run duplex using different tx/rx and different sub frequencies or simplex using the same subcarrier/rig..

This system allows me to tune to baseband for basic cw/am phone set ups and almost any subcarrier freq. for ANY type of modulation ssb/fm/data etc..

The carrier as seen in a 800hz beat into the CCW/BPSK tuning utility ala VE2IQ shows a very stable carrier with resolution to well within 1 hz., enough for easy CCW and the accompanied S/N improvement but as it stands now is only needed on a very noisey circuit..

I hope this running commentary is helpful, it sure lets me see my own thoughts more clearly.. Lets hear from you..

73 de daveaa1a

3148. Laser SSB/NBFM/CW CCW/BPSK

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: daveaa1a@ssih.com
Message-ID: <5gparg$onc@xensei3.xensei.com>
Source record: 95995

Gudday,

Rough guess with 3mw diode is some efficiency factor and I peg it to 1mw or the equivalent of 0 dbm on the sig gen.
From there the RELATIVE db range can be seen by substituting the sig. gen. output range versus the diode shining dead into the detector.. I measure about 124 dbm range and it looks the equivalent of about 3 uv. sensitivity to me.

My best front end to date is the VTP diode reverse biased with a 82k resistor back to filtered 9 vdc.. coupled with a .1 to the gate of a mpf-102 which sees a 1 meg to gnd. A 1.2k resistor in the drain lead, bypased and the source resistance of 500 ohm coupled via a .1 into the DBMixer with a L.O. of 4 mhz. gives me s-1 noise floor on the TS930 receiver at 4++ mhz. with the VLF converter running..

The main advantage of subcarrier I see is greatly diminished base band sounds from noisey lights, car headlights, rain drops, ambient, etc.. At 40 khz things get pretty quiet and i track a 124 dbm difference there between the full ON signal from the laser diode into the pin detector at dark/noisey signal and this sounds more like a communications receiver sensitivity/dynamic range all the time..

I am using the transverter IN/OUT from the hf rig to limit the power during transmit which can run duplex using different tx/rx and different sub frequencies or simplex using the same subcarrier/rig..

This system allows me to tune to baseband for basic cw/am phone set ups and almost any subcarrier freq. for ANY type of modulation ssb/fm/data etc..

The carrier as seen in a 800hz beat into the CCW/BPSK tuning utility ala VE2IQ shows a very stable carrier with resolution to well within 1 hz., enough for easy CCW and the accompanied S/N improvement but as it stands now is only needed on a very noisey circuit..

I hope this running commentary is helpful, it sure lets me see my own thoughts more clearly.. Lets hear from you..

73 de daveaa1a

3149. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: Andrew Marshall <andrew@g8bur.demon.co.uk>
Message-ID: <8u9jFJA8LEMzEwwm@g8bur.demon.co.uk>
Source record: 95996
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics,sci.electronics.design,uk.radio.amateur

In article <LYL5vpAh69LzEw8d@chubs.demon.co.uk>, Steve Simpson
<Steve@chubs.demon.co.uk> writes
>
>I need to make a 15 volt PSU supplying around 10 amps continues. Does
>anyone have any cheap off the shelf ideas. Perhaps using one of the LM
>series of regulators and 3055's. Even a simple zener diode type affair
>will probably do.

There is a 10 amp 3-terminal regulator about, but AFAICR it's rather
pricey.

I'd be tempted to go the LM317T plus 2N3055s route. I'll see if I can
find any circuits.

>I've never really got involved with PSU's before but I feel I need to
>move on from batteries!!

I'd stick with the battery and float a good, accurately-regulated 13.8v
supply across it (with dropout contactor or other anti-backflow device
if need be). All my gear is fed in this way. It gives you a good UPS,
and more importantly provides protection against a shorted regulator
putting 25v or more on your gear. IMHO much better than a crowbar, which
I've found can be subject to false triggering by spikes and local RF
fields.

73,
Andrew
--
Andrew Marshall.
Unsolicited advertising matter unwelcome. Offenders may be blacklisted.

3150. Re: HF "VOX" for 2m preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-19 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5gpert$29n2@info4.rus.uni-stuttgart.de>
Source record: 95997

In article <5gobsr$cmq@nyheter.chalmers.se>,
Hans-Christian Becker <root@localhost> wrote:
>Hi everyone!
>Could anyone point out sources and/or ideas for typical "HF VOX"
>circuits used in VHF [pre]amps (i.e. switch out preamp when HF comes
>its way, switch in PA, without using a separate transmit signal from
>the rig)? I can't find anything on this topic in my books.
>Thanks in advance,

Hello Hans-Christian,

The circuit is really simple. sample some RF from the antenna
line with a 1 pF capacitor, rectify it with two diodes, connected
in a voltage doubling arrangement and feed this to the base of a transistor
which has else no base bias. than maybe a second transistor, and you have
enough current for the relays.

Good luck, Moritz DL5UH

3151. - Untitled QuickPICT 5.JPG (0/1) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya02358000200397145433000l@news.europa.com>
Source record: 95848

In article <jupiter-ya02358000200397142450000l@news.europa.com>,
jupiter@europa.com wrote:

::> I think the inrush stuff is minor compared to safety issues.
::>
::Whether one or two step-start resistors is used with a 240v amplifier, the
::chassis is always connected to the mains-neutral. What safety issues?
::
::--
::--Rich-- ag6k, 805-386-3734
:
:
:Rich,
:
:I don't think most of these people have ever built anything, let alone a
:high power amp. I have some 4x6 glossies of my amp and power supply, which
:I will try to attach as JPEG's to an upcoming post. My baby took my 9
:months to build:
:
:I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came
:out of some BC-xx AM transmitter. paid $200
:
:8877 from that tube guy on McArthur Blvd in Oakland. paid $250
:
:Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for
:$75, oh my god what a deal.
:
:Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5
:
:Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos
:to get it.
:
:Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got
:both for about $200.
:
:Filament transformer is 7V from Halted special $5 computer power supply
:sale. Use 150W adj pot for filament inrush protection and adj voltage.
:
:I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.
:-------------
:
:In summary, if you want to build amps, move to Cal. I now live in Oregon.
:It may as well be Libya, as far as parts procurement goes.
:

:Rob.

3152. - Untitled QuickPICT 4.JPG (1/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971453420001@news.europa.com>
Source record: 95849

```
BEGIN -- Cut Here -- cut here
begin 644 Untitled QuickPICT 4.JPG
<uuencoded_portion_removed>
END -- Cut Here -- cut here
```

3153. - Untitled QuickPICT 4.JPG (2/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971454050001@news.europa.com>
Source record: 95850

```
BEGIN -- Cut Here -- cut here
<uuencoded_portion_removed>
7A9V))+').:JW4Y)3;CRW"BF9A10!_]F.
`
end
END -- Cut Here -- cut here
```

3154. - Untitled QuickPICT 5.JPG (1/1) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971454390001@news.europa.com>
Source record: 95851
Body handling: Inline uuencoded payload not displayed: Untitled QuickPICT 5.JPG

```
BEGIN -- Cut Here -- cut here

[Inline uuencoded payload not displayed: Untitled QuickPICT 5.JPG]

END -- Cut Here -- cut here
```

3155. Re: ?? TR-7200 A mike pinouts ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: brinkal@worldaccess.nl
Message-ID: <N.032097.173824.69@hgl2-7.worldaccess.nl>
Source record: 95852

Aan 19-03-97 4:07, in bericht <332F586A.65E5@lightspeed.net>, jtz
<rapuppa@lightspeed.net> schreef:

> hi i recently aquired a kenwood tr 7200
> sans 1 mike & cord. & after rooting through
> some boxes of... well i found a mike and correct
> plug for the radio yet i know not the pinout.
> can someone help? wires as follows
> mike side> 2 black
> 1 white
> 1 red
> plug > 20 40
> 10 3 0

---
1 = Microphone
2 + 3 = PTT
4 = Ground
---

greetings /_/
/ /ARRY PD o GBJ

>E-mail: brinkal@worldaccess.nl<
********> Fido: 2:283/312.34 <********

3156. - Untitled QuickPICT 3.JPG (0/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya02358000200397145235000l@news.europa.com>
Source record: 95853

In article <jupiter-ya02358000200397142450000l@news.europa.com>,
jupiter@europa.com wrote:

::> I think the inrush stuff is minor compared to safety issues.
::>
::Whether one or two step-start resistors is used with a 240v amplifier, the
::chassis is always connected to the mains-neutral. What safety issues?
::
::--
::--Rich-- ag6k, 805-386-3734
:
:
:Rich,
:
:I don't think most of these people have ever built anything, let alone a
:high power amp. I have some 4x6 glossies of my amp and power supply, which
:I will try to attach as JPEG's to an upcoming post. My baby took my 9
:months to build:
:
:I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came
:out of some BC-xx AM transmitter. paid $200
:
:8877 from that tube guy on McArthur Blvd in Oakland. paid $250
:
:Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for
:$75, oh my god what a deal.
:
:Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5
:
:Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos
:to get it.
:
:Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got
:both for about $200.
:
:Filament transformer is 7V from Halted special $5 computer power supply
:sale. Use 150W adj pot for filament inrush protection and adj voltage.
:
:I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.
:-------------
:
:In summary, if you want to build amps, move to Cal. I now live in Oregon.
:It may as well be Libya, as far as parts procurement goes.
:

:Rob.

3157. Anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: dal9@axe.humboldt.edu
Message-ID: <dal9-2003971621570001@thales.razorlogic.com>
Source record: 95854

Has anyone outside of CA heard of the Humboldt Brewing Co.?

3158. Want Camcorder for ATV use - cheap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: John in Roseville <rtwodtwo@jps.net>
Message-ID: <5gsedf$l4i@news2.snfc21.pacbell.net>
Source record: 95855

Thanks for reading this. I'm looking for a color video camera that I
can use for ATV but don't have much cash so a broken camcorder will do
just fine if the camera part still works and I can get video out.
Let me know what you have and how much you want for it.
$60 is my limit for a broken camcorder.

mailto:rtwodtwo@cwnet.com

John

3159. Tone Burst Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: Gene Neill <gneill@ge.maxess.ch>
Message-ID: <3331A8C6.7165@ge.maxess.ch>
Source record: 95856

I just got to Europe and my Yaseu FT470 does not have the tone burst generator needed to open repeaters and I'm not good at whistling.
Anyone have a schematic for a 1750 Hz tone burst generator?

Thanks in advance, WA7NPP/HB9

3160. non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971823450001@news.europa.com>
Source record: 95857

Already, I've gotten complaints from whiners regarding my linear picts.

Well, if political debates regarding "Little LEO's", whatever that means, can occupy the NG, then you should be complaining to them, not me.

Also, I am very intereested in seeing others' homebrew projects captured via QuickCams, etc.

If QST can begin with 20pp of pictures then we can assuredly do the same with this NG. Also, I can put schematics onto JPEGS.

This is brand new territory with this NG, and I am already getting rave reviews from some of the less timid QST authors.

Anyway, thanks for your time, Rob

3161. - Untitled QuickPICT 3.JPG (1/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971452380001@news.europa.com>
Source record: 95858

```
BEGIN -- Cut Here -- cut here
begin 644 Untitled QuickPICT 3.JPG
<uuencoded_portion_removed>
END -- Cut Here -- cut here
```

3162. - Untitled QuickPICT 4.JPG (0/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya02358000200397145339000l@news.europa.com>
Source record: 95859

In article <jupiter-ya02358000200397142450000l@news.europa.com>,
jupiter@europa.com wrote:

::> I think the inrush stuff is minor compared to safety issues.
::>
::Whether one or two step-start resistors is used with a 240v amplifier, the
::chassis is always connected to the mains-neutral. What safety issues?
::
::--
::--Rich-- ag6k, 805-386-3734
:
:
:Rich,
:
:I don't think most of these people have ever built anything, let alone a
:high power amp. I have some 4x6 glossies of my amp and power supply, which
:I will try to attach as JPEG's to an upcoming post. My baby took my 9
:months to build:
:
:I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came
:out of some BC-xx AM transmitter. paid $200
:
:8877 from that tube guy on McArthur Blvd in Oakland. paid $250
:
:Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for
:$75, oh my god what a deal.
:
:Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5
:
:Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos
:to get it.
:
:Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got
:both for about $200.
:
:Filament transformer is 7V from Halted special $5 computer power supply
:sale. Use 150W adj pot for filament inrush protection and adj voltage.
:
:I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.
:-------------
:
:In summary, if you want to build amps, move to Cal. I now live in Oregon.
:It may as well be Libya, as far as parts procurement goes.
:

:Rob.

3163. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: n7ws@azstarnet.com
Message-ID: <n7ws.278.01106695@azstarnet.com>
Source record: 95860

In article <measures-ya02408000R2003970753440001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
>From: measures@mail.vcnet.com (R. L. Measures)
>Subject: Re: Soft-start circuits
>Date: Thu, 20 Mar 1997 07:53:44 -0800

[SNIP]

I hope your lapdog Tony is reading this group too Rich, cuz here is another example where you are dead wrong (no pun intended).

>>
>Whether one or two step-start resistors is used with a 240v amplifier, the
>chassis is always connected to the mains-neutral. What safety issues?

The safety issue is the one you just introduced.

THE NEUTRAL IS TIED TO EARTH AT THE SERVICE ENTRANCE..... After that, it is treated as a current carrying conductor. The safety ground (what you should be tying to the chassis) carries fault current only, as John, WA0VYZ, clearly points out in his post.

N7WS
>--
>--Rich-- ag6k, 805-386-3734

3164. - Untitled QuickPICT 1.JPG (0/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya02358000200397145020000 1@news.europa.com>
Source record: 95861

In article <jupiter-ya02358000200397142450000 1@news.europa.com>,
jupiter@europa.com wrote:

::> I think the inrush stuff is minor compared to safety issues.
::>
::Whether one or two step-start resistors is used with a 240v amplifier, the
::chassis is always connected to the mains-neutral. What safety issues?
::
::--
::--Rich-- ag6k, 805-386-3734
:
:
:Rich,
:
:I don't think most of these people have ever built anything, let alone a
:high power amp. I have some 4x6 glossies of my amp and power supply, which
:I will try to attach as JPEG's to an upcoming post. My baby took my 9
:months to build:
:
:I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came
:out of some BC-xx AM transmitter. paid $200
:
:8877 from that tube guy on McArthur Blvd in Oakland. paid $250
:
:Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for
:$75, oh my god what a deal.
:
:Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5
:
:Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos
:to get it.
:
:Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got
:both for about $200.
:
:Filament transformer is 7V from Halted special $5 computer power supply
:sale. Use 150W adj pot for filament inrush protection and adj voltage.
:
:I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.
:-------------
:
:In summary, if you want to build amps, move to Cal. I now live in Oregon.
:It may as well be Libya, as far as parts procurement goes.
:

:Rob.

3165. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5gt4b3$jga@mtinsc05.worldnet.att.net>
Source record: 95862

Ah Ha! Now it computes :-)
73,
--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3166. Re: Who knows e-mail address TenTec ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: "Allan (VE6AQK)" <doblera@cadvision.com>
Message-ID: <33321C2B.4F85@cadvision.com>
Source record: 95863

Bart Mudde wrote:
>
> I am looking for the manual of the TenTec Corsair II.
> Therefor I am looking for the e-mail address of TenTec.
> Who knows an address wich is good and I also will get an answer ?
> 73 de Bart PA3GGM.

http://www.tentec.com/ might be a good start

73 Allan VE6AQK

3167. - Untitled QuickPICT 1.JPG (2/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971450570001@news.europa.com>
Source record: 95864

```
BEGIN -- Cut Here -- cut here
<uuencoded_portion_removed>
7E1J1W0;6]#15&;36Z"B@044`%%`'_]FK
`
end
END -- Cut Here -- cut here
```

3168. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003972212550001@news.europa.com>
Source record: 95865

In article <3331ef8b.53186746@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

:On Thu, 20 Mar 1997 14:24:50 -0800, jupiter@europa.com wrote:
:
:
:>I don't think most of these people have ever built anything, let alone a
:>high power amp. I have some 4x6 glossies of my amp and power supply, which
:>I will try to attach as JPEG's to an upcoming post. My baby took my 9
:>months to build:
:
:Wow! An 8877, that's a **big** tube.
:
:And in only nine months!
:
:73 Tom

This NG is supposed to be about construction, not speculation or humiliation. The amazing thing about my amp was the construction and acquisition of parts, not the schematic or size of the tube. Put up or shut up. Thats why I posted all the JPEGs. It sounds like you are one of those speculators and not a doer. But its not my fault. The local ham store here, they would always say: we just can't get any of those exotic parts. Now they are Chapter 11. Meanwhile, my construction projects go on.

I guess you aren't interested in getting any of those free 5.2mhz 2.5khz and 25Ohz linear phase filters that I posted. Others can inquire.

Rob.

3169. WEBPAGE UPDATES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: kb7ub@dxer.com
Message-ID: <33361909.9464779@news.primenet.com>
Source record: 95866

Check out the new indexes at

"http://www.dxer.com"

"Amateur Television Index"

"New Product Index"

"Used Equipment Index:

"Additions to Ham Club, CW, Satellite
and VHF/UHF indexes"

Begining May 1st, 1997 Comet Antennas will be
having a monthly drawing for Comet Shirts, and
other selected items.. Details will be posted
at "http://www.dxer.com"

3170. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5gs3ii$88s_001@leeds.ac.uk>
Source record: 95867

In article <332E58B6.41C6@athena.polito.it>,
Claudio Fornaro <fornaro@athena.polito.it> wrote:
>Hi all,
>I'd want to build a "home made" radio receiver for AM (or even SW...) by
>putting
>together pieces that can be found at home, that is you have not to buy
>them in an
>electronic shop.
>To explain better: I intend to build capacitors (maybe with alluminium
>sheets and
>plastic bags), inductors (copper wire), the crystal is a problem... one
>usually
>has no galena crystal at home... the loudspeaker maybe is a bigger
>one...
>Has anyone ever seen such a project made or has s/he any idea about
>building it?
>Thanks in advance.
> Claudio
You wouldn't *need* a crystal, you could use an inductor/capacitor vfo.

73 & good luck de Laurens

3171. Re: motorola pager modifications?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: "H.Silvia" <hrsil@flinet.com>
Message-ID: <33311B9D.39B0@flinet.com>
Source record: 95868

Demolition Man wrote:
>
> Any of you homebrewers out there know anything about pagers? i'm gonna
> recrystal this one [a yard sale find with no docs!!] for use with tnc
> and such. nice CQ vhf article on this subject.
>
> the question is: how do i find out its activation code. i remember
> seeing somewhere that there is a way to make it give me the
> information. i don't even know the model number. it has the standard
> beep and vibration type alerts. a backlight and displays the time.
>
> it does say 152.4800 and 1200 baud on the back so it's a vhf type. any
> help out there?
>
> --
> A.C.Curtis
> KB0WLF
>
> mailto:demoman@rollanet.org
> http://www.rollanet.org/~demoman/
The activation or "capcode is a 7 digit number also printed on the back
of the pager itself. A few companies provide demo software for computer
paging and can be found on the web.
Henry KE4WBW

3172. - Untitled QuickPICT 2.JPG (0/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya02358000200397145131000l@news.europa.com>
Source record: 95869

In article <jupiter-ya02358000200397142450000l@news.europa.com>,
jupiter@europa.com wrote:

::> I think the inrush stuff is minor compared to safety issues.
::>
::Whether one or two step-start resistors is used with a 240v amplifier, the
::chassis is always connected to the mains-neutral. What safety issues?
::
::--
::--Rich-- ag6k, 805-386-3734
:
:
:Rich,
:
:I don't think most of these people have ever built anything, let alone a
:high power amp. I have some 4x6 glossies of my amp and power supply, which
:I will try to attach as JPEG's to an upcoming post. My baby took my 9
:months to build:
:
:I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came
:out of some BC-xx AM transmitter. paid $200
:
:8877 from that tube guy on McArthur Blvd in Oakland. paid $250
:
:Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for
:$75, oh my god what a deal.
:
:Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5
:
:Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos
:to get it.
:
:Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got
:both for about $200.
:
:Filament transformer is 7V from Halted special $5 computer power supply
:sale. Use 150W adj pot for filament inrush protection and adj voltage.
:
:I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.
:-------------
:
:In summary, if you want to build amps, move to Cal. I now live in Oregon.
:It may as well be Libya, as far as parts procurement goes.
:

:Rob.

3173. - Untitled QuickPICT 2.JPG (2/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971452010001@news.europa.com>
Source record: 95870

```
BEGIN -- Cut Here -- cut here
<uuencoded_portion_removed>
8%`!10`44`%%`!10`44`%%`!10`44`?_9
`
end
END -- Cut Here -- cut here
```

3174. need short range xmitter design for packet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: ccoupland@pei.sympatico.ca
Message-ID: <33319e2f.10729134@news1.pei.sympatico.ca>
Source record: 95871
Cross-posted to: rec.radio.amateur.packet,rec.radio.amateur.homebrew

I'm looking for a good xmitter design to use for packet radio data.
The range needed is about 100 meters. Small size and current use are
the primary requirements.

Any ideas?

Chris Coupland
ccoupland@pei.sympatico.ca

3175. Re: Cryptic coil description

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: John Rabson <word.factory@zetnet.co.uk>
Message-ID: <19970320210338682l3@zetnet.co.uk>
Source record: 95872

In message <5gjfjv$550$1@news.rwth-aachen.de>
ajass@tabaqui.informatik.rwth-aachen.de (Andreas Junklewitz) writes:

> Hallo,

> in one of the ARRL-Microwave handbooks, there are coil description
> which are absolut cryptic to me.

> What means: 4t, 28 swg e.c.w. ?
> or 2.5t, 28 swg t.c.w. ?

Probably,

e.c.w. = enamelled copper wire
t.c.w = tinned copper wire

Did the book say swg (standard [British] wire gauge) or awg (American gauge)?
73 de G3PAI

3176. Re: hlp pls, i need change my tone voice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5gqc7q$aod@news1.mnsinc.com>
Source record: 95873
Cross-posted to: rec.radio.amateur.homebrew,es.rec.radio.amateur

"Andy" <muldowne@wilde.oit.umass.edu> whistled a happy tune like:

|>Leon Heller <leon@lfheller.demon.co.uk> wrote in article
|><UmsBfqASNzJzEwta@lfheller.demon.co.uk>...
|>> In article <5g4o64$5r0$1@diana.ibernet.es>, Alfonso
|>> <alfonsog@redestb.es> writes
|>> >Hi, all.
|>> >
|>> >I need help to modify my tone voice. I have a problem with my voice,
|>> >more people, don't think my age, no think my callsign, is similary a
|>> >girl voice. I want down the frequency to be similary with a men.
|>> >
|>> >Do you know any chip, construccion or circuit to made this mod?
|>> >
|>> >Thanks for your help. The bests 73's EB3FYJ
|>>
|>> OKI have a Speech Pitch Controller chip, the MSM6322GSK, that should do
|>> what you want. It costs #10.20 (UK) from Maplin, and the circuit is in
|>> their current catalogue. You can shift the pitch of input speech in 17
|>> steps either one octave up or one octave down. Maplin is on 01702
|>> 554000.
|>>
|>> Leon
|>> --
|>> Leon Heller, G1HSM

|>You could also try an octaver guitar effect. Just an idea.

Or how about a sex change? :-)

3177. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: cj@hth.com
Message-ID: <3331983a.331917@news.buller.se>
Source record: 95874
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is going to be posted to the following
mailing lists and news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics.misc
rec.radio.amateur.homebrew

You can also find the latest version on the following URL...

WWW site:

http://www.hth.com/losa.htm

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

[--- cut ---]
```

```
=========================================================================
- L.O.S.A Contribution Form -
=========================================================================
New Contribution [ ] Update [ ]
-------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=========================================================================

[--- cut ---]

/Christer

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

3178. Re: Poky Toky!! Help please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jonz@rainbow.rmii.com
Message-ID: <5gq47l$bm3$2@news1.rmi.net>
Source record: 95914
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Steve Simpson (Steve@chubs.demon.co.uk) wrote:
: Hi all,
: I have two little handhelds called Poky Toky's they operate on 144.550
: mhz FM. They have an output of about 10mW I think.

: The problem I have is 144.55 is used by packet around here and I'd
: really like to re-rock them for another frequency.
: This is where the fun starts. The RX IF is 10.7 followed by .455 and a
: 10.240 rock is used to do this, nothing strange here. But the RX rock in
: the first LO has 19.122 mhz on it??? Now I can't make that go in to
: 144.55 anyway I try.

(7 * 19.122) + 10.7 == 144.554 +/- trim capacitor = +/- 5->10 kcs.

: Also the TX rock is in the 20 meg area (I can't
: remember exactly at the moment) This also doesn't seem to divide into
: 144.55.

(7 * 20.65) == 144.55

73
Jonesy W3DHJ

--
SK

3179. Schematics and plans online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: ballance@nr.infi.net
Message-ID: <5gq2fd$j2$1@nw003.infi.net>
Source record: 95915

Does anoyone know of a site on the web where you can download schematics, plans, or other information on homebrew TX/RX equipment?

Matthew Ballance
KF4BGQ Greensboro, NC

3180. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: rapuppa@lightspeed.net
Message-ID: <3330dca9.11306786@news.lightspeed.net>
Source record: 95916
Body handling: HTML body converted to readable text

On Tue, 18 Mar 1997 09:56:22 +0100, Claudio Fornaro wrote:

<hi claudio yeah ive been sorta tossing around the same thing in
>the back ("some times the only part")of my head and happend upon
>a url on the othernet where a fella is building small. "or not so small"
>xtal radios using only things found in nature I.E. rocks & soil & what not
>i cant remem. url but i booked it so ill fire up my browser and see if i cant locate
>er for ya it was really enlightning and sorta bent in a nifty sorta way
>ill email ya the url when i locate as my bookmark.htm file is pushing 300k
>and its as organised as my sentence structure
>>well later for now good luck and well hafta swap notes
><*>73 craigS

3181. Re: crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3330e852.0@cheese.pcug.org.au>
Source record: 95917

I believe a UK company called Kanga Products has 40 metre CW crystals. I don't know their URL but they do have a site on the Web.

73,
--

_____
Peter Parker parkerp@pcug.org.au

Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK
Home Page: http://www.pcug.org.au/~parkerp/
_____

3182. FS: Netwave Wireless Networking For Your Laptop!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: sandy@sandy.com
Message-ID: <5gqs50$29@surf.com>
Source record: 95918

FOR SALE - Netwave Wireless Networking For Your Laptop!
Install into any pcmcia slot and your ready for
high-speed wireless networking!

(1) Netwave AirSurfer Wireless LAN PC Card
(1) Netwave AirSurfer Access Point

** As New..in the box with all manuals, asking $750.00
(I paid over $1600.00 new).

How would you like to stay connected to your network
at home while you carry your laptop computer from
room to room? Or relax in your backyard on a nice
day while you surf the Internet? Or stay connected
to your network at work while you sit in meetings?

Well, you can do this and more with the Netwave
wireless link.

Works with most laptop computers and is fully
supported by Netwave. All product info and
free software updates are available at
Netwave's web site:

http://www.netwave-wireless.com/products.htm

I sold my ThinkPad, so I don't need it anymore.

You can contact me via email at sandy@sandy.com
or call (408) 257-5383.

```
_\//__
--Sandy / _ _ \
( @ @ )
+----------.oOOo--()--oOOo.-----+-------------------------+
| CactusNET Communications | Reflections By Design |
| Internet Service Provider | Web Design & Production |
| San Jose, California | Cupertino, California |
| 408-261-4676 | 408-257-2800 |
| http://www.cactusnet.com | http://www.by-design.com |
| "An Oasis In The CyberDesert" | "We Give You The World" |
+------------------- Oooo.------+-------------------------+
.oooO ( ) zzz.|\ _,,,---,,_
( ) ) / /,`.-'`' -. ;-;;,_..
\ ( (_/ |,*< ) )-,_. ,\ ( `'-`
\_) '---''(_/--' `-'\_)
```

3183. Re: Poky Toky!! Help please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: Steve Simpson <Steve@chubs.demon.co.uk>
Message-ID: <elQsQPAQmQMzEwV5@chubs.demon.co.uk>
Source record: 95919
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

In article <VSpeNFA2vHMzEwGe@chubs.demon.co.uk>, Steve Simpson
<Steve@chubs.demon.co.uk> writes
>Hi all,
>I have two little handhelds called Poky Toky's they operate on 144.550
>mhz FM. They have an output of about 10mW I think.
>
>The problem I have is 144.55
<Snip>

Of course, *7

I was only thinking of *2 *3 *4 *6 *8 etc

I never even considered *7, Thanks to everyone who helped put my brain
in order.

I owe you one,
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
G-QRP Club Member 9631
Visit Radio World -
HTTP://www.chubs.demon.co.uk

3184. Re: Poky Toky!! Help please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970320134201.IAA28553@ladder01.news.aol.com>
Source record: 95920

Well, if you take the output frequency 144.55 and subtract the first IF of 10.7, you get 133.85 MHz which is 7 times the xtal frequency of 19.122. So if you'd like to spend the money on rocks, I'd suggest buying some that are -10.7 and divided by 7 to get the frequency you need.

W4ZCB

And they say these differential equations are tough!

3185. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970320134400.IAA28631@ladder01.news.aol.com>
Source record: 95921

Not really, you tend to get really lousy programming on your 2 meter FM sets, and the plots of your conversations really stink.

W4ZCB

3186. Re: Cryptic coil description

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5grf7h$8ds_001@leeds.ac.uk>
Source record: 95922

In article <5gk954$ooq@hpcvsnz.cv.hp.com>,
tomb@lsid.hp.com (Tom Bruhns) wrote:
>Andreas Junklewitz (ajass@tabaqui.informatik.rwth-aachen.de) wrote:
>: Hallo,
>
>: in one of the ARRL-Microwave handbooks, there are coil description
>: which are absolut cryptic to me.
>
>: What means: 4t, 28 swg e.c.w. ?
>: or 2.5t, 28 swg t.c.w. ?
>
>: I guess the t stands for the number of turns. But what is the rest?
>
>28 swg is the wire size... "swg" seems a bit ambiguous. AWG would
>be the standard American wire gauge, about 0.0126 inches = 0.32mm
>diameter. But swg could be the British standard wire gauge, just
>slightly larger for number 28.
>
>e.c.w. would be enamelled copper wire (polyurethane, etc.)
>t.c.w. would be tinned copper wire, uninsulated
>(b.c.w. would presumably be bare copper wire.)
>
>I don't think much of publications that use abbreviations without
>providing a definition or at least a pointer to definitions.
>

Is it possible to just use enamelled copper wire for all coils (provided the insulation is scraped away if a tap has to be made)? Or is there some good reason for using bare/tinned copper wire (RF signal handling etc.)? TIA

73 de Laurens

3187. Re: HF "VOX" for 2m preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <333de633.1650392489@news.sci.fi>
Source record: 95923

root@localhost (Hans-Christian Becker) wrote:

>Hi everyone!
>Could anyone point out sources and/or ideas for typical "HF VOX"
>circuits used in VHF [pre]amps (i.e. switch out preamp when HF comes
>its way, switch in PA, without using a separate transmit signal from
>the rig)? I can't find anything on this topic in my books.
>Thanks in advance,
>/hcb
>
A simple RF VOX consists of a simple voltage doubler circuit (small input capacitor, two diodes and a small smoothing capacitor) followed by a comparator, some circuit to control the attack and decay times (a long decay time is required for SSB) and the relay driver.

The RF-VOX works great for FM and usually also for CW, since the input signal is well defined.

However, if you plan to operate SSB and your PTT on your microphone does not produce a loud key click when keyed, there is a risk that the rig is in transmit mode and will pick up some ambient noise from the room before you say the first word, which will eventually key the RF-VOX. Prior to this, the RF-signal from the ambient noise in the room might be sufficient to damage the external preamplifier before the RF VOX switches to transmit mode. Thus, the RF VOX must be quite sensitive.

For SSB operation, I would recommend controlling the [pre]amplifier directly with the PTT (and not the RF VOX), since this will reduce the risk for preamplifier damage. In addition, no prolonged decay is required and the whole system goes to receive as soon as the PTT is released. An annoying feature with RF-VOX SSB operation is the long decay time required, during which time you will loose the first words of the response from the other operator :-).

> P.S. Please reply by mail also, since I can't spend all day reading
> news without pissing off my boss!

Nice anti spam system you have invented :-), however, when you requested e-mail response, I think you should have said to use the address in your sig. Fortunately I noticed your address before hitting the send key :-).

Paul OH3LWR

3188. Re: Value of 1N714 Zener??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: Grant Youngman <nq5t@gte.net>
Message-ID: <33314A3A.3717@gte.net>
Source record: 95924

Seppo Nurmi wrote:

> A very good German manual says that 10 volts at 12 mA. Hope

Thanks .. sounds like 10 volts wins :-)

Grant

Grant Youngman / NQ5T
nq5t@gte.net
http://home1.gte.net/nq5t/index.htm

3189. UHF PA-Module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: dc6sn@aol.com
Message-ID: <19970320152200.KAA02652@ladder01.news.aol.com>
Source record: 95925

UHF Power Amplifier Modules

The MITSUBISHI M67729H2 has been developed and produced in large quantities
for UHF cellular telephone applications.

Technical Data:
Output Power = 20 W
Gain = 21 dB
Harmonics = -40 db
Spurious Outputs = -70 dB
50 Ohm in/out

This module is also excellent suited for class C Amateur Radio PA's in the 70 cm-Band.
The low output of a UHF handheld may be amplified to about 20 W output! The use of these
modules is the easiest way to build a PA. There are various discriptions in the ham
literature.

I am now able to offer you this excellent module with a more than 10 dB! price
reduction:

1 ea for DM 35,--
10 ea for DM 300,--

plus postage with C.O.D. charge.

Klaus-J. Sauvant Tel.: (+49) 2405-85123
DC6SN FAX: (+49) 2405-84623
Im Groetchen 38 Email: dc6sn@aol.com
D-52146 W&#65533;rselen
GERMANY

3190. Re: Poky Toky!! Help please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jcoe@brightok.net
Message-ID: <33309b06.1806812@brightok.net>
Source record: 95926
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Steve Simpson <Steve@chubs.demon.co.uk> wrote:

>The problem I have is 144.55 is used by packet around here and I'd
>really like to re-rock them for another frequency.
>This is where the fun starts. The RX IF is 10.7 followed by .455 and a
>10.240 rock is used to do this, nothing strange here. But the RX rock in
>the first LO has 19.122 mhz on it??? Now I can't make that go in to
>144.55 anyway I try. Also the TX rock is in the 20 meg area (I can't
>remember exactly at the moment) This also doesn't seem to divide into
>144.55.

Steve, subtract 10.7 from 144.55 and divide the remainder by 7 and you
get 19.122. The seventh harmonic of the xtal is mixed with the
incoming signal and yields a 10.7 mHz product.

73's....Jim

3191. UHF PA-Module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: Keith Sauvant <Keith.Sauvant@post.rwth-aachen.de>
Message-ID: <33315813.63C@post.rwth-aachen.de>
Source record: 95927

UHF Power Amplifier Modules

The MITSUBISHI M67729H2 has been developed and produced in large
quantities
for UHF cellular telephone applications.

Technical Data:
Output Power = 20 W
Gain = 21 dB
Harmonics = -40 db
Spurious Outputs = -70 dB
50 Ohm in/out

This module is also excellent suited for class C Amateur Radio PA's in
the 70 cm-Band.
The low output of a UHF handheld may be amplified to about 20 W output!
The use of these modules is the easiest way to build a PA. There are
various discriptions in the ham literature.

I am now able to offer you this excellent module with a more than 10 dB!
price
reduction:

1 ea for DM 35,--
10 ea for DM 300,--

plus postage with C.O.D. charge.

Klaus-J. Sauvant Tel.: (+49) 2405-85123
DC6SN FAX: (+49) 2405-84623
Im Groetchen 38 Email: dc6sn@aol.com
D-52146 W&#65533;rselen
GERMANY

3192. Found: copies of Service manual for TR-8400 and TR-7400

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: gerwitz@inficad.com
Message-ID: <5gq1mfauv1@news.inficad.com>
Source record: 95928

In article <5e4pjb$b7l$2@news.inficad.com>, gerwitz@inficad.com (James A. Gerwitz) wrote:
>
I got copies. Thanks!

Jim

>
>Can anyone help me locate a copy of a service manula for a TR-7400 and another
>manual for a TR-8400? I need to align both of my radios and need the
>alignment procedure. I will pay reasonable copy and mailing costs. Please
>respond to: gerwitz@inficad.com
>
>Thank you. I appreciate the help.
>
>Jim
>N7QHK

3193. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33312722.1874024@netnews.worldnet.att.net>
Source record: 95929

On Wed, 19 Mar 1997 21:36:58 -0500, Woody White <"eMail "@
my.www.page.Mailto> wrote:

>I do hope you meant to say connect a N.O. relay in SERIES with the
>transformer primary, across the current limiting resistor. Relay to
>short the resistor when the surge subsides....
>
>_Woody_
>
>
><snip>
>> A better way to do it is to connect the surge relay across the
>> transformer primary, use only one resistor, and short it when the
>> PRIMARY reaches near full voltage. Of course the resistor should be
>> fused with a slow blow fuse in case the supply is shorted (or the
>> relay fails) at start up.

Too many dangling parts hanging in there. Try this.

>> A better way to do it is to connect the surge relay's **coil** across the
>> transformer primary, use only one **series** resistor, and short it (**the resistor**)
when the
>> PRIMARY reaches near full voltage. Of course the resistor should be
>> fused with a slow blow fuse in case the supply is shorted (or the
>> relay fails) at start up.

73 Tom

3194. Re: Value of 1N714 Zener??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: seppo@rulla.me.tut.fi
Message-ID: <5gr9rt$p07@cc.tut.fi>
Source record: 95930

Grant Youngman <nq5t@gte.net> wrote:

>Anyone know the voltage and power rating of a 1N714 zener?

>Doesn't show up in any reference I have laying around.

>Thanks ..

>-----------------------------------
>Grant Youngman / NQ5T
>nq5t@gte.net
>http://home1.gte.net/nq5t/index.htm
>-----------------------------------

The Motorola Master Index says that a direct replacement is 1N5240A.
It says further that power rating is 250 mW and zener current is 12
mA, but it says nothing about the voltage.

1N5240A in turn says that the zener voltage is 10 volts, zener current
10 mA and power rating 500 mW.

A very good German manual says that 10 volts at 12 mA. Hope this
helps.

Seppo Nurmi 73 DE OH3LYA

3195. LowFer, VLF, Cave Radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5gqg23$r72$1@zinger.callamer.com>
Source record: 95931

Curry Communications now has a web page devoted to Low Frequency radio equipment.

He provides several high quality kits for the serious cave dweller and the Low Frequency experimenter in the License Free Band.

http://www.fix.net/~jparker/currycom.htm

Enjoy,,,72,,,Jerry...K

3196. Re: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: tersigni@mail.isle.net
Message-ID: <tersigni-1903972332480001@router1port13.isle.net>
Source record: 95932
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thinnet uses RG-58, 50ohm coax.... Yes it can be used in Ham Radio
Applications, since most Ham Radios/Antennas are 50 ohms
Dave KD6DUN@mail.isle.net

In article <857705372.619774@fan1.fan.nb.ca>, aa126@fan.nb.ca (William
Burrow) wrote:

> Does anybody know the characteristics of IEEE 802.3 thin ethernet cable?
> Is this useful for ham applications?
>
> --
> William Burrow -- Fredericton Area Network, New Brunswick, Canada
> Copyright 1997 William Burrow

3197. ?3D digitizing- precision phase measurements

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: trevere@cv.hp.com
Message-ID: <E7Cq9u.EE9@hpcvusn.cv.hp.com>
Source record: 95933

Hi,

I am looking at design alternatives for a system to do 3D digitizing over
a radius of 60 feet or so with an accuracy of a few inches

The technique that I am considering now is to use
three antennas and compare the phase differences between the three for a
signal from an unmodulated carrier emitted by a mobile transmitter.

The ARRL manual has a schematic for a very-low-phase noise xtal oscillator
so I 'm assuming that I can leverage this for a source.

The receivers would consist of an omnidirectional antenna followed by a
filter(xtal- probably) & an IF amp to get adequate signal level to do the
comparison. the outputs would be fed via equal length coax into a central
detector where phase comparisons would be done between the signals.

detection possibilities I have considered are
> comparing the output from a phase locked oscillator using an ECL XOR.
(I haven't been able to identify a suitable integrated PLL, yet)
> no PLL- signal fed from limiting amp into an ECL XOR
> using an off-the-shelf detector such as the Analog Devices AD9901

The output of the detector would then be filtered with a low pass(< 10Hz)
& fed into an AtoD

Neglecting issues such as the number of measurement points needed to
eliminate ambiguity about the location of the transmitter, I would greatly
appreciate any comments about the system outlined above & other issues
such as-

> Multipath - assume a transmitter & receiver from ground level to
20 feet above

> Phase variations in a receiving chain & phase noise of IC PLLs

> Tradeoffs for the frequency used

I'm not an RF person & would greatly appreciate any pointers to help as
well as informed opinions about issues I have listed or problems not
immediately obvious to a nonspecialist.

Thanks in advance,

Tom Revere trevere@cv.hp.com
Phone eves. (Collect)541-752-7701

3198. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2003970753440001@news.vcnet.com>
Source record: 95934

In article <332fd64c.1271942@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Tue, 18 Mar 1997 13:39:18 -0800, jupiter@europa.com wrote:
>
> >Also, I see that for 110v, the resistors are in parallel, while for 220v
> >they are in series, so that makes some intuitive sense.
>
> With ten ohm resistors, maximum inrush power would be the same on 240
> v and 120 v, so that makes sense. But the circuits Ian was looking at
> have a 240 volt only primary.

Good point, Rob. To make a step-start circuit work properly with dual
voltage amplifiers, it takes dual step-start resistors.
>
> I think the inrush stuff is minor compared to safety issues.
>
Whether one or two step-start resistors is used with a 240v amplifier, the
chassis is always connected to the mains-neutral. What safety issues?

--
--Rich-- ag6k, 805-386-3734

3199. Re: Great ham radio web site!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: "Bayard R. Coolidge" <coolidge@zk3.dec.com>
Message-ID: <33317A7C.15FB@zk3.dec.com>
Source record: 95935
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

```
--

Why does it want/need so many cookies?

-------------------------------------------------------------------------
Bayard R. Coolidge N1HO DISCLAIMER: The opinions expressed are
Digital Equipment Corp. solely those of the author, and not
Nashua, New Hampshire, USA those of Digital Equipment Corporation
coolidge@zk3.dec.com nor any other entity.
"Brake for Moose - It can save your life" - N.H. Fish & Game Dept.
-------------------------------------------------------------------------
```

3200. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5gs0svrnu2@nadine.teleport.com>
Source record: 95936

In article <5gl3hc$fsp@apple.telalink.net>,
desmith@telalink.net (Doug Smith) wrote:
>Chris Nicholson <csnichol@mail.delcoelect.com> wrote:
>>Dana Myers wrote:
>>>> >> What if you keyed a repeater with your transmitter that was legal below
the
>>> >> maximum field strength and you are not licensed)? Things can get harry
>
>So far, Part 15 unlicensed devices are not allowed in the ham bands.
>Any intentional unlicensed transmission in our bands, regardless of
>power, is illegal. (the FCC had considered lifting that ban, but I
>think that threat has been staved off)
>. . .

I haven't been able to find this restriction anywhere in part 15. Which section
is it?

Roy Lewallen, W7EL

3201. Who knows e-mail address TenTec ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <33349f13.273801@news5.inter.NL.net>
Source record: 95937

I am looking for the manual of the TenTec Corsair II.
Therefor I am looking for the e-mail address of TenTec.
Who knows an address wich is good and I also will get an answer ?
73 de Bart PA3GGM.

3202. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971050310001@news.europa.com>
Source record: 95938

Mine uses one of those 0-60sec adjustable Agastat (sp?) relays. They're available pretty cheap at flea markets, but expensive if you buy new. Then you can have any delay you want, and drive panel "STBY" and "RUN" lights with the extra relay contacts.

Otherwise with varying line conditions, temps, the delay is not very repeatable.

Rob.

3203. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <333148C1.686F@ix.netcom.com>
Source record: 95939

Claudio Fornaro wrote:
>
> Hi all,
> I'd want to build a "home made" radio receiver for AM (or even SW...) by
> putting
> together pieces that can be found at home, that is you have not to buy
> them in an
> electronic shop.
> To explain better: I intend to build capacitors (maybe with alluminium
> sheets and
> plastic bags), inductors (copper wire), the crystal is a problem... one
> usually
> has no galena crystal at home... the loudspeaker maybe is a bigger
> one...
> Has anyone ever seen such a project made or has s/he any idea about
> building it?
> Thanks in advance.
> Claudio

Hi Claudio -- an admirable project. For the crystal detector -- try a
small whisker wire on a razor blade. It works -- I remember doing this
as a boy experimenting with xtal radios.
For the inductor we used copper wire on an oatmeal box. An improvised
slider was made to adjust the inductance. You will probably need a pair
of hi impedance headphones rather than a speaker as the resultant output
is a rather low level signal.

There is an xtal radio page which has some books and info. See my page
below and go to the index -- then xtal radios.

Good luck
Rod in San Diego
--
AC6V DX Reference Page
With Over 700 Links To DX And HAm Radio
http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

I Detect -- therefore I am -- AC6V

3204. Re: Trap/Balun losses

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3331B148.4864@crpl.cedar-rapids.lib.ia.us>
Source record: 95940
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Roger A. McCarty wrote:
>
> (refering to the Tucker T-3000 antenna tuner) "The situation got much
> worse in the balanced mode, where power losses ranged from 35% to an
> astonishing 99% across 160 meters and 60% or higher on 80 meters for low
> impedance loads."
>

It is possible to imagine a load impedance so low in resistance and so high in reactance, and also a tuner that is not designed to deal with it, that the efficiency can be almost nonexistent. In particular, if the circuit Q (loaded Q) is too high because of too-small capacitor values and inadequate coils at very low values of inductance, then we are using the wrong tuner for that particular difficult situation.

This situation constitutes flagrant misuse of that particular tuner design. Antenna tuners is one area where we have to be on our toes.

I do think the vendors need to specify their products more precisely, instead of just the usual hooplah advertising come-ons that we see in the ads.

Bill W0IYH

3205. Re: TRADE: 7025 and 7050 KHz FT-243 crystals for others on 40m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: Michael Ruther <Ruther@alliedsignal.com>
Message-ID: <33319A51.36FB@alliedsignal.com>
Source record: 95941
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Mustang Maniac wrote:
>
> I have one each 7025 KHz and 7050 KHz FT-243 crystals that I'd like
> to TRADE for others on 40m CW frequencies. LMK what you have.
>
> 73!
>
> --
> Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
> 211 Addison Place
> PO Box 328 Home: (817) 497-5365
> Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
> . . . . . .
> Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
> Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
> Die-cast model car collector (mainly Ford products, in all scales)
> Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
> Glass insulator collector (specializing in "oddball" pieces)
> . . . . . .Hi
what freq u looking fer?
I have a few in 40m novice sub-band.
if ur xtals are in 243 case(3 screws to hold lid on)
it is easy to move up in frequency
gud in call book
mike aa7qa

3206. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <5gsci6$d24@flood.weeg.uiowa.edu>
Source record: 95942

First I'm no expert on this, and try to put it the way I see it.....SO..

I see in some posts here, reference to neutral and chassis ground as the same thing.

The newer books have taken into account the new wiring for neutral and ground and do not refer to them as the same.

I think in the (USA) the National Electrical Code has definded neutral and ground. They are not the same thing. They are the same at one point. The main service enterence. They are bonded together and tied to an earth ground. After this point they differ. The neutral carries the unbalanced (240vac) load current. The ground carries "fault current".

Why worry, because the wire carrying the neutral current has resistance. There for volt drop. Now some place along the system the ground (carrying no current) and the neutral are at different potentials. This may be and should be a small voltage. The ground is still at earth ground potential. The ground conductor is the one bonded to the chassis not the neutral.

If you connect the ground conductor to the neutral at some place in the system, other than at the service enterence, the load current is divided between the neutral and ground conductors in that circuit. The ground is no longer at earth ground potential. There will be voltage from ground to say a water pipe (another earth ground). This is not a good condition. Any sub-feeder(in the same building) from the main service enterence is now required to have a separate ground conductor. The neutral and ground are separate.

Well this is my $.02

WA0VYZ
john

John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

3207. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971424500001@news.europa.com>
Source record: 95943

:> I think the inrush stuff is minor compared to safety issues.
:>
:Whether one or two step-start resistors is used with a 240v amplifier, the
:chassis is always connected to the mains-neutral. What safety issues?
:
:--
:--Rich-- ag6k, 805-386-3734

Rich,

I don't think most of these people have ever built anything, let alone a high power amp. I have some 4x6 glossies of my amp and power supply, which I will try to attach as JPEG's to an upcoming post. My baby took my 9 months to build:

I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came out of some BC-xx AM transmitter. paid $200

8877 from that tube guy on McArthur Blvd in Oakland. paid $250

Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for $75, oh my god what a deal.

Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5

Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos to get it.

Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got both for about $200.

Filament transformer is 7V from Halted special $5 computer power supply sale. Use 150W adj pot for filament inrush protection and adj voltage.

I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.

In summary, if you want to build amps, move to Cal. I now live in Oregon. It may as well be Libya, as far as parts procurement goes.

Rob.

3208. Chinese vs. American Tubes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: Dan K Nelson <dknelson@pacbell.net>
Message-ID: <3331CADC.5FF7@pacbell.net>
Source record: 95944

I have seen postings for 811A tubes of both American and Chinese manufacture. Usually, the US tubes sell for two to three times the price of the foreign tubes. I would suspect that the saying "You get what you pay for" would apply, but I am curious if anyone has had any experience with the Chinese tubes?

Thanks and 73's,

<<< DAN >>>
--
+---+
|An Armed Man is a Citizen, an Unarmed Man is a Subject.|
+---+

3209. - Untitled QuickPICT 2.JPG (1/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971451360001@news.europa.com>
Source record: 95945

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BEGIN -- Cut Here -- cut here
begin 644 Untitled QuickPICT 2.JPG
<uuencoded_portion_removed>
END -- Cut Here -- cut here
```

3210. - Untitled QuickPICT 3.JPG (2/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971452570001@news.europa.com>
Source record: 95946

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BEGIN -- Cut Here -- cut here
<uuencoded_portion_removed>
DTQ9E*OC_`/71NSU/>DM"Y2O97T`]?SHIF;"B@044`%%`'__9
`
end
END -- Cut Here -- cut here
```

3211. - Untitled QuickPICT 1.JPG (1/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-20 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002003971450280001@news.europa.com>
Source record: 95947

```
BEGIN -- Cut Here -- cut here
begin 644 Untitled QuickPICT 1.JPG
<uuencoded_portion_removed>
END -- Cut Here -- cut here
```

3212. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211344.FAA07284@mailbox1.ucsd.edu>
Source record: 95798

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 76930.wrk; Fri, 21 Mar 1997 14:52:40 -1
Received: from [195.120.135.127] by infocomm.it id 76620.wrk; Fri, 21 Mar 1997 14:51:06 -1
Received: from [195.120.135.127] by infocomm.it id 762e0.wrk; Fri, 21 Mar 1997 14:49:30 -1
Received: from [195.120.135.127] by infocomm.it id 76020.wrk; Fri, 21 Mar 1997 14:48:06 -1
Received: from [195.120.135.127] by infocomm.it id 75d90.wrk; Fri, 21 Mar 1997 14:46:50 -1
Received: from [195.120.135.127] by infocomm.it id 75a80.wrk; Fri, 21 Mar 1997 14:45:18 -1
Received: from [195.120.135.127] by infocomm.it id 75830.wrk; Fri, 21 Mar 1997 14:44:08 -1
Received: from [195.120.135.127] by infocomm.it id 755a0.wrk; Fri, 21 Mar 1997 14:42:54 -1
Received: from [195.120.135.127] by infocomm.it id 752e0.wrk; Fri, 21 Mar 1997 14:41:30 -1
Received: from [195.120.135.127] by infocomm.it id 75070.wrk; Fri, 21 Mar 1997 14:40:18 -1
Received: from [195.120.135.127] by infocomm.it id 74dd0.wrk; Fri, 21 Mar 1997 14:39:00 -1
Received: from [195.120.135.127] by infocomm.it id 74b60.wrk; Fri, 21 Mar 1997 14:37:46 -1
Received: from [195.120.135.127] by infocomm.it id 74900.wrk; Fri, 21 Mar 1997 14:36:32 -1
Received: from [195.120.135.127] by infocomm.it id 745c0.wrk; Fri, 21 Mar 1997 14:34:56 -1
Received: from [195.120.135.127] by infocomm.it id 74490.wrk; Fri, 21 Mar 1997 14:34:22 -1
Received: from [195.120.135.127] by infocomm.it id 74310.wrk; Fri, 21 Mar 1997 14:33:36 -1
Received: from [132.239.1.54] by infocomm.it id 73e60.wrk; Fri, 21 Mar 1997 14:31:16 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03917 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:07 -0800 (PST)
Received: by noc.ucsd.edu; id CAA22393
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 02:52:33 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id CAA22377
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 02:52:28 -0800 (PST)
Message-Id: <199703211052.CAA22377@noc.ucsd.edu>
Date: Fri, 21 Mar 97 02:52:26 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #187
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Fri, 21 Mar 97 Volume 97 : Issue 187

Today's Topics:
- Untitled QuickPICT 1.JPG (0/2) Re: Soft-start circuits
- Untitled QuickPICT 1.JPG (2/2) Re: Soft-start circuits
?? TR-7200 A mike pinouts ??
FM transmitter and FCC approval (2 msgs)
Ground Rod Installation w/pipe
Home Made "crystal' for receiver
Making Coils
Of T368 interest only
Soft-start circuits (2 msgs)
Tone Burst Generator
Trap/Balun losses
Want Camcorder for ATV use - cheap
Who knows e-mail address TenTec ???

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 20 Mar 1997 14:50:20 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 1.JPG (0/2) Re: Soft-start circuits

In article <jupiter-ya023580002003971424500001@news.europa.com>,
jupiter@europa.com wrote:

::> I think the inrush stuff is minor compared to safety issues.
::>
::Whether one or two step-start resistors is used with a 240v amplifier, the
::chassis is always connected to the mains-neutral. What safety issues?
::
::--
::--Rich-- ag6k, 805-386-3734
:
:
:Rich,
:
:I don't think most of these people have ever built anything, let alone a
:high power amp. I have some 4x6 glossies of my amp and power supply, which
:I will try to attach as JPEG's to an upcoming post. My baby took my 9

:months to build:
:
:I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came
:out of some BC-xx AM transmitter. paid $200
:
:8877 from that tube guy on McArthur Blvd in Oakland. paid $250
:
:Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for
:$75, oh my god what a deal.
:
:Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5
:
:Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos
:to get it.
:
:Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got
:both for about $200.
:
:Filament transformer is 7V from Halted special $5 computer power supply
:sale. Use 150W adj pot for filament inrush protection and adj voltage.
:
:I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.
:-------------
:
:In summary, if you want to build amps, move to Cal. I now live in Oregon.
:It may as well be Libya, as far as parts procurement goes.
:
:Rob.

Date: Thu, 20 Mar 1997 14:50:57 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 1.JPG (2/2) Re: Soft-start circuits

BEGIN -- Cut Here -- cut here
<uuencoded_portion_removed>
M[<__``;F?\$]_P!A7X8V?Q'^,/[

3213. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211448.GAA09142@mailbox1.ucsd.edu>
Source record: 95799

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7b680.wrk; Fri, 21 Mar 1997 15:27:20 -1
Received: from [195.120.135.127] by infocomm.it id 7b590.wrk; Fri, 21 Mar 1997 15:26:54 -1
Received: from [195.120.135.127] by infocomm.it id 7b4b0.wrk; Fri, 21 Mar 1997 15:26:22 -1
Received: from [195.120.135.127] by infocomm.it id 7b390.wrk; Fri, 21 Mar 1997 15:25:54 -1
Received: from [195.120.135.127] by infocomm.it id 7b2a0.wrk; Fri, 21 Mar 1997 15:25:22 -1
Received: from [195.120.135.127] by infocomm.it id 7b1c0.wrk; Fri, 21 Mar 1997 15:24:56 -1
Received: from [195.120.135.127] by infocomm.it id 7b120.wrk; Fri, 21 Mar 1997 15:24:36 -1
Received: from [195.120.135.127] by infocomm.it id 7b030.wrk; Fri, 21 Mar 1997 15:24:06 -1
Received: from [195.120.135.127] by infocomm.it id 7ae70.wrk; Fri, 21 Mar 1997 15:23:14 -1
Received: from [195.120.135.127] by infocomm.it id 7ac60.wrk; Fri, 21 Mar 1997 15:22:14 -1
Received: from [195.120.135.127] by infocomm.it id 7aa40.wrk; Fri, 21 Mar 1997 15:21:10 -1
Received: from [195.120.135.127] by infocomm.it id 7a850.wrk; Fri, 21 Mar 1997 15:20:12 -1
Received: from [195.120.135.127] by infocomm.it id 7a640.wrk; Fri, 21 Mar 1997 15:19:12 -1
Received: from [195.120.135.127] by infocomm.it id 7a440.wrk; Fri, 21 Mar 1997 15:18:12 -1
Received: from [195.120.135.127] by infocomm.it id 7a260.wrk; Fri, 21 Mar 1997 15:17:14 -1
Received: from [195.120.135.127] by infocomm.it id 7a040.wrk; Fri, 21 Mar 1997 15:16:10 -1
Received: from [132.239.1.54] by infocomm.it id 79b80.wrk; Fri, 21 Mar 1997 15:13:50 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03921 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:09 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27002
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:10 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25966
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:05 -0800 (PST)
Message-Id: <199703211124.DAA25966@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:57 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #190
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

<uuencoded_portion_removed>
M^:+UL]/[RB

3214. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211346.FAA07344@mailbox1.ucsd.edu>
Source record: 95800

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 76e90.wrk; Fri, 21 Mar 1997 14:55:20 -1
Received: from [195.120.135.127] by infocomm.it id 76b20.wrk; Fri, 21 Mar 1997 14:53:36 -1
Received: from [195.120.135.127] by infocomm.it id 76820.wrk; Fri, 21 Mar 1997 14:52:06 -1
Received: from [195.120.135.127] by infocomm.it id 76550.wrk; Fri, 21 Mar 1997 14:50:44 -1
Received: from [195.120.135.127] by infocomm.it id 76230.wrk; Fri, 21 Mar 1997 14:49:08 -1
Received: from [195.120.135.127] by infocomm.it id 75f30.wrk; Fri, 21 Mar 1997 14:47:40 -1
Received: from [195.120.135.127] by infocomm.it id 75c70.wrk; Fri, 21 Mar 1997 14:46:16 -1
Received: from [195.120.135.127] by infocomm.it id 75a00.wrk; Fri, 21 Mar 1997 14:45:00 -1
Received: from [195.120.135.127] by infocomm.it id 75760.wrk; Fri, 21 Mar 1997 14:43:46 -1
Received: from [195.120.135.127] by infocomm.it id 754e0.wrk; Fri, 21 Mar 1997 14:42:28 -1
Received: from [195.120.135.127] by infocomm.it id 75240.wrk; Fri, 21 Mar 1997 14:41:10 -1
Received: from [195.120.135.127] by infocomm.it id 74fa0.wrk; Fri, 21 Mar 1997 14:39:54 -1
Received: from [195.120.135.127] by infocomm.it id 74d20.wrk; Fri, 21 Mar 1997 14:38:40 -1
Received: from [195.120.135.127] by infocomm.it id 74ad0.wrk; Fri, 21 Mar 1997 14:37:28 -1
Received: from [195.120.135.127] by infocomm.it id 74860.wrk; Fri, 21 Mar 1997 14:36:12 -1
Received: from [195.120.135.127] by infocomm.it id 74641.wrk; Fri, 21 Mar 1997 14:35:12 -1
Received: from [132.239.1.54] by infocomm.it id 74070.wrk; Fri, 21 Mar 1997 14:32:16 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03923 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:10 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27037
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:20 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26103
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:27 -0800 (PST)
Message-Id: <199703211124.DAA26103@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:25 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #192
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Fri, 21 Mar 97 Volume 97 : Issue 192

Today's Topics:
- Untitled QuickPICT 1.JPG (1/2) Re: Soft-start circuits

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 20 Mar 1997 14:50:28 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 1.JPG (1/2) Re: Soft-start circuits

BEGIN -- Cut Here -- cut here
begin 644 Untitled QuickPICT 1.JPG
<uuencoded_portion_removed>
MK"HFJB<5KJM;Z]FO+ST^[TOX8_\`!0OX'^"[7P

3215. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211520.HAA10743@mailbox1.ucsd.edu>
Source record: 95801

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 83b50.wrk; Fri, 21 Mar 1997 16:29:44 -1
Received: from [195.120.135.127] by infocomm.it id 83a00.wrk; Fri, 21 Mar 1997 16:29:02 -1
Received: from [195.120.135.127] by infocomm.it id 83880.wrk; Fri, 21 Mar 1997 16:28:18 -1
Received: from [195.120.135.127] by infocomm.it id 83710.wrk; Fri, 21 Mar 1997 16:27:36 -1
Received: from [195.120.135.127] by infocomm.it id 83590.wrk; Fri, 21 Mar 1997 16:26:52 -1
Received: from [195.120.135.127] by infocomm.it id 83470.wrk; Fri, 21 Mar 1997 16:26:16 -1
Received: from [195.120.135.127] by infocomm.it id 83300.wrk; Fri, 21 Mar 1997 16:25:34 -1
Received: from [195.120.135.127] by infocomm.it id 83190.wrk; Fri, 21 Mar 1997 16:24:52 -1
Received: from [195.120.135.127] by infocomm.it id 83030.wrk; Fri, 21 Mar 1997 16:24:10 -1
Received: from [195.120.135.127] by infocomm.it id 82ef0.wrk; Fri, 21 Mar 1997 16:23:32 -1
Received: from [195.120.135.127] by infocomm.it id 82da0.wrk; Fri, 21 Mar 1997 16:22:54 -1
Received: from [195.120.135.127] by infocomm.it id 82c20.wrk; Fri, 21 Mar 1997 16:22:06 -1
Received: from [195.120.135.127] by infocomm.it id 82b10.wrk; Fri, 21 Mar 1997 16:21:36 -1
Received: from [195.120.135.127] by infocomm.it id 82980.wrk; Fri, 21 Mar 1997 16:20:50 -1
Received: from [195.120.135.127] by infocomm.it id 82840.wrk; Fri, 21 Mar 1997 16:20:10 -1
Received: from [195.120.135.127] by infocomm.it id 82720.wrk; Fri, 21 Mar 1997 16:19:40 -1
Received: from [132.239.1.54] by infocomm.it id 82660.wrk; Fri, 21 Mar 1997 16:19:14 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03927 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:12 -0800 (PST)
Received: by noc.ucsd.edu; id DAA25978
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:06 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25855
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:23:38 -0800 (PST)
Message-Id: <199703211123.DAA25855@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:36 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #188
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Fri, 21 Mar 97 Volume 97 : Issue 188

Today's Topics:
- Untitled QuickPICT 2.JPG (0/2) Re: Soft-start circuits
- Untitled QuickPICT 4.JPG (1/2) Re: Soft-start circuits
- Untitled QuickPICT 4.JPG (2/2) Re: Soft-start circuits
- Untitled QuickPICT 5.JPG (0/1) Re: Soft-start circuits
motorola pager modifications?
Soft-start circuits (3 msgs)

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Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 20 Mar 1997 14:51:31 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 2.JPG (0/2) Re: Soft-start circuits

In article <jupiter-ya023580002003971424500001@news.europa.com>,
jupiter@europa.com wrote:

::> I think the inrush stuff is minor compared to safety issues.
::>
::Whether one or two step-start resistors is used with a 240v amplifier, the
::chassis is always connected to the mains-neutral. What safety issues?
::
::--
::--Rich-- ag6k, 805-386-3734
:
:
:Rich,
:
:I don't think most of these people have ever built anything, let alone a
:high power amp. I have some 4x6 glossies of my amp and power supply, which
:I will try to attach as JPEG's to an upcoming post. My baby took my 9
:months to build:
:
:I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came
:out of some BC-xx AM transmitter. paid $200
:
:8877 from that tube guy on McArthur Blvd in Oakland. paid $250
:

:Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for
:$75, oh my god what a deal.
:
:Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5
:
:Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos
:to get it.
:
:Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got
:both for about $200.
:
:Filament transformer is 7V from Halted special $5 computer power supply
:sale. Use 150W adj pot for filament inrush protection and adj voltage.
:
:I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.
:-------------
:
:In summary, if you want to build amps, move to Cal. I now live in Oregon.
:It may as well be Libya, as far as parts procurement goes.
:
:Rob.

Date: Thu, 20 Mar 1997 14:53:42 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 4.JPG (1/2) Re: Soft-start circuits

BEGIN -- Cut Here -- cut here
begin 644 Untitled QuickPICT 4.JPG
<uuencoded_portion_removed>

3216. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211426.GAA08647@mailbox1.ucsd.edu>
Source record: 95802

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7c740.wrk; Fri, 21 Mar 1997 15:35:42 -1
Received: from [195.120.135.127] by infocomm.it id 7c660.wrk; Fri, 21 Mar 1997 15:35:14 -1
Received: from [195.120.135.127] by infocomm.it id 7c550.wrk; Fri, 21 Mar 1997 15:34:44 -1
Received: from [195.120.135.127] by infocomm.it id 7c490.wrk; Fri, 21 Mar 1997 15:34:20 -1
Received: from [195.120.135.127] by infocomm.it id 7c3d0.wrk; Fri, 21 Mar 1997 15:34:02 -1
Received: from [195.120.135.127] by infocomm.it id 7c350.wrk; Fri, 21 Mar 1997 15:33:44 -1
Received: from [195.120.135.127] by infocomm.it id 7c260.wrk; Fri, 21 Mar 1997 15:33:16 -1
Received: from [195.120.135.127] by infocomm.it id 7c1b0.wrk; Fri, 21 Mar 1997 15:32:56 -1
Received: from [195.120.135.127] by infocomm.it id 7c130.wrk; Fri, 21 Mar 1997 15:32:40 -1
Received: from [195.120.135.127] by infocomm.it id 7c080.wrk; Fri, 21 Mar 1997 15:32:18 -1
Received: from [195.120.135.127] by infocomm.it id 7bfd0.wrk; Fri, 21 Mar 1997 15:32:00 -1
Received: from [195.120.135.127] by infocomm.it id 7bf50.wrk; Fri, 21 Mar 1997 15:31:44 -1
Received: from [195.120.135.127] by infocomm.it id 7beb0.wrk; Fri, 21 Mar 1997 15:31:26 -1
Received: from [195.120.135.127] by infocomm.it id 7bda0.wrk; Fri, 21 Mar 1997 15:30:52 -1
Received: from [195.120.135.127] by infocomm.it id 7bd10.wrk; Fri, 21 Mar 1997 15:30:36 -1
Received: from [195.120.135.127] by infocomm.it id 7bc40.wrk; Fri, 21 Mar 1997 15:30:12 -1
Received: from [132.239.1.54] by infocomm.it id 7b760.wrk; Fri, 21 Mar 1997 15:27:50 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03919 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27021
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:15 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25913
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:23:56 -0800 (PST)
Message-Id: <199703211123.DAA25913@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:57 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #190
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

<uuencoded_portion_removed>
M^:+UL]/[RB

3217. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211543.HAA11772@mailbox1.ucsd.edu>
Source record: 95803

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 86901.wrk; Fri, 21 Mar 1997 16:52:34 -1
Received: from [195.120.135.127] by infocomm.it id 868b0.wrk; Fri, 21 Mar 1997 16:52:22 -1
Received: from [195.120.135.127] by infocomm.it id 86860.wrk; Fri, 21 Mar 1997 16:52:12 -1
Received: from [195.120.135.127] by infocomm.it id 867d0.wrk; Fri, 21 Mar 1997 16:52:00 -1
Received: from [195.120.135.127] by infocomm.it id 86780.wrk; Fri, 21 Mar 1997 16:51:48 -1
Received: from [195.120.135.127] by infocomm.it id 86710.wrk; Fri, 21 Mar 1997 16:51:38 -1
Received: from [195.120.135.127] by infocomm.it id 866b0.wrk; Fri, 21 Mar 1997 16:51:22 -1
Received: from [195.120.135.127] by infocomm.it id 86660.wrk; Fri, 21 Mar 1997 16:51:12 -1
Received: from [195.120.135.127] by infocomm.it id 86610.wrk; Fri, 21 Mar 1997 16:51:02 -1
Received: from [195.120.135.127] by infocomm.it id 865a0.wrk; Fri, 21 Mar 1997 16:50:52 -1
Received: from [195.120.135.127] by infocomm.it id 86550.wrk; Fri, 21 Mar 1997 16:50:44 -1
Received: from [195.120.135.127] by infocomm.it id 86500.wrk; Fri, 21 Mar 1997 16:50:32 -1
Received: from [195.120.135.127] by infocomm.it id 864b0.wrk; Fri, 21 Mar 1997 16:50:22 -1
Received: from [195.120.135.127] by infocomm.it id 86460.wrk; Fri, 21 Mar 1997 16:50:12 -1
Received: from [195.120.135.127] by infocomm.it id 86410.wrk; Fri, 21 Mar 1997 16:50:02 -1
Received: from [195.120.135.127] by infocomm.it id 86350.wrk; Fri, 21 Mar 1997 16:49:42 -1
Received: from [132.239.1.54] by infocomm.it id 82660.wrk; Fri, 21 Mar 1997 16:19:14 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03927 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:12 -0800 (PST)
Received: by noc.ucsd.edu; id DAA25978
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:06 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25855
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:23:38 -0800 (PST)
Message-Id: <199703211123.DAA25855@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:36 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #188
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 3 di un precedente messaggio >>>

<uuencoded_portion_removed>
M?_!5+]H[]A

3218. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211344.FAA07273@mailbox1.ucsd.edu>
Source record: 95804

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 768f0.wrk; Fri, 21 Mar 1997 14:52:30 -1
Received: from [195.120.135.127] by infocomm.it id 765c0.wrk; Fri, 21 Mar 1997 14:50:58 -1
Received: from [195.120.135.127] by infocomm.it id 762c0.wrk; Fri, 21 Mar 1997 14:49:26 -1
Received: from [195.120.135.127] by infocomm.it id 76000.wrk; Fri, 21 Mar 1997 14:48:00 -1
Received: from [195.120.135.127] by infocomm.it id 75d20.wrk; Fri, 21 Mar 1997 14:46:36 -1
Received: from [195.120.135.127] by infocomm.it id 75b20.wrk; Fri, 21 Mar 1997 14:45:38 -1
Received: from [195.120.135.127] by infocomm.it id 758a0.wrk; Fri, 21 Mar 1997 14:44:24 -1
Received: from [195.120.135.127] by infocomm.it id 75650.wrk; Fri, 21 Mar 1997 14:43:12 -1
Received: from [195.120.135.127] by infocomm.it id 75380.wrk; Fri, 21 Mar 1997 14:41:48 -1
Received: from [195.120.135.127] by infocomm.it id 750e0.wrk; Fri, 21 Mar 1997 14:40:32 -1
Received: from [195.120.135.127] by infocomm.it id 74e50.wrk; Fri, 21 Mar 1997 14:39:14 -1
Received: from [195.120.135.127] by infocomm.it id 74c00.wrk; Fri, 21 Mar 1997 14:38:02 -1
Received: from [195.120.135.127] by infocomm.it id 749a0.wrk; Fri, 21 Mar 1997 14:36:54 -1
Received: from [195.120.135.127] by infocomm.it id 74710.wrk; Fri, 21 Mar 1997 14:35:36 -1
Received: from [195.120.135.127] by infocomm.it id 744d0.wrk; Fri, 21 Mar 1997 14:34:28 -1
Received: from [195.120.135.127] by infocomm.it id 74410.wrk; Fri, 21 Mar 1997 14:34:04 -1
Received: from [132.239.1.54] by infocomm.it id 740d0.wrk; Fri, 21 Mar 1997 14:32:30 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03914 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id DAA26164
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:45 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26142
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:39 -0800 (PST)
Message-Id: <199703211124.DAA26142@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:37 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #193
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 3 di un precedente messaggio >>>

<uuencoded_portion_removed>
"_]E%
`
end
END -- Cut Here -- cut here

End of Ham-Homebrew Digest V97 #193
****

3219. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211357.FAA07661@mailbox1.ucsd.edu>
Source record: 95805

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 78e50.wrk; Fri, 21 Mar 1997 15:07:10 -1
Received: from [195.120.135.127] by infocomm.it id 78db0.wrk; Fri, 21 Mar 1997 15:06:56 -1
Received: from [195.120.135.127] by infocomm.it id 78cc1.wrk; Fri, 21 Mar 1997 15:06:26 -1
Received: from [195.120.135.127] by infocomm.it id 78c70.wrk; Fri, 21 Mar 1997 15:06:14 -1
Received: from [195.120.135.127] by infocomm.it id 78c20.wrk; Fri, 21 Mar 1997 15:06:06 -1
Received: from [195.120.135.127] by infocomm.it id 78bb0.wrk; Fri, 21 Mar 1997 15:05:54 -1
Received: from [195.120.135.127] by infocomm.it id 78b60.wrk; Fri, 21 Mar 1997 15:05:46 -1
Received: from [195.120.135.127] by infocomm.it id 78b10.wrk; Fri, 21 Mar 1997 15:05:34 -1
Received: from [195.120.135.127] by infocomm.it id 78ac0.wrk; Fri, 21 Mar 1997 15:05:24 -1
Received: from [195.120.135.127] by infocomm.it id 78a70.wrk; Fri, 21 Mar 1997 15:05:14 -1
Received: from [195.120.135.127] by infocomm.it id 78a20.wrk; Fri, 21 Mar 1997 15:05:04 -1
Received: from [195.120.135.127] by infocomm.it id 78990.wrk; Fri, 21 Mar 1997 15:04:54 -1
Received: from [195.120.135.127] by infocomm.it id 78940.wrk; Fri, 21 Mar 1997 15:04:40 -1
Received: from [195.120.135.127] by infocomm.it id 78880.wrk; Fri, 21 Mar 1997 15:04:18 -1
Received: from [195.120.135.127] by infocomm.it id 78800.wrk; Fri, 21 Mar 1997 15:04:02 -1
Received: from [195.120.135.127] by infocomm.it id 78740.wrk; Fri, 21 Mar 1997 15:03:44 -1
Received: from [132.239.1.54] by infocomm.it id 73e60.wrk; Fri, 21 Mar 1997 14:31:16 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03917 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:07 -0800 (PST)
Received: by noc.ucsd.edu; id CAA22393
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 02:52:33 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id CAA22377
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 02:52:28 -0800 (PST)
Message-Id: <199703211052.CAA22377@noc.ucsd.edu>
Date: Fri, 21 Mar 97 02:52:26 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #187
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 3 di un precedente messaggio >>>

Date: Sun, 09 Mar 1997 11:25:30 -0600
From: Phil Clements <philk5pc@connect.net>
Subject: Ground Rod Installation w/pipe

R. L. Measures wrote:
> ....snip....
> The antenna-ground on my 3/8 wave 80m vertical antenna is about 100 feet
> away from the NEC- 'ground' on the Neutral wire at my service-entrance.
> Connecting a wire between these two grounds would seeming be
> electrical-lunacy. .
> The "wire" between the two grounds in your case, Rich, is the shield of your coax. I lost 150 feet of RG-213 in this manner. The shield of your coax is connected to your antenna-ground, is it not? The other end of the coax shield is connected to the chassis of your radio. The green wire in your a.c. power cord goes from the chassis of your radio to the NEC ground bus in your service entrance panel, which is strapped by a big wire to the neutral bus in the panel. You have bonding of both ground systems whether you want it or not via the coax. The NEC requires that all antenna system, cable TV system, water well pumps, and other electrical devices all be bonded to the service entrance ground. Someone wisely stated in an earlier post that an insurance adjuster can make life very miserable for someone who ignores NEC guidelines.

(((73)))
Phil, K5PC

Date: 21 Mar 97 01:20:09 GMT
From: FoxFox7@aol.COM
Subject: Home Made "crystal' for receiver

During the war,(WWII) soldiers indeed made home-made "crystal" radios using household parts. The "crystal" was made from a blued-steel razor blade and the whisker was the "lead" (actually carbon) from a pencil. A sweet spot was found by probing around on the blued surface with the pointed end of the pencil lead. One wire went to the razor blade and the other to th pencil lead. Don't know about the earpiece or headset though. I made a carbon microphone one time using carbon from a zinc-carbon flashlight battery, a soda bottle cap for the button and a paper cup for the diapragm and housing. Maybe if you "borrow" the earpiece from a telephone handset, that will meet you goal of not going to the radio store.

By the way the "crytal" radio I described is commonly called a FOXHOLE RADIO because that's where they were used.

Good Luck DE George Dowell K0FF/7

Date: Sun, 09 Mar 1997 12:07:55 -0800
From: Raj Singh VE6RAJ <singhraj@cadvision.com>
Subject: Making Coils

Meg wrote:
>
> Does any one know how to make a .5uf and a 1uf coil ??
> Like.... give the info on what AWG # on the wire and how long it should be
> and how many times you wrap it around something, like a pencil.
>
> Thanks.

VE3ERP has a shareware program out that does this among about a hundred other things. I am not sure exactly where to find it. If you look in ham software archives you should be able to find it. Use Yahoo or HotBot to search it should point you in the right direction.

73
Raj

Date: 9 Mar 1997 18:06:23 GMT
From: trouts1@aol.com (Trouts1)
Subject: Of T368 interest only

68 owners,
I have found that some T368 owners have common problems that would seem to be in all rigs. As it turns out other owners do not have the same
problems. A few examples are problems with the vaccum relay for T/R switching on E and F models. Another is a sharp point near the final tank coil which causes arcing which is cured with filing.
I have receintly found out that there were several (if not more) manufactures
of the T3. The problems may be due to design or specification latitude where
manufactures introduces differences or the design may have changed slightly
from order to order. I decided to track some T368's with their order numbers
to see if anything common shows up as common. So I am requesting T3 owners to send me their TYPE, SR #, ORDER # and MANUF. to see what the contract span was and how SR #'s were issued. If you have time please
include what you may have problems with or any other information you may know.
So far I have only been able to locate informaiton about the T3 A,B and C
models. Fair included one E schematic in the A,B and C package they sell.
I would like to purchase manuals for the other models if anyone has them.

I have been told that the Gov't has not released the manuals past the C model.
It may be that there was not manual for the E and F. Thay may have been covered by addendiums or bullitans? If anyone has any information please let me know.
Please send any infomation you have to me at:
trouts1@aol.com and CC
davidk@artax.webo.dg.com
If there is enough enformation to be interesting I will see if ER is interested in
posting it. I will keep a list of people who respond and will send you the
compilation as it develops.
Tkanks
David N1RBM Near Boston.

Date: 20 Mar 1997 22:09:10 GMT
From: jstroppe@uhl.uiowa.edu (John Stroppel)
Subject: Soft-start circuits

First I'm no expert on this, and try to put it the way I see it.....SO..

I see in some posts here, reference to neutral and chassis ground as the same thing.

The newer books have taken into account the new wiring for neutral and ground and do not refer to them as the same.

I think in the (USA) the National Electrical Code has definded neutral and ground. They are not the same thing. They are the same at one point. The main service enterence. They are bonded together and tied to an earth ground. After this point they differ. The neutral carries the unbalanced (240vac) load current. The ground carries "fault current".

Why worry, because the wire carrying the neutral current has resistance. There for volt drop. Now some place along the system the ground (carrying no current) and the neutral are at different potentials. This may be and should be a small voltage. The ground is still at earth ground potential. The ground conductor is the one bonded to the chassis not the neutral.

If you connect the ground conductor to the neutral at
some place in the system, other than at the service enterence, the load current is divided between the neutral and ground conductors in that circuit. The ground is no longer at earth ground potential. There will be voltage from ground to say a water pipe (another earth ground). This is not a good condition. Any sub-feeder(in the same building) from the main service enterence is now required to have a separate ground conductor. The neutral and ground are separate.

Well this is my $.02

WA0VYZ
john

John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

Date: Thu, 20 Mar 1997 23:57:17 -0500
From: Woody White <"eMail "@my.www.page.Mailto>
Subject: Soft-start circuits

Ah Ha! Now it computes :-)
73,
--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

Date: Thu, 20 Mar 1997 22:14:46 +0100
From: Gene Neill <gneill@ge.maxess.ch>
Subject: Tone Burst Generator

I just got to Europe and my Yaseu FT470 does not have the tone burst
generator needed to open repeaters and I'm not good at whistling.
Anyone have a schematic for a 1750 Hz tone burst generator?

Thanks in advance, WA7NPP/HB9

Date: Thu, 20 Mar 1997 13:51:04 -0800
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Subject: Trap/Balun losses

Roger A. McCarty wrote:
>
> (refering to the Tucker T-3000 antenna tuner) "The situation got much
> worse in the balanced mode, where power losses ranged from 35% to an
> astonishing 99% across 160 meters and 60% or higher on 80 meters for low
> impedance loads."
>

It is possible to imagine a load impedance so low in resistance and so
high in reactance, and also a tuner that is not designed to deal with it,
that the efficiency can be almost nonexistent. In particular, if the
circuit Q (loaded Q) is too high because of too-small capacitor values
and inadequate coils at very low values of inductance, then we are using

the wrong tuner for that particular difficult situation.

This situation constitutes flagrant misuse of that particular tuner design. Antenna tuners is one area where we have to be on our toes.

I do think the vendors need to specify their products more precisely, instead of just the usual hooplah advertising come-ons that we see in the ads.

Bill W0IYH

Date: Fri, 21 Mar 1997 00:12:39 -0500
From: Woody White <"eMail "@my.www.page.Mailto>
Subject: Want Camcorder for ATV use - cheap

Best of luk! I finally got one... From a friend who repairs them "on the side". Checking with major chain store electronics sections for returns was an excersise in futility.... The will destroy "non-reparable" units before giving or selling. Smaller independent repair shops might help, but I was not successful. Another suggestion... Insurance companies (if you are on good terms w/agents) which paid for new and have old broken unit. The tape "basket" was dead in the one I did find, so I pulled it out and put a 900 MHz FM transmitter in its' place. Switch selects that (900 FM) or video out to separate 426 AM tx.
Woody

John in Roseville wrote:
>
> Thanks for reading this. I'm looking for a color video camera that I
> can use for ATV but don't have much cash so a broken camcorder will do
> just fine if the camera part still works and I can get video out.
> Let me know what you have and how much you want for it.
> $60 is my limit for a broken camcorder.
>
> mailto:rtwodtwo@cwnet.com
>
> John

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

Date: Thu, 20 Mar 1997 20:46:52 GMT
From: W.B.Mudde@net.HCC.nl (Bart Mudde)

Subject: Who knows e-mail address TenTec ???

I am looking for the manual of the TenTec Corsair II.
Therefor I am looking for the e-mail address of TenTec.
Who knows an address wich is good and I also will get an answer ?
73 de Bart PA3GGM.

End of Ham-Homebrew Digest V97 #187
****

3220. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211521.HAA10763@mailbox1.ucsd.edu>
Source record: 95806

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 83cd0.wrk; Fri, 21 Mar 1997 16:30:26 -1
Received: from [195.120.135.127] by infocomm.it id 83b80.wrk; Fri, 21 Mar 1997 16:29:52 -1
Received: from [195.120.135.127] by infocomm.it id 83a50.wrk; Fri, 21 Mar 1997 16:29:12 -1
Received: from [195.120.135.127] by infocomm.it id 838d0.wrk; Fri, 21 Mar 1997 16:28:26 -1
Received: from [195.120.135.127] by infocomm.it id 83760.wrk; Fri, 21 Mar 1997 16:27:46 -1
Received: from [195.120.135.127] by infocomm.it id 83600.wrk; Fri, 21 Mar 1997 16:27:02 -1
Received: from [195.120.135.127] by infocomm.it id 83430.wrk; Fri, 21 Mar 1997 16:26:06 -1
Received: from [195.120.135.127] by infocomm.it id 832a0.wrk; Fri, 21 Mar 1997 16:25:22 -1
Received: from [195.120.135.127] by infocomm.it id 83140.wrk; Fri, 21 Mar 1997 16:24:42 -1
Received: from [195.120.135.127] by infocomm.it id 83020.wrk; Fri, 21 Mar 1997 16:24:04 -1
Received: from [195.120.135.127] by infocomm.it id 82ed0.wrk; Fri, 21 Mar 1997 16:23:30 -1
Received: from [195.120.135.127] by infocomm.it id 82d10.wrk; Fri, 21 Mar 1997 16:22:36 -1
Received: from [195.120.135.127] by infocomm.it id 82c10.wrk; Fri, 21 Mar 1997 16:22:04 -1
Received: from [195.120.135.127] by infocomm.it id 82ac0.wrk; Fri, 21 Mar 1997 16:21:26 -1
Received: from [195.120.135.127] by infocomm.it id 82940.wrk; Fri, 21 Mar 1997 16:20:42 -1
Received: from [195.120.135.127] by infocomm.it id 827a0.wrk; Fri, 21 Mar 1997 16:19:54 -1
Received: from [132.239.1.54] by infocomm.it id 82660.wrk; Fri, 21 Mar 1997 16:19:14 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03927 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:12 -0800 (PST)
Received: by noc.ucsd.edu; id DAA25978
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:06 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25855
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:23:38 -0800 (PST)
Message-Id: <199703211123.DAA25855@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:36 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #188
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 4 di un precedente messaggio >>>

<uuencoded_portion_removed>
END -- Cut Here -- cut here

Date: Thu, 20 Mar 1997 14:54:05 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 4.JPG (2/2) Re: Soft-start circuits

BEGIN -- Cut Here -- cut here
<uuencoded_portion_removed>
MUB$.Y(8+VW9L=,L9Y,?]\]Z%BJ$I/ZQA

3221. Wtd: 48VDC, 30amp switching supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <3332F4BA.3357@gte.net>
Source record: 95807

Anyone able to lead me to a circuit or construction article for a 48 VDC,
30 amp, switching power supply. Your attention is appreciated.
W4BYG

3222. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211347.FAA07360@mailbox1.ucsd.edu>
Source record: 95808

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 76ef1.wrk; Fri, 21 Mar 1997 14:55:30 -1
Received: from [195.120.135.127] by infocomm.it id 76ce0.wrk; Fri, 21 Mar 1997 14:54:30 -1
Received: from [195.120.135.127] by infocomm.it id 769c0.wrk; Fri, 21 Mar 1997 14:52:58 -1
Received: from [195.120.135.127] by infocomm.it id 766c0.wrk; Fri, 21 Mar 1997 14:51:26 -1
Received: from [195.120.135.127] by infocomm.it id 763a0.wrk; Fri, 21 Mar 1997 14:49:54 -1
Received: from [195.120.135.127] by infocomm.it id 760c0.wrk; Fri, 21 Mar 1997 14:48:26 -1
Received: from [195.120.135.127] by infocomm.it id 75e00.wrk; Fri, 21 Mar 1997 14:47:02 -1
Received: from [195.120.135.127] by infocomm.it id 75ac0.wrk; Fri, 21 Mar 1997 14:45:24 -1
Received: from [195.120.135.127] by infocomm.it id 75870.wrk; Fri, 21 Mar 1997 14:44:16 -1
Received: from [195.120.135.127] by infocomm.it id 755d0.wrk; Fri, 21 Mar 1997 14:43:00 -1
Received: from [195.120.135.127] by infocomm.it id 75310.wrk; Fri, 21 Mar 1997 14:41:34 -1
Received: from [195.120.135.127] by infocomm.it id 750b0.wrk; Fri, 21 Mar 1997 14:40:24 -1
Received: from [195.120.135.127] by infocomm.it id 74e40.wrk; Fri, 21 Mar 1997 14:39:10 -1
Received: from [195.120.135.127] by infocomm.it id 74b70.wrk; Fri, 21 Mar 1997 14:37:48 -1
Received: from [195.120.135.127] by infocomm.it id 74950.wrk; Fri, 21 Mar 1997 14:36:44 -1
Received: from [195.120.135.127] by infocomm.it id 74690.wrk; Fri, 21 Mar 1997 14:35:22 -1
Received: from [132.239.1.54] by infocomm.it id 74070.wrk; Fri, 21 Mar 1997 14:32:16 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03923 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:10 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27037
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:20 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26103
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:27 -0800 (PST)
Message-Id: <199703211124.DAA26103@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:25 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #192
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 3 di un precedente messaggio >>>

<uuencoded_portion_removed>
M'J'B:+3+==

3223. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211346.FAA06307@mailbox2.ucsd.edu>
Source record: 95809

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 76dd0.wrk; Fri, 21 Mar 1997 14:55:00 -1
Received: from [195.120.135.127] by infocomm.it id 76ad0.wrk; Fri, 21 Mar 1997 14:53:26 -1
Received: from [195.120.135.127] by infocomm.it id 76800.wrk; Fri, 21 Mar 1997 14:52:02 -1
Received: from [195.120.135.127] by infocomm.it id 764f0.wrk; Fri, 21 Mar 1997 14:50:32 -1
Received: from [195.120.135.127] by infocomm.it id 761c0.wrk; Fri, 21 Mar 1997 14:48:56 -1
Received: from [195.120.135.127] by infocomm.it id 75f10.wrk; Fri, 21 Mar 1997 14:47:36 -1
Received: from [195.120.135.127] by infocomm.it id 75c40.wrk; Fri, 21 Mar 1997 14:46:10 -1
Received: from [195.120.135.127] by infocomm.it id 75990.wrk; Fri, 21 Mar 1997 14:44:50 -1
Received: from [195.120.135.127] by infocomm.it id 75730.wrk; Fri, 21 Mar 1997 14:43:40 -1
Received: from [195.120.135.127] by infocomm.it id 75490.wrk; Fri, 21 Mar 1997 14:42:20 -1
Received: from [195.120.135.127] by infocomm.it id 751d0.wrk; Fri, 21 Mar 1997 14:41:00 -1
Received: from [195.120.135.127] by infocomm.it id 74f50.wrk; Fri, 21 Mar 1997 14:39:44 -1
Received: from [195.120.135.127] by infocomm.it id 74ce0.wrk; Fri, 21 Mar 1997 14:38:28 -1
Received: from [195.120.135.127] by infocomm.it id 74a60.wrk; Fri, 21 Mar 1997 14:37:14 -1
Received: from [195.120.135.127] by infocomm.it id 74810.wrk; Fri, 21 Mar 1997 14:36:04 -1
Received: from [195.120.135.127] by infocomm.it id 74640.wrk; Fri, 21 Mar 1997 14:35:08 -1
Received: from [132.239.1.54] by infocomm.it id 74070.wrk; Fri, 21 Mar 1997 14:32:16 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03923 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:10 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27037
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:20 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26103
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:27 -0800 (PST)
Message-Id: <199703211124.DAA26103@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:25 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #192
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

<uuencoded_portion_removed>
MB?6=)T*\F:

3224. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211346.FAA07345@mailbox1.ucsd.edu>
Source record: 95810

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

```
554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 76dd1.wrk; Fri, 21 Mar 1997 14:55:02 -1
Received: from [195.120.135.127] by infocomm.it id 76b70.wrk; Fri, 21 Mar 1997 14:53:48 -1
Received: from [195.120.135.127] by infocomm.it id 76890.wrk; Fri, 21 Mar 1997 14:52:20 -1
Received: from [195.120.135.127] by infocomm.it id 76560.wrk; Fri, 21 Mar 1997 14:50:46 -1
Received: from [195.120.135.127] by infocomm.it id 76250.wrk; Fri, 21 Mar 1997 14:49:12 -1
Received: from [195.120.135.127] by infocomm.it id 75f80.wrk; Fri, 21 Mar 1997 14:47:50 -1
Received: from [195.120.135.127] by infocomm.it id 75cc0.wrk; Fri, 21 Mar 1997 14:46:26 -1
Received: from [195.120.135.127] by infocomm.it id 75a10.wrk; Fri, 21 Mar 1997 14:45:04 -1
Received: from [195.120.135.127] by infocomm.it id 757b0.wrk; Fri, 21 Mar 1997 14:43:56 -1
Received: from [195.120.135.127] by infocomm.it id 75530.wrk; Fri, 21 Mar 1997 14:42:40 -1
Received: from [195.120.135.127] by infocomm.it id 75280.wrk; Fri, 21 Mar 1997 14:41:18 -1
Received: from [195.120.135.127] by infocomm.it id 74fb0.wrk; Fri, 21 Mar 1997 14:39:58 -1
Received: from [195.120.135.127] by infocomm.it id 74d70.wrk; Fri, 21 Mar 1997 14:38:48 -1
Received: from [195.120.135.127] by infocomm.it id 74ae0.wrk; Fri, 21 Mar 1997 14:37:32 -1
Received: from [195.120.135.127] by infocomm.it id 748a0.wrk; Fri, 21 Mar 1997 14:36:22 -1
Received: from [195.120.135.127] by infocomm.it id 746e0.wrk; Fri, 21 Mar 1997 14:35:28 -1
Received: from [132.239.1.54] by infocomm.it id 74070.wrk; Fri, 21 Mar 1997 14:32:16 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03923 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:10 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27037
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:20 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26103
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:27 -0800 (PST)
Message-Id: <199703211124.DAA26103@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:25 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
```

Subject: Ham-Homebrew Digest V97 #192
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 4 di un precedente messaggio >>>

<uuencoded_portion_removed>
END -- Cut Here -- cut here

End of Ham-Homebrew Digest V97 #192
****

3225. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211414.GAA08221@mailbox1.ucsd.edu>
Source record: 95811

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7ad10.wrk; Fri, 21 Mar 1997 15:22:34 -1
Received: from [195.120.135.127] by infocomm.it id 7ab00.wrk; Fri, 21 Mar 1997 15:21:34 -1
Received: from [195.120.135.127] by infocomm.it id 7a8f0.wrk; Fri, 21 Mar 1997 15:20:32 -1
Received: from [195.120.135.127] by infocomm.it id 7a700.wrk; Fri, 21 Mar 1997 15:19:32 -1
Received: from [195.120.135.127] by infocomm.it id 7a500.wrk; Fri, 21 Mar 1997 15:18:34 -1
Received: from [195.120.135.127] by infocomm.it id 7a300.wrk; Fri, 21 Mar 1997 15:17:32 -1
Received: from [195.120.135.127] by infocomm.it id 7a0d0.wrk; Fri, 21 Mar 1997 15:16:30 -1
Received: from [195.120.135.127] by infocomm.it id 79ed0.wrk; Fri, 21 Mar 1997 15:15:28 -1
Received: from [195.120.135.127] by infocomm.it id 79d90.wrk; Fri, 21 Mar 1997 15:14:52 -1
Received: from [195.120.135.127] by infocomm.it id 79c70.wrk; Fri, 21 Mar 1997 15:14:16 -1
Received: from [195.120.135.127] by infocomm.it id 79af0.wrk; Fri, 21 Mar 1997 15:13:32 -1
Received: from [195.120.135.127] by infocomm.it id 799d0.wrk; Fri, 21 Mar 1997 15:13:02 -1
Received: from [195.120.135.127] by infocomm.it id 798e0.wrk; Fri, 21 Mar 1997 15:12:30 -1
Received: from [195.120.135.127] by infocomm.it id 79770.wrk; Fri, 21 Mar 1997 15:11:48 -1
Received: from [195.120.135.127] by infocomm.it id 79650.wrk; Fri, 21 Mar 1997 15:11:12 -1
Received: from [195.120.135.127] by infocomm.it id 79550.wrk; Fri, 21 Mar 1997 15:10:44 -1
Received: from [132.239.1.54] by infocomm.it id 79310.wrk; Fri, 21 Mar 1997 15:09:36 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03925 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:11 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27057
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:25 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26042
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:12 -0800 (PST)
Message-Id: <199703211124.DAA26042@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:10 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #191
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 3 di un precedente messaggio >>>

<uuencoded_portion_removed>
MYB26[X9-\`

3226. Re: Tone Burst Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <npQ9cBA30sMzEwSQ@lfheller.demon.co.uk>
Source record: 95812

In article <3331A8C6.7165@ge.maxess.ch>, Gene Neill
<gneill@ge.maxess.ch> writes
>I just got to Europe and my Yaseu FT470 does not have the tone burst
>generator needed to open repeaters and I'm not good at whistling.
>Anyone have a schematic for a 1750 Hz tone burst generator?
>
>Thanks in advance, WA7NPP/HB9

You need a 4060 CMOS divider IC, which contains an inverter that can be
used as an oscillator. Pin 16 is +5 to +15V. Ground is pins 8 and 12.
Take the output from pin 14 via a 100 - 270K resistor. A 455 KHz ceramic
resonator goes across pins 10 and 11, with a 1M resistor across it. Both
ends of the resonator are connected via 1n capacitors to ground.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3227. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211415.GAA08249@mailbox1.ucsd.edu>
Source record: 95813

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7af40.wrk; Fri, 21 Mar 1997 15:23:40 -1
Received: from [195.120.135.127] by infocomm.it id 7ad30.wrk; Fri, 21 Mar 1997 15:22:40 -1
Received: from [195.120.135.127] by infocomm.it id 7ab30.wrk; Fri, 21 Mar 1997 15:21:40 -1
Received: from [195.120.135.127] by infocomm.it id 7a920.wrk; Fri, 21 Mar 1997 15:20:38 -1
Received: from [195.120.135.127] by infocomm.it id 7a720.wrk; Fri, 21 Mar 1997 15:19:38 -1
Received: from [195.120.135.127] by infocomm.it id 7a520.wrk; Fri, 21 Mar 1997 15:18:38 -1
Received: from [195.120.135.127] by infocomm.it id 7a320.wrk; Fri, 21 Mar 1997 15:17:38 -1
Received: from [195.120.135.127] by infocomm.it id 7a120.wrk; Fri, 21 Mar 1997 15:16:38 -1
Received: from [195.120.135.127] by infocomm.it id 79f20.wrk; Fri, 21 Mar 1997 15:15:38 -1
Received: from [195.120.135.127] by infocomm.it id 79e10.wrk; Fri, 21 Mar 1997 15:15:02 -1
Received: from [195.120.135.127] by infocomm.it id 79cb0.wrk; Fri, 21 Mar 1997 15:14:22 -1
Received: from [195.120.135.127] by infocomm.it id 79b50.wrk; Fri, 21 Mar 1997 15:13:42 -1
Received: from [195.120.135.127] by infocomm.it id 79a00.wrk; Fri, 21 Mar 1997 15:13:02 -1
Received: from [195.120.135.127] by infocomm.it id 798a0.wrk; Fri, 21 Mar 1997 15:12:22 -1
Received: from [195.120.135.127] by infocomm.it id 796f1.wrk; Fri, 21 Mar 1997 15:11:32 -1
Received: from [195.120.135.127] by infocomm.it id 79540.wrk; Fri, 21 Mar 1997 15:10:44 -1
Received: from [132.239.1.54] by infocomm.it id 79310.wrk; Fri, 21 Mar 1997 15:09:36 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03925 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:11 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27057
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:25 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26042
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:12 -0800 (PST)
Message-Id: <199703211124.DAA26042@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:10 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #191
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

<uuencoded_portion_removed>
MP]6I/X?<A&

3228. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211345.FAA07320@mailbox1.ucsd.edu>
Source record: 95814

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 76a30.wrk; Fri, 21 Mar 1997 14:53:08 -1
Received: from [195.120.135.127] by infocomm.it id 76720.wrk; Fri, 21 Mar 1997 14:51:40 -1
Received: from [195.120.135.127] by infocomm.it id 76450.wrk; Fri, 21 Mar 1997 14:50:12 -1
Received: from [195.120.135.127] by infocomm.it id 76120.wrk; Fri, 21 Mar 1997 14:48:38 -1
Received: from [195.120.135.127] by infocomm.it id 75e60.wrk; Fri, 21 Mar 1997 14:47:16 -1
Received: from [195.120.135.127] by infocomm.it id 75b90.wrk; Fri, 21 Mar 1997 14:45:50 -1
Received: from [195.120.135.127] by infocomm.it id 758e0.wrk; Fri, 21 Mar 1997 14:44:30 -1
Received: from [195.120.135.127] by infocomm.it id 75690.wrk; Fri, 21 Mar 1997 14:43:18 -1
Received: from [195.120.135.127] by infocomm.it id 753b0.wrk; Fri, 21 Mar 1997 14:41:56 -1
Received: from [195.120.135.127] by infocomm.it id 75150.wrk; Fri, 21 Mar 1997 14:40:42 -1
Received: from [195.120.135.127] by infocomm.it id 74eb0.wrk; Fri, 21 Mar 1997 14:39:24 -1
Received: from [195.120.135.127] by infocomm.it id 74c60.wrk; Fri, 21 Mar 1997 14:38:12 -1
Received: from [195.120.135.127] by infocomm.it id 74a10.wrk; Fri, 21 Mar 1997 14:37:02 -1
Received: from [195.120.135.127] by infocomm.it id 74770.wrk; Fri, 21 Mar 1997 14:35:46 -1
Received: from [195.120.135.127] by infocomm.it id 74530.wrk; Fri, 21 Mar 1997 14:34:38 -1
Received: from [195.120.135.127] by infocomm.it id 743b0.wrk; Fri, 21 Mar 1997 14:33:56 -1
Received: from [132.239.1.54] by infocomm.it id 740d0.wrk; Fri, 21 Mar 1997 14:32:30 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03914 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id DAA26164
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:45 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26142
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:39 -0800 (PST)
Message-Id: <199703211124.DAA26142@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:37 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #193
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Fri, 21 Mar 97 Volume 97 : Issue 193

Today's Topics:
- Untitled QuickPICT 5.JPG (1/1) Re: Soft-start circuits

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 20 Mar 1997 14:54:39 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 5.JPG (1/1) Re: Soft-start circuits

BEGIN -- Cut Here -- cut here
begin 644 Untitled QuickPICT 5.JPG
<uuencoded_portion_removed>
M6J,\=3HYA@ZF#JZ*2T:5W&2=XR6N\9)->:/Z<;

3229. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211453.GAA09307@mailbox1.ucsd.edu>
Source record: 95815

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 805b0.wrk; Fri, 21 Mar 1997 16:02:54 -1
Received: from [195.120.135.127] by infocomm.it id 80560.wrk; Fri, 21 Mar 1997 16:02:44 -1
Received: from [195.120.135.127] by infocomm.it id 80510.wrk; Fri, 21 Mar 1997 16:02:34 -1
Received: from [195.120.135.127] by infocomm.it id 804c0.wrk; Fri, 21 Mar 1997 16:02:24 -1
Received: from [195.120.135.127] by infocomm.it id 80470.wrk; Fri, 21 Mar 1997 16:02:14 -1
Received: from [195.120.135.127] by infocomm.it id 80420.wrk; Fri, 21 Mar 1997 16:02:04 -1
Received: from [195.120.135.127] by infocomm.it id 803b0.wrk; Fri, 21 Mar 1997 16:01:54 -1
Received: from [195.120.135.127] by infocomm.it id 80360.wrk; Fri, 21 Mar 1997 16:01:44 -1
Received: from [195.120.135.127] by infocomm.it id 802c0.wrk; Fri, 21 Mar 1997 16:01:26 -1
Received: from [195.120.135.127] by infocomm.it id 80270.wrk; Fri, 21 Mar 1997 16:01:14 -1
Received: from [195.120.135.127] by infocomm.it id 80210.wrk; Fri, 21 Mar 1997 16:01:04 -1
Received: from [195.120.135.127] by infocomm.it id 801a0.wrk; Fri, 21 Mar 1997 16:00:54 -1
Received: from [195.120.135.127] by infocomm.it id 80150.wrk; Fri, 21 Mar 1997 16:00:44 -1
Received: from [195.120.135.127] by infocomm.it id 80100.wrk; Fri, 21 Mar 1997 16:00:34 -1
Received: from [195.120.135.127] by infocomm.it id 800b0.wrk; Fri, 21 Mar 1997 16:00:24 -1
Received: from [195.120.135.127] by infocomm.it id 80040.wrk; Fri, 21 Mar 1997 16:00:10 -1
Received: from [132.239.1.54] by infocomm.it id 7b760.wrk; Fri, 21 Mar 1997 15:27:50 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03919 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27021
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:15 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25913
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:23:56 -0800 (PST)
Message-Id: <199703211123.DAA25913@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:57 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #190
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Fri, 21 Mar 97 Volume 97 : Issue 190

Today's Topics:
- Untitled QuickPICT 3.JPG (2/2) Re: Soft-start circuits

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 20 Mar 1997 14:52:57 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 3.JPG (2/2) Re: Soft-start circuits

BEGIN -- Cut Here -- cut here
<uuencoded_portion_removed>
MVTDFG.#;VY^

3230. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211521.HAA10761@mailbox1.ucsd.edu>
Source record: 95816

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 83c60.wrk; Fri, 21 Mar 1997 16:30:12 -1
Received: from [195.120.135.127] by infocomm.it id 83b00.wrk; Fri, 21 Mar 1997 16:29:32 -1
Received: from [195.120.135.127] by infocomm.it id 83990.wrk; Fri, 21 Mar 1997 16:28:52 -1
Received: from [195.120.135.127] by infocomm.it id 83830.wrk; Fri, 21 Mar 1997 16:28:08 -1
Received: from [195.120.135.127] by infocomm.it id 836a0.wrk; Fri, 21 Mar 1997 16:27:22 -1
Received: from [195.120.135.127] by infocomm.it id 83520.wrk; Fri, 21 Mar 1997 16:26:38 -1
Received: from [195.120.135.127] by infocomm.it id 833a0.wrk; Fri, 21 Mar 1997 16:25:52 -1
Received: from [195.120.135.127] by infocomm.it id 83230.wrk; Fri, 21 Mar 1997 16:25:10 -1
Received: from [195.120.135.127] by infocomm.it id 830f0.wrk; Fri, 21 Mar 1997 16:24:32 -1
Received: from [195.120.135.127] by infocomm.it id 82f80.wrk; Fri, 21 Mar 1997 16:23:50 -1
Received: from [195.120.135.127] by infocomm.it id 82e50.wrk; Fri, 21 Mar 1997 16:23:12 -1
Received: from [195.120.135.127] by infocomm.it id 82cd0.wrk; Fri, 21 Mar 1997 16:22:26 -1
Received: from [195.120.135.127] by infocomm.it id 82b80.wrk; Fri, 21 Mar 1997 16:21:50 -1
Received: from [195.120.135.127] by infocomm.it id 82a60.wrk; Fri, 21 Mar 1997 16:21:14 -1
Received: from [195.120.135.127] by infocomm.it id 828a0.wrk; Fri, 21 Mar 1997 16:20:22 -1
Received: from [195.120.135.127] by infocomm.it id 82740.wrk; Fri, 21 Mar 1997 16:19:40 -1
Received: from [132.239.1.54] by infocomm.it id 82660.wrk; Fri, 21 Mar 1997 16:19:14 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03927 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:12 -0800 (PST)
Received: by noc.ucsd.edu; id DAA25978
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:06 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25855
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:23:38 -0800 (PST)
Message-Id: <199703211123.DAA25855@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:36 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #188
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

<uuencoded_portion_removed>
M(U4@Y]6.2>

3231. help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: baddog@nidlink.com
Message-ID: <5guj1d$7r4@faile.nidlink.com>
Source record: 95817

Hello Peolple,
I thought I would ask a Question even though I do know the answer
is gonna be NO but does anybody out there have a simple ETT circuit
aka(Roger-Beep) that you would be willing to share with me
baddog@nidlink.com thanks for your time 73

3232. Info wanted on HBcs-1100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Marco Bokma <mbokma@caiw.nl>
Message-ID: <01bc3621$e014a000$4008b2c2@ingrid>
Source record: 95818

Hello,

Who can help me with the datasheets of a HBCS-1100 laser of HP.
It's an 8 pins housing and there's also a number SC9310D written on it.

Thanks,
Marco

e-mail : mbokma@caiw.nl
: pe1obu@caiw.nl

3233. Q: M67711 SHF module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: christer.jogenborn@era.ericsson.se
Message-ID: <5gtfbc$o8f@newstoo.ericsson.se>
Source record: 95819

Argh !
where can I find some info on the M67711 module from Mitsubishi ?
Its supposed to be SHF and more than 10W.
Will it handle class AB ?
Do I need more than one DC feed (for class AB or just during TX) ?

73 Chris SM0NCL - on 1G2.
--

3234. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <3332D110.3DCB@aeneas.net>
Source record: 95820

Well, for what it's worth....

Back a couple months ago, we had the mobile TV truck over at our Gym for a basketball game. We plugged into a service outlet on the outside of the building. We ran camera cables inside, intercom cables, video for the announcers booth, audio back down from the announcers booth, you get the idea.... Well the monitor that the announcers had was a 117VAC grounded plug. We plugged the monitor into a outlet in the announcers booth instead of running AC all the way up to it from the truck. Well, as it turns out, and no one knew this, the whole ground system inside of the gym was not bonded to neutral or the ground rods at the service entrance. A transformer shorted in one of the lights inside of the gym and was putting 600VAC on the whole ground system. The outlets we were plugged into on the outside of gym were grounded. When the monitor was plugged in, a ground fault breaker opened. The engineer who was working the truck that night didn't know what was happening and why the ground fault breakers in the truck kept opening. He unhooked the video and audio lines to the announcers booth. Presto, no breaker opening up. He reached over and started to grab the video line with one hand while his other hand was pressed against a tape machine (case grounded of course), he was knocked out backwards of the truck, blacked out when his head hit the ground. He had holes in 3 fingers that touched the video connector. And if all than wasn't enough, he had a heart pacemaker. He lived and is doing fine, fingers healed, no problems with his pacemaker. We now call him LUCKY.

Is there a need for the ground separate from the neutral? Well the system that was supposed to prevent this, was actually worse than if we had no ground at all. This was a electrical problem that should have been caught when the building was constructed. Times past we plugged into the outlets and had no problems, why, because the transformer was not shorted to ground. It's amazing someone didn't get killed. The ground and neutral have to be bonded together at the service feed point for the ground safety system to work, otherwise you are better off without it. People who work in the electronics industry naturally 'assume' that ground is ground. That's a deadly assumption.

My $0.02 worth as well.

> I see in some posts here, reference to neutral and chassis ground as the
> same thing.
>
> The newer books have taken into account the new wiring for neutral and
> ground and do not refer to them as the same.
>
> I think in the (USA) the National Electrical Code has defined neutral and

> ground. They are not the same thing. They are the same at one point. The
> main service entrance. They are bonded together and tied to an earth ground.
> After this point they differ. The neutral carries the unbalanced (240vac)
> load current. The ground carries "fault current".
>
> Why worry, because the wire carrying the neutral current has resistance.
> There for volt drop. Now some place along the system the ground (carrying
> no current) and the neutral are at different potentials. This may be and
> should be a small voltage. The ground is still at earth ground potential.
> The ground conductor is the one bonded to the chassis not the neutral.
>
> If you connect the ground conductor to the neutral at
> some place in the system, other than at the service enterence, the load
> current is divided between the neutral and ground conductors in that
> circuit. The ground is no longer at earth ground potential. There will
> be voltage from ground to say a water pipe (another earth ground). This
> is not a good condition. Any sub-feeder(in the same building) from the main
> service enterence is now required to have a separate ground conductor. The
> neutral and ground are separate.

3235. WTB: Maunals for CEI 1687/G LF receiver.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <3332D649.7FE5@aeneas.net>
Source record: 95821

I'm looking for manuals for a CEI 1687/G LF receiver.
I'm not picky, I'll take copies just as well as originals.
Any help locating these would be greatly appreciated.
Thanks!
Mark
mmans@aeneas.net

3236. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2103971249400001@news.vcnet.com>
Source record: 95822

In article <33312722.1874024@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Wed, 19 Mar 1997 21:36:58 -0500, Woody White <"eMail "@
> my.www.page.Mailto> wrote:
>
> >I do hope you meant to say connect a N.O. relay in SERIES with the
> >transformer primary, across the current limiting resistor. Relay to
> >short the resistor when the surge subsides....
> >
> >_Woody_

> >
> ><snip>
> >> A better way to do it is to connect the surge relay across the
> >> transformer primary, use only one resistor, and short it when the
> >> PRIMARY reaches near full voltage. Of course the resistor should be
> >> fused with a slow blow fuse in case the supply is shorted (or the
> >> relay fails) at start up.

• Unlike DC coil relays, AC coil relays are not very satisfactory for
step-start service because they do not close positively when they reach the
pull in voltage.
IMO, it would be preferable to connect a small transformer to the primary
of the HV transformer. The secondary of the small transformer is
rectified, filtered, and used to power the DC coil of the step-start relay.

The step point can be contolled by placing resistance in series with the
relay's coil.

--
--Rich-- ag6k, 805-386-3734

3237. Re: Anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: orion**@capital.net
Message-ID: <3334b01b.4225832@news.capital.net>
Source record: 95823

On 21 Mar 1997 12:25:42 GMT, ae517@FreeNet.Carleton.CA (Russ Renaud)
wrote:

>
>David LaRue (dal9@axe.humboldt.edu) writes:
>> Has anyone outside of CA heard of the Humboldt Brewing Co.?
>
>You've posted to the wrong newsgroup in error. This group is "devoted" to
>homebrew of the radio electronic sort.
>
>Not to worry, you're not the first.

I always thought that "homebrew" was a silly word to use in the
electronics field. Homebuilt would make a lot more sense and eliminate
this confusion with the homebrewing of beer and spirits, IMHO.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

3238. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5guuav$6dq@hpcvsnz.cv.hp.com>
Source record: 95824

lblockhart@aol.com wrote:
: This "newbie" still doesn't get it does he? Go read a basic FAQ
: regarding what is allowable here on the NG. You have flooded
: the group with multiple almost a DOZEN JPG files that it took
: my setup 10 minutes to download! Further, rather than
: apologize to the group, you take issue and claim you are "blazing
: new territory" and give us some flawed logic about QST and 20
: pages of pix. GEEZ....

Amen. Not only that, but now I see a reposting of them all
by some server somewhere that perhaps barfed on them.

As someone else posted: if you have binaries you think are
interesting, just post a simple _pointer_ to them here! Leave
the binaries themselves OFF this (and other text-only) newsgroups.

--
Cheers,
Tom
tomb@lsid.hp.com

3239. stornophone 4000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: bpearson@helen2.win-uk.net
Message-ID: <3@helen2.win-uk.net>
Source record: 95825

Hi

I have been trying to get some stornophone 4000's (uhf and vhf)
working on the amature bands with some success..(by interfacing
the PLL to a pc)..
I was going to use a couple of PIC's to finish the project off but
I could not get them in the case ..Also to find a way round the
keypad mapping done my head in..
So to get further on I need to know more about the personality
prom ... Can anybody help,,

Thanks in advance

Bob Pearson (G0PEY)

3240. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Rolf Mathson <rmathiso@ix.netcom.com>
Message-ID: <33331261.22E9@ix.netcom.com>
Source record: 95826

AC6V wrote:
>
> Claudio Fornaro wrote:
> >
> > Hi all,
> > I'd want to build a "home made" radio receiver for AM (or even SW...)
<snip>
> > usually
> > has no galena crystal at home...
<snip>
> Hi Claudio -- an admirable project. For the crystal detector -- try a
> small whisker wire on a razor blade. It works -- I remember doing this
> as a boy experimenting with xtal radios.

The "gotcha" on using a razor blade for the detector is it had to be a
"Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
with a material that would behave as a rectifier. The connection could
be made via a wire wraped around a sharpened pencil lead. They probably
don't make these blades any longer :(

Regards,
Rolf

3241. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <7aVKAUAgtvMzEwCv@lfheller.demon.co.uk>
Source record: 95827

In article <19970321171101.MAA16295@ladder01.news.aol.com>,
lblockhart@aol.com writes
>This "newbie" still doesn't get it does he? Go read a basic FAQ regarding
>what
>is allowable here on the NG. You have flooded the group with multiple almost
>a DOZEN JPG files that it took my setup 10 minutes to download! Further,
>rather than apologize to the group, you take issue and claim you are "blazing
>new territory" and give us some flawed logic about QST and 20 pages of pix.
>GEEZ....

Report him to postmaster@europa.com for net abuse. That should stop him.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3242. Re: 88Mh Coils needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5gvje4$in@mtinsc03.worldnet.att.net>
Source record: 95828

Sorry, the ones I had are long gone....
Why not use op-amp active filters or the newer chips designed
specifically to be used as filters?
Woody

Russ Ellsworth wrote:
>
> Anyone out there in Homebrew land have any of the famous 88 Mh repeater
> coils? I am looking for 6 or 7 to send to a Ham in Japan so he can build
> an inexpensive BP filter for RTTY. They aren't easily available there
> apparently. I fyou have some you can spare, e-mail me.
>
> Thanks, Russ Ellsworth,WA6CWV Boise,Idaho

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3243. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <3332F6A3.4AEB@rollanet.org>
Source record: 95829

> >>> Hmmmm... then what would you say about 2m <-> 10m FM links?
> >>> You know, a 2m box coupled to a 10m box. A Tech can then cause
> >>> the 10m box to transmit without being licensed to transmit
> >>> in that band.
>
> >This used to be illegal. Seems to me it was 5-6 years ago they made a
> >change with the specific intent of allowing this situation.
>
> IF you are a tech no code, THIS IS STILL ILLEGAL. Only those with
> suitable license class can use such an HV/VHF cross-band repeater.
>
no it isn't. the same way you may let a non licensed person talk on your radio while you are there with them, you may allow vhf only hams to talk on 10m thru your repeater. my license class is general and i am the control operator of my multi-cast repeater system, be it remotely or right there sitting by it. when a tech comes in on 440mHz or 6m, they are repeated out on 440mHz, 6m AND 10m simultaneously. this has been accepted and legal practice for years now. techs can even use my remote base and go way down on the hf bands because I, the control operator have the priveleges. just like at field day, the club uses the highest class license in the group and everyone id's with that call sign and so on. the repeater let's me be a remote control operator rather than sitting next to the tech "holding their hand"

hope this clears up the crossband on a repeater system thingy. a few others have said the same thing, i just took up more room yakking.
--
A.C.Curtis
KB0WLF
Missouri's multicast repeater system - 6m, 70cm, 10m, ATV
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3244. 88Mh Coils needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Russ Ellsworth <russcwv@cyberhighway.net>
Message-ID: <3332FF12.3AE7@cyberhighway.net>
Source record: 95830

Anyone out there in Homebrew land have any of the famous 88 Mh repeater coils? I am looking for 6 or 7 to send to a Ham in Japan so he can build an inexpensive BP filter for RTTY. They aren't easily available there apparently. I fyou have some you can spare, e-mail me.

Thanks, Russ Ellsworth,WA6CWV Boise,Idaho

3245. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2103971258360001@news.vcnet.com>
Source record: 95831

In article <3331ed1a.52561626@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On 20 Mar 1997 22:09:10 GMT, jstroppe@uhl.uiowa.edu (John Stroppel)
> wrote:
>
>
> >
> > >Well this is my $.02
> > >
> > >
> > >WA0VYZ
> > >john
>
> John, If you look at the 95 Handbook, they return filament transformer
> and other leads to the chassis in some PA designs, that is a bad idea
> and against wiring standards.
>
> If the neutral and ground lead should ever break or become
> disconnected, the chassis would be hot with 120 VAC.
>
> If you look at the two HV power supplies by Mark Wilson, neither has a
> chassis safety ground. Not a good idea.

 Page numbers?

> If you look at the B- return, it is clampd through a resistor to the
> POWER line neutral in one supply, not a good idea.

 Amen, Tom. The fault I limiting R belongs in the positive HV circuit
after the filter capacitor. For Class AB2 g-g amplifiers, the only path
from HV negative to ground should be through the grid current meter and the
paralleled glitch protection diodes.

> If you look at the B- returns, they are clamped only by a resistor,
> not a good idea (since a fault can force the negative lead to full
> supply voltage as the capacitor discharges).
>
> IMHO, a Handbook should contain SAFE designs.
>
> 73 Tom

--
--Rich-- ag6k, 805-386-3734

3246. packet radio from 8051 microcontroller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: ccoupland@pei.sympatico.ca
Message-ID: <33321e83.6463978@news1.pei.sympatico.ca>
Source record: 95832
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.packet,sci.electronics

What is needed to transmit ASCII text from a micromint domino type microcontroller via packet radio? Can the domino do all the work or do I need a separate modem chip, etc...?

I am totally new to both packet and microcontrollers so any help is appreciated.

Chris Coupland
ccoupland@pei.sympatico.ca

3247. WTB manuals for Fluke 8506A DMM, GenRad 1657 RLC Digibridge

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: parnass@marconi.ih.lucent.com
Message-ID: <5gsq1s$r8@ssbunews.ih.lucent.com>
Source record: 95875
Cross-posted to: misc.industry.electronics.marketplace,sci.electronics.equipment,rec.radio.swap,rec.radio.amateur.homebrew

I am looking for original instruction and/or service
manuals for:

1. Fluke 8506A thermal RMS digital multimeter
2. GenRad 1657 RLC Digibridge

Please state price and condition in your response. Thanks.
--

==========
Copyright 1997, Bob Parnass, AJ9S AMPS/PCS Development Laboratory
parnass@bell-labs.com - (630)979-5414 Bell Laboratories

3248. Re: motorola pager modifications?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: frog200@nospam.juno.com
Message-ID: <5gsv5c$h56$1@news.wco.com>
Source record: 95876

>>
>> Any of you homebrewers out there know anything about pagers? i'm gonna
>> recrystal this one [a yard sale find with no docs!!] for use with tnc
>> and such. nice CQ vhf article on this subject.
>>
<<SNIP>>

sounds like a Bravo type pager. You may be biting off more than you can
chew trying to modify this one.

Ed

3249. Re: Want Camcorder for ATV use - cheap

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5gt57t$sj@mtinsc05.worldnet.att.net>
Source record: 95877

Best of luk! I finally got one... From a friend who repairs them "on the side". Checking with major chain store electronics sections for returns was an excersise in futility.... The will destroy "non-reparable" units before giving or selling. Smaller independent repair shops might help, but I was not successful. Another suggestion... Insurance companies (if you are on good terms w/agents) which paid for new and have old broken unit. The tape "basket" was dead in the one I did find, so I pulled it out and put a 900 MHz FM transmitter in its' place. Switch selects that (900 FM) or video out to separate 426 AM tx.
Woody

John in Roseville wrote:
>
> Thanks for reading this. I'm looking for a color video camera that I
> can use for ATV but don't have much cash so a broken camcorder will do
> just fine if the camera part still works and I can get video out.
> Let me know what you have and how much you want for it.
> $60 is my limit for a broken camcorder.
>
> mailto:rtwodtwo@cwnet.com
>
> John

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3250. Re: Home Made "crystal' for receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: FoxFox7@aol.COM
Message-ID: <970320201958_-1237027059@emout15.mail.aol.com>
Source record: 95878

During the war,(WWII) soldiers indeed made home-made "crystal" radios using household parts. The "crystal" was made from a blued-steel razor blade and the whisker was the "lead" (actually carbon) from a pencil. A sweet spot was found by probing around on the blued surface with the pointed end of the pencil lead. One wire went to the razor blade and the other to th pencil lead. Don't know about the earpiece or headset though. I made a carbon microphone one time using carbon from a zinc-carbon flashlight battery, a soda bottle cap for the button and a paper cup for the diapragm and housing. Maybe if you "borrow" the earpiece from a telephone handset, that will meet you goal of not going to the radio store.

By the way the "crytal" radio I described is commonly called a FOXHOLE RADIO because that's where they were used.

Good Luck DE George Dowell K0FF/7

3251. Re: - Untitled QuickPICT 1.JPG (1/2) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: "Dr. Duncan Clark" <duncan@genesys.demon.co.uk>
Message-ID: <4FL2QGAzFIMzEwji@genesys.demon.co.uk>
Source record: 95879

In article <jupiter-ya023580002003971450280001@news.europa.com>,
jupiter@europa.com writes
>BEGIN -- Cut Here -- cut here
>begin 644 Untitled QuickPICT 1.JPG

Why do you insist on posting binaries to a newsgroup so that it slows up
my incoming news for 10 mins to download this rubbish. Use a web page or
email me to a user but don't inflict it on evrybody esle. It shows a
total disregard for everyone

73's
Duncan
G4ELJ
--
The problem with being on the cutting edge is that you occasionally get
sliced from time to time....

Duncan Clark
DNAmp Ltd.
TEl/FAX 01252376288
http://www.dnamp.com
http://www.genesys.demon.co.uk

3252. wtb:kenwood MJ8/4

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: tpotts@clemson.edu
Message-ID: <5gu0l8$b44$2@hubcap.clemson.edu>
Source record: 95880

```
i need kenwood mj8/4 cable used to adapt mc60 mike to 830s radio.
thanks keruuc.
```

3253. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33328928.2726713@netnews.worldnet.att.net>
Source record: 95881

On Thu, 20 Mar 1997 22:12:55 -0800, jupiter@europa.com wrote:

>This NG is supposed to be about construction, not speculation or
>humiliation. The amazing thing about my amp was the construction and
>acquisition of parts, not the schematic or size of the tube. Put up or
>shut up. Thats why I posted all the JPEGs. It sounds like you are one of
>those speculators and not a doer. But its not my fault. The local ham
>store here, they would always say: we just can't get any of those exotic
>parts. Now they are Chapter 11. Meanwhile, my construction projects go
>on.

Hi Rob,

Part of the problem (and blessing) of written comminiucations is is
does not carry any tone. The reader can put any inflection he likes
into the words.

I was trying to congratulate you on your project, since you seemed to
be bubbling over with enthusiasm now that you finished it (and
couldn't wait to show us pictures).

In trying to understand your reply, I re-read your post.

I wonder what makes you think others "probably haven't built anything"
and also why we aren't allowed to talk about theory or safety issues?

Do you think safety issues are out of place?

73 Tom

3254. Re: Anyone?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: ae517@FreeNet.Carleton.CA
Message-ID: <5gtuo6$qfo@freenet-news.carleton.ca>
Source record: 95882

David LaRue (dal9@axe.humboldt.edu) writes:
> Has anyone outside of CA heard of the Humboldt Brewing Co.?

You've posted to the wrong newsgroup in error. This group is "devoted" to homebrew of the radio electronic sort.

Not to worry, you're not the first.

BTW, I've never heard of Humboldt (I'm in Ontario) and I have been known to whip up the odd batch of homebrew (and drink it too!)

Russ, va3rr@amsat.org

3255. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <5gu8g0$108q@flood.weeg.uiowa.edu>
Source record: 95883

<3331ef8b.53186746@netnews.worldnet.att.net>
<jupiter-ya023580002003972212550001@news.europa.com>
<33328928.2726713@netnews.worldnet.att.net>
Distribution:

Tom:

Got the 95 handbook out and it appears your right. It is a bad pratice to do this with the ground and neutral. That was what I was tryiung to bring out in the post. Even to refer to them as the same thing.

But if both the neutral and the ground open somethings going to be hot thats not suppose to. You have got no saftey if both break. And RF by-pass capacitors at line frequency pass enough current to get you shocked real good if those are the only thing between the hot,neutral, and ground.

WA0VYZ
john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

3256. Re: Cryptic coil description

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <3332AAA2.6577@arrl.org>
Source record: 95884

L. DE BRUIJN wrote:
>
> >: in one of the ARRL-Microwave handbooks, there are coil description
> >: which are absolut cryptic to me.
> >
> >: What means: 4t, 28 swg e.c.w. ?
> >: or 2.5t, 28 swg t.c.w. ?
> >

This sounds like it came from the RSGB Microwave
Handbook (3 volume set), not an ARRL publication.

The ARRL publishes a UHF/Microwave Projects Manual,
as well as a UHF/Microwave Experimenter's Manual.
We also publish the proceedings of several conferences.

The VHF/UHF DX Book now published by the
RSGB is really the 2nd printing of the book
originally published by DIR Publishing.

The RSGB VHF/UHF Manual seems to have gone
the way of the ARRL's The Radio Amateur's VHF
Manual--now out of print. The latter is
particularly dated--the last printing appears
to have been in 1972. I think a modern up to
date VHF Manual is a great idea--anyone want
to write one?

Zack Lau zlau@arrl.org
Technical Consultant for some ARRL Publications

3257. non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9703210759404971@atdbbs.com>
Source record: 95885

>>I've gotten complaints from whiners regarding my linear picts.

We're not "whiners." We simply abide by the simple, established rules of Netiquette in our posts.

This is a text-only, message-based group. Period. Either like it, or leave it.

>>If QST...

You cannot compare this group to any other media form. QST is a print magazine. This is an Internet Newsgroup.

If you have something that is exciting - but binary - then please post us a MESSAGE advising us where we can download it in this Newsgroup. That is proper Netiquette.

3258. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3331ed1a.52561626@netnews.worldnet.att.net>
Source record: 95886

On 20 Mar 1997 22:09:10 GMT, jstroppe@uhl.uiowa.edu (John Stroppel)
wrote:

>
>Well this is my $.02
>
>
>WA0VYZ
>john

John, If you look at the 95 Handbook, they return filament transformer
and other leads to the chassis in some PA designs, that is a bad idea
and against wiring standards.

If the neutral and ground lead should ever break or become
disconnected, the chassis would be hot with 120 VAC.

If you look at the two HV power supplies by Mark Wilson, neither has a
chassis safety ground. Not a good idea.

If you look at the B- return, it is clampd through a resistor to the
POWER line neutral in one supply, not a good idea.

If you look at the B- returns, they are clamped only by a resistor,
not a good idea (since a fault can force the negative lead to full
supply voltage as the capacitor discharges).

IMHO, a Handbook should contain SAFE designs.

73 Tom

3259. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3331ef8b.53186746@netnews.worldnet.att.net>
Source record: 95887

On Thu, 20 Mar 1997 14:24:50 -0800, jupiter@europa.com wrote:

>I don't think most of these people have ever built anything, let alone a
>high power amp. I have some 4x6 glossies of my amp and power supply, which
>I will try to attach as JPEG's to an upcoming post. My baby took my 9
>months to build:

Wow! An 8877, that's a **big** tube.

And in only nine months!

73 Tom

3260. Re: WTB: Alpha 77Dx Plate Choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: edwest@snowcrest.net
Message-ID: <33329ab7.2067748@news.snowcrest.net>
Source record: 95888

On 8 Mar 1997 11:59:58 GMT, pkluwe@aol.com (PKluwe) wrote:

>WTB: Alpha 77Dx Plate Choke or equivalent. Please advise condition and
>cost. Thank you. Email: paul@kluwe.com
>
>73, Paul Kluwe, W8ZO
>

Paul

Don"t bother with the original equp. choke. It is a B&W 800 and is
not the best choice.

Go to Peter Dahl. He has a heavy duty choke for this amp. It will
giove you no trouble at all and you will find a lot of problems from
internal arcing will go away.

73
Ed

3261. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: lblockhart@aol.com
Message-ID: <19970321171101.MAA16295@ladder01.news.aol.com>
Source record: 95889

This "newbie" still doesn't get it does he? Go read a basic FAQ regarding what is allowable here on the NG. You have flooded the group with multiple almost a DOZEN JPG files that it took my setup 10 minutes to download! Further, rather than apologize to the group, you take issue and claim you are "blazing new territory" and give us some flawed logic about QST and 20 pages of pix. GEEZ....

L. B. Lockhart KC5NVY Houston, Tx. USA
Northwest Amatuer Radio Society 146.660 (-)
OMIK - Electronic Communications Association, Inc.
ARRL

3262. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211345.FAA07319@mailbox1.ucsd.edu>
Source record: 95890

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 76a80.wrk; Fri, 21 Mar 1997 14:53:18 -1
Received: from [195.120.135.127] by infocomm.it id 76770.wrk; Fri, 21 Mar 1997 14:51:48 -1
Received: from [195.120.135.127] by infocomm.it id 76480.wrk; Fri, 21 Mar 1997 14:50:20 -1
Received: from [195.120.135.127] by infocomm.it id 76160.wrk; Fri, 21 Mar 1997 14:48:44 -1
Received: from [195.120.135.127] by infocomm.it id 75ec0.wrk; Fri, 21 Mar 1997 14:47:26 -1
Received: from [195.120.135.127] by infocomm.it id 75bb0.wrk; Fri, 21 Mar 1997 14:45:56 -1
Received: from [195.120.135.127] by infocomm.it id 75930.wrk; Fri, 21 Mar 1997 14:44:40 -1
Received: from [195.120.135.127] by infocomm.it id 756e0.wrk; Fri, 21 Mar 1997 14:43:30 -1
Received: from [195.120.135.127] by infocomm.it id 75440.wrk; Fri, 21 Mar 1997 14:42:10 -1
Received: from [195.120.135.127] by infocomm.it id 75170.wrk; Fri, 21 Mar 1997 14:40:48 -1
Received: from [195.120.135.127] by infocomm.it id 74f00.wrk; Fri, 21 Mar 1997 14:39:34 -1
Received: from [195.120.135.127] by infocomm.it id 74c80.wrk; Fri, 21 Mar 1997 14:38:18 -1
Received: from [195.120.135.127] by infocomm.it id 74a30.wrk; Fri, 21 Mar 1997 14:37:08 -1
Received: from [195.120.135.127] by infocomm.it id 74790.wrk; Fri, 21 Mar 1997 14:35:52 -1
Received: from [195.120.135.127] by infocomm.it id 74570.wrk; Fri, 21 Mar 1997 14:34:46 -1
Received: from [195.120.135.127] by infocomm.it id 74420.wrk; Fri, 21 Mar 1997 14:34:06 -1
Received: from [132.239.1.54] by infocomm.it id 740d0.wrk; Fri, 21 Mar 1997 14:32:30 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03914 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id DAA26164
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:45 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26142
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:39 -0800 (PST)
Message-Id: <199703211124.DAA26142@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:37 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #193
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

<uuencoded_portion_removed>
M8,I>WA;!!&

3263. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211521.HAA10755@mailbox1.ucsd.edu>
Source record: 95891

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 83c00.wrk; Fri, 21 Mar 1997 16:30:02 -1
Received: from [195.120.135.127] by infocomm.it id 83ac0.wrk; Fri, 21 Mar 1997 16:29:26 -1
Received: from [195.120.135.127] by infocomm.it id 83960.wrk; Fri, 21 Mar 1997 16:28:46 -1
Received: from [195.120.135.127] by infocomm.it id 837c0.wrk; Fri, 21 Mar 1997 16:27:58 -1
Received: from [195.120.135.127] by infocomm.it id 83680.wrk; Fri, 21 Mar 1997 16:27:20 -1
Received: from [195.120.135.127] by infocomm.it id 834d0.wrk; Fri, 21 Mar 1997 16:26:28 -1
Received: from [195.120.135.127] by infocomm.it id 83330.wrk; Fri, 21 Mar 1997 16:25:42 -1
Received: from [195.120.135.127] by infocomm.it id 831b0.wrk; Fri, 21 Mar 1997 16:24:56 -1
Received: from [195.120.135.127] by infocomm.it id 830a0.wrk; Fri, 21 Mar 1997 16:24:22 -1
Received: from [195.120.135.127] by infocomm.it id 82f20.wrk; Fri, 21 Mar 1997 16:23:38 -1
Received: from [195.120.135.127] by infocomm.it id 82db0.wrk; Fri, 21 Mar 1997 16:22:56 -1
Received: from [195.120.135.127] by infocomm.it id 82c70.wrk; Fri, 21 Mar 1997 16:22:16 -1
Received: from [195.120.135.127] by infocomm.it id 82b30.wrk; Fri, 21 Mar 1997 16:21:40 -1
Received: from [195.120.135.127] by infocomm.it id 82a30.wrk; Fri, 21 Mar 1997 16:21:08 -1
Received: from [195.120.135.127] by infocomm.it id 828f0.wrk; Fri, 21 Mar 1997 16:20:30 -1
Received: from [195.120.135.127] by infocomm.it id 827d0.wrk; Fri, 21 Mar 1997 16:20:00 -1
Received: from [132.239.1.54] by infocomm.it id 82660.wrk; Fri, 21 Mar 1997 16:19:14 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03927 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:12 -0800 (PST)
Received: by noc.ucsd.edu; id DAA25978
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:06 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25855
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:23:38 -0800 (PST)
Message-Id: <199703211123.DAA25855@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:36 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #188
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 5 di un precedente messaggio >>>

<uuencoded_portion_removed>
7A9V))+').:JW4Y)3;CRW"BF9A10!_]F.
`
end
END -- Cut Here -- cut here

Date: Thu, 20 Mar 1997 14:54:33 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 5.JPG (0/1) Re: Soft-start circuits

In article <jupiter-ya023580002003971424500001@news.europa.com>,
jupiter@europa.com wrote:

::> I think the inrush stuff is minor compared to safety issues.
::>
::Whether one or two step-start resistors is used with a 240v amplifier, the
::chassis is always connected to the mains-neutral. What safety issues?
::
::--
::--Rich-- ag6k, 805-386-3734
:
:
:Rich,
:
:I don't think most of these people have ever built anything, let alone a
:high power amp. I have some 4x6 glossies of my amp and power supply, which
:I will try to attach as JPEG's to an upcoming post. My baby took my 9
:months to build:
:
:I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came
:out of some BC-xx AM transmitter. paid $200
:
:8877 from that tube guy on McArthur Blvd in Oakland. paid $250
:
:Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for
:$75, oh my god what a deal.
:
:Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5
:
:Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos
:to get it.
:
:Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got
:both for about $200.
:

:Filament transformer is 7V from Halted special $5 computer power supply
:sale. Use 150W adj pot for filament inrush protection and adj voltage.
:
:I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.
:-------------
:
:In summary, if you want to build amps, move to Cal. I now live in Oregon.
:It may as well be Libya, as far as parts procurement goes.
:
:Rob.

Date: Thu, 20 Mar 1997 06:12:29 -0500
From: "H.Silvia" <hrsil@flinet.com>
Subject: motorola pager modifications?

Demolition Man wrote:
>
> Any of you homebrewers out there know anything about pagers? i'm gonna
> recrystal this one [a yard sale find with no docs!!] for use with tnc
> and such. nice CQ vhf article on this subject.
>
> the question is: how do i find out its activation code. i remember
> seeing somewhere that there is a way to make it give me the
> information. i don't even know the model number. it has the standard
> beep and vibration type alerts. a backlight and displays the time.
>
> it does say 152.4800 and 1200 baud on the back so it's a vhf type. any
> help out there?
>
> --
> A.C.Curtis
> KB0WLF
>
> mailto:demoman@rollanet.org
> http://www.rollanet.org/~demoman/
The activation or "capcode is a 7 digit number also printed on the back
of the pager itself. A few companies provide demo software for computer
paging and can be found on the web.
Henry KE4WBW

Date: Thu, 20 Mar 1997 14:24:50 -0800
From: jupiter@europa.com
Subject: Soft-start circuits

:> I think the inrush stuff is minor compared to safety issues.
:>
:Whether one or two step-start resistors is used with a 240v amplifier, the
:chassis is always connected to the mains-neutral. What safety issues?

:
:--
:--Rich-- ag6k, 805-386-3734

Rich,

I don't think most of these people have ever built anything, let alone a high power amp. I have some 4x6 glossies of my amp and power supply, which I will try to attach as JPEG's to an upcoming post. My baby took my 9 months to build:

I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came out of some BC-xx AM transmitter. paid $200

8877 from that tube guy on McArthur Blvd in Oakland. paid $250

Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for $75, oh my god what a deal.

Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5

Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos to get it.

Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got both for about $200.

Filament transformer is 7V from Halted special $5 computer power supply sale. Use 150W adj pot for filament inrush protection and adj voltage.

I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.

In summary, if you want to build amps, move to Cal. I now live in Oregon. It may as well be Libya, as far as parts procurement goes.

Rob.

Date: Fri, 21 Mar 1997 02:43:27 GMT
From: W8JItom@worldnet.att.net (Tom Rauch)
Subject: Soft-start circuits

On 20 Mar 1997 22:09:10 GMT, jstroppe@uhl.uiowa.edu (John Stroppel) wrote:

>
>Well this is my $.02
>
>
>WA0VYZ
>john

John, If you look at the 95 Handbook, they return filament transformer and other leads to the chassis in some PA designs, that is a bad idea

and against wiring standards.

If the neutral and ground lead should ever break or become
disconnected, the chassis would be hot with 120 VAC.

If you look at the two HV power supplies by Mark Wilson, neither has a
chassis safety ground. Not a good idea.

If you look at the B- return, it is clampd through a resistor to the
POWER line neutral in one supply, not a good idea.

If you look at the B- returns, they are clamped only by a resistor,
not a good idea (since a fault can force the negative lead to full
supply voltage as the capacitor discharges).

IMHO, a Handbook should contain SAFE designs.

73 Tom

Date: Fri, 21 Mar 1997 02:43:29 GMT
From: W8JItom@worldnet.att.net (Tom Rauch)
Subject: Soft-start circuits

On Thu, 20 Mar 1997 14:24:50 -0800, jupiter@europa.com wrote:

>I don't think most of these people have ever built anything, let alone a
>high power amp. I have some 4x6 glossies of my amp and power supply, which
>I will try to attach as JPEG's to an upcoming post. My baby took my 9
>months to build:

Wow! An 8877, that's a **big** tube.

And in only nine months!

73 Tom

End of Ham-Homebrew Digest V97 #188
****

3264. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211413.GAA08190@mailbox1.ucsd.edu>
Source record: 95892

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7abb0.wrk; Fri, 21 Mar 1997 15:21:58 -1
Received: from [195.120.135.127] by infocomm.it id 7a9c0.wrk; Fri, 21 Mar 1997 15:20:58 -1
Received: from [195.120.135.127] by infocomm.it id 7a7d0.wrk; Fri, 21 Mar 1997 15:19:58 -1
Received: from [195.120.135.127] by infocomm.it id 7a5c0.wrk; Fri, 21 Mar 1997 15:18:58 -1
Received: from [195.120.135.127] by infocomm.it id 7a3b0.wrk; Fri, 21 Mar 1997 15:17:58 -1
Received: from [195.120.135.127] by infocomm.it id 7a181.wrk; Fri, 21 Mar 1997 15:16:50 -1
Received: from [195.120.135.127] by infocomm.it id 79f50.wrk; Fri, 21 Mar 1997 15:15:44 -1
Received: from [195.120.135.127] by infocomm.it id 79e20.wrk; Fri, 21 Mar 1997 15:15:08 -1
Received: from [195.120.135.127] by infocomm.it id 79d00.wrk; Fri, 21 Mar 1997 15:14:32 -1
Received: from [195.120.135.127] by infocomm.it id 79b70.wrk; Fri, 21 Mar 1997 15:13:48 -1
Received: from [195.120.135.127] by infocomm.it id 79a60.wrk; Fri, 21 Mar 1997 15:13:16 -1
Received: from [195.120.135.127] by infocomm.it id 79940.wrk; Fri, 21 Mar 1997 15:12:42 -1
Received: from [195.120.135.127] by infocomm.it id 79820.wrk; Fri, 21 Mar 1997 15:12:06 -1
Received: from [195.120.135.127] by infocomm.it id 79730.wrk; Fri, 21 Mar 1997 15:11:40 -1
Received: from [195.120.135.127] by infocomm.it id 79600.wrk; Fri, 21 Mar 1997 15:11:02 -1
Received: from [195.120.135.127] by infocomm.it id 79510.wrk; Fri, 21 Mar 1997 15:10:36 -1
Received: from [132.239.1.54] by infocomm.it id 79310.wrk; Fri, 21 Mar 1997 15:09:36 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03925 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:11 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27057
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:25 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26042
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:12 -0800 (PST)
Message-Id: <199703211124.DAA26042@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:10 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #191
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Fri, 21 Mar 97 Volume 97 : Issue 191

Today's Topics:
- Untitled QuickPICT 3.JPG (1/2) Re: Soft-start circuits
- Untitled QuickPICT 4.JPG (0/2) Re: Soft-start circuits

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 20 Mar 1997 14:52:38 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 3.JPG (1/2) Re: Soft-start circuits

BEGIN -- Cut Here -- cut here
begin 644 Untitled QuickPICT 3.JPG
<uuencoded_portion_removed>
ME4BITY;ZIK:WEZ_E^'@^OZ+\-?&-O<:;XQ\%

3265. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211414.GAA08225@mailbox1.ucsd.edu>
Source record: 95893

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7ad70.wrk; Fri, 21 Mar 1997 15:22:48 -1
Received: from [195.120.135.127] by infocomm.it id 7ab40.wrk; Fri, 21 Mar 1997 15:21:44 -1
Received: from [195.120.135.127] by infocomm.it id 7a960.wrk; Fri, 21 Mar 1997 15:20:44 -1
Received: from [195.120.135.127] by infocomm.it id 7a760.wrk; Fri, 21 Mar 1997 15:19:46 -1
Received: from [195.120.135.127] by infocomm.it id 7a560.wrk; Fri, 21 Mar 1997 15:18:46 -1
Received: from [195.120.135.127] by infocomm.it id 7a360.wrk; Fri, 21 Mar 1997 15:17:46 -1
Received: from [195.120.135.127] by infocomm.it id 7a180.wrk; Fri, 21 Mar 1997 15:16:48 -1
Received: from [195.120.135.127] by infocomm.it id 79f80.wrk; Fri, 21 Mar 1997 15:15:52 -1
Received: from [195.120.135.127] by infocomm.it id 79e80.wrk; Fri, 21 Mar 1997 15:15:20 -1
Received: from [195.120.135.127] by infocomm.it id 79d50.wrk; Fri, 21 Mar 1997 15:14:42 -1
Received: from [195.120.135.127] by infocomm.it id 79bd0.wrk; Fri, 21 Mar 1997 15:14:02 -1
Received: from [195.120.135.127] by infocomm.it id 79aa0.wrk; Fri, 21 Mar 1997 15:13:22 -1
Received: from [195.120.135.127] by infocomm.it id 79951.wrk; Fri, 21 Mar 1997 15:12:42 -1
Received: from [195.120.135.127] by infocomm.it id 79800.wrk; Fri, 21 Mar 1997 15:12:02 -1
Received: from [195.120.135.127] by infocomm.it id 79670.wrk; Fri, 21 Mar 1997 15:11:16 -1
Received: from [195.120.135.127] by infocomm.it id 79580.wrk; Fri, 21 Mar 1997 15:10:50 -1
Received: from [132.239.1.54] by infocomm.it id 79310.wrk; Fri, 21 Mar 1997 15:09:36 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03925 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:11 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27057
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:25 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA26042
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:12 -0800 (PST)
Message-Id: <199703211124.DAA26042@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:24:10 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #191
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 4 di un precedente messaggio >>>

<uuencoded_portion_removed>
END -- Cut Here -- cut here

Date: Thu, 20 Mar 1997 14:53:39 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 4.JPG (0/2) Re: Soft-start circuits

In article <jupiter-ya023580002003971424500001@news.europa.com>,
jupiter@europa.com wrote:

::> I think the inrush stuff is minor compared to safety issues.
::>
::Whether one or two step-start resistors is used with a 240v amplifier, the
::chassis is always connected to the mains-neutral. What safety issues?
::
::--
::--Rich-- ag6k, 805-386-3734
:
:
:Rich,
:
:I don't think most of these people have ever built anything, let alone a
:high power amp. I have some 4x6 glossies of my amp and power supply, which
:I will try to attach as JPEG's to an upcoming post. My baby took my 9
:months to build:
:
:I bought the 5kvac @1a CT transformer at Haltek in Mountain View, CA. Came
:out of some BC-xx AM transmitter. paid $200
:
:8877 from that tube guy on McArthur Blvd in Oakland. paid $250
:
:Got both 2000pf @5kv and 500pf @15kv from surplus place in Sacramento for
:$75, oh my god what a deal.
:
:Chimney for 8877 at Foothill College Hamfest (Mar-Oct?) for $5
:
:Pi Inductor specially made by B&W, the low plate Z version, took me 4 mos
:to get it.
:
:Chassis/cabinet were bought new from Halted Specialties in Santa Clara, got
:both for about $200.
:
:Filament transformer is 7V from Halted special $5 computer power supply
:sale. Use 150W adj pot for filament inrush protection and adj voltage.
:

:I use 5A @ 7.5kv SEMTECH rectifiers in series, all bought at Halted Sp.
:-------------
:
:In summary, if you want to build amps, move to Cal. I now live in Oregon.
:It may as well be Libya, as far as parts procurement goes.
:
:Rob.

End of Ham-Homebrew Digest V97 #191
****

3266. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211418.GAA08353@mailbox1.ucsd.edu>
Source record: 95894

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7b740.wrk; Fri, 21 Mar 1997 15:27:44 -1
Received: from [195.120.135.127] by infocomm.it id 7b660.wrk; Fri, 21 Mar 1997 15:27:14 -1
Received: from [195.120.135.127] by infocomm.it id 7b540.wrk; Fri, 21 Mar 1997 15:26:42 -1
Received: from [195.120.135.127] by infocomm.it id 7b3c0.wrk; Fri, 21 Mar 1997 15:26:00 -1
Received: from [195.120.135.127] by infocomm.it id 7b2f0.wrk; Fri, 21 Mar 1997 15:25:30 -1
Received: from [195.120.135.127] by infocomm.it id 7b1c1.wrk; Fri, 21 Mar 1997 15:24:58 -1
Received: from [195.120.135.127] by infocomm.it id 7b0e0.wrk; Fri, 21 Mar 1997 15:24:30 -1
Received: from [195.120.135.127] by infocomm.it id 7afc0.wrk; Fri, 21 Mar 1997 15:23:56 -1
Received: from [195.120.135.127] by infocomm.it id 7ae20.wrk; Fri, 21 Mar 1997 15:23:06 -1
Received: from [195.120.135.127] by infocomm.it id 7ac20.wrk; Fri, 21 Mar 1997 15:22:06 -1
Received: from [195.120.135.127] by infocomm.it id 7aa10.wrk; Fri, 21 Mar 1997 15:21:04 -1
Received: from [195.120.135.127] by infocomm.it id 7a810.wrk; Fri, 21 Mar 1997 15:20:04 -1
Received: from [195.120.135.127] by infocomm.it id 7a610.wrk; Fri, 21 Mar 1997 15:19:04 -1
Received: from [195.120.135.127] by infocomm.it id 7a410.wrk; Fri, 21 Mar 1997 15:18:04 -1
Received: from [195.120.135.127] by infocomm.it id 7a210.wrk; Fri, 21 Mar 1997 15:17:02 -1
Received: from [195.120.135.127] by infocomm.it id 7a010.wrk; Fri, 21 Mar 1997 15:16:04 -1
Received: from [132.239.1.54] by infocomm.it id 79b80.wrk; Fri, 21 Mar 1997 15:13:50 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03921 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:09 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27002
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:10 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25966
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:05 -0800 (PST)
Message-Id: <199703211124.DAA25966@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:57 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #190
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Fri, 21 Mar 97 Volume 97 : Issue 190

Today's Topics:
- Untitled QuickPICT 3.JPG (2/2) Re: Soft-start circuits

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 20 Mar 1997 14:52:57 -0800
From: jupiter@europa.com
Subject: - Untitled QuickPICT 3.JPG (2/2) Re: Soft-start circuits

BEGIN -- Cut Here -- cut here
<uuencoded_portion_removed>
MVTDFG.#;VY^

3267. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211418.GAA08342@mailbox1.ucsd.edu>
Source record: 95895

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

```
554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7b6e0.wrk; Fri, 21 Mar 1997 15:27:32 -1
Received: from [195.120.135.127] by infocomm.it id 7b600.wrk; Fri, 21 Mar 1997 15:27:00 -1
Received: from [195.120.135.127] by infocomm.it id 7b520.wrk; Fri, 21 Mar 1997 15:26:40 -1
Received: from [195.120.135.127] by infocomm.it id 7b450.wrk; Fri, 21 Mar 1997 15:26:12 -1
Received: from [195.120.135.127] by infocomm.it id 7b310.wrk; Fri, 21 Mar 1997 15:25:36 -1
Received: from [195.120.135.127] by infocomm.it id 7b250.wrk; Fri, 21 Mar 1997 15:25:10 -1
Received: from [195.120.135.127] by infocomm.it id 7b160.wrk; Fri, 21 Mar 1997 15:24:46 -1
Received: from [195.120.135.127] by infocomm.it id 7b050.wrk; Fri, 21 Mar 1997 15:24:12 -1
Received: from [195.120.135.127] by infocomm.it id 7aea0.wrk; Fri, 21 Mar 1997 15:23:22 -1
Received: from [195.120.135.127] by infocomm.it id 7aca0.wrk; Fri, 21 Mar 1997 15:22:24 -1
Received: from [195.120.135.127] by infocomm.it id 7aa90.wrk; Fri, 21 Mar 1997 15:21:20 -1
Received: from [195.120.135.127] by infocomm.it id 7a890.wrk; Fri, 21 Mar 1997 15:20:20 -1
Received: from [195.120.135.127] by infocomm.it id 7a690.wrk; Fri, 21 Mar 1997 15:19:20 -1
Received: from [195.120.135.127] by infocomm.it id 7a490.wrk; Fri, 21 Mar 1997 15:18:20 -1
Received: from [195.120.135.127] by infocomm.it id 7a2a0.wrk; Fri, 21 Mar 1997 15:17:22 -1
Received: from [195.120.135.127] by infocomm.it id 7a080.wrk; Fri, 21 Mar 1997 15:16:18 -1
Received: from [132.239.1.54] by infocomm.it id 79b80.wrk; Fri, 21 Mar 1997 15:13:50 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03921 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:09 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27002
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:10 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25966
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:24:05 -0800 (PST)
Message-Id: <199703211124.DAA25966@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:57 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
```

Subject: Ham-Homebrew Digest V97 #190
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 3 di un precedente messaggio >>>

<uuencoded_portion_removed>
M%3GTT^1UXC

3268. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211427.GAA08653@mailbox1.ucsd.edu>
Source record: 95896

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7c770.wrk; Fri, 21 Mar 1997 15:35:48 -1
Received: from [195.120.135.127] by infocomm.it id 7c6b0.wrk; Fri, 21 Mar 1997 15:35:22 -1
Received: from [195.120.135.127] by infocomm.it id 7c5a0.wrk; Fri, 21 Mar 1997 15:34:54 -1
Received: from [195.120.135.127] by infocomm.it id 7c4d0.wrk; Fri, 21 Mar 1997 15:34:26 -1
Received: from [195.120.135.127] by infocomm.it id 7c430.wrk; Fri, 21 Mar 1997 15:34:08 -1
Received: from [195.120.135.127] by infocomm.it id 7c360.wrk; Fri, 21 Mar 1997 15:33:46 -1
Received: from [195.120.135.127] by infocomm.it id 7c2c0.wrk; Fri, 21 Mar 1997 15:33:26 -1
Received: from [195.120.135.127] by infocomm.it id 7c1d0.wrk; Fri, 21 Mar 1997 15:33:02 -1
Received: from [195.120.135.127] by infocomm.it id 7c140.wrk; Fri, 21 Mar 1997 15:32:42 -1
Received: from [195.120.135.127] by infocomm.it id 7c0d0.wrk; Fri, 21 Mar 1997 15:32:26 -1
Received: from [195.120.135.127] by infocomm.it id 7c020.wrk; Fri, 21 Mar 1997 15:32:06 -1
Received: from [195.120.135.127] by infocomm.it id 7bf60.wrk; Fri, 21 Mar 1997 15:31:46 -1
Received: from [195.120.135.127] by infocomm.it id 7bed0.wrk; Fri, 21 Mar 1997 15:31:26 -1
Received: from [195.120.135.127] by infocomm.it id 7be20.wrk; Fri, 21 Mar 1997 15:31:06 -1
Received: from [195.120.135.127] by infocomm.it id 7bd50.wrk; Fri, 21 Mar 1997 15:30:46 -1
Received: from [195.120.135.127] by infocomm.it id 7bc90.wrk; Fri, 21 Mar 1997 15:30:22 -1
Received: from [132.239.1.54] by infocomm.it id 7b760.wrk; Fri, 21 Mar 1997 15:27:50 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03919 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:08 -0800 (PST)
Received: by noc.ucsd.edu; id DAA27021
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:33:15 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA25913
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 03:23:56 -0800 (PST)
Message-Id: <199703211123.DAA25913@noc.ucsd.edu>
Date: Fri, 21 Mar 97 03:23:57 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #190
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 3 di un precedente messaggio >>>

<uuencoded_portion_removed>
M%3GTT^1UXC

3269. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-21 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703211429.GAA08717@mailbox1.ucsd.edu>
Source record: 95897

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7cc90.wrk; Fri, 21 Mar 1997 15:38:18 -1
Received: from [195.120.135.127] by infocomm.it id 7cc40.wrk; Fri, 21 Mar 1997 15:38:08 -1
Received: from [195.120.135.127] by infocomm.it id 7cbd0.wrk; Fri, 21 Mar 1997 15:38:00 -1
Received: from [195.120.135.127] by infocomm.it id 7cb80.wrk; Fri, 21 Mar 1997 15:37:48 -1
Received: from [195.120.135.127] by infocomm.it id 7cb10.wrk; Fri, 21 Mar 1997 15:37:34 -1
Received: from [195.120.135.127] by infocomm.it id 7cac0.wrk; Fri, 21 Mar 1997 15:37:24 -1
Received: from [195.120.135.127] by infocomm.it id 7ca30.wrk; Fri, 21 Mar 1997 15:37:08 -1
Received: from [195.120.135.127] by infocomm.it id 7c9b1.wrk; Fri, 21 Mar 1997 15:36:58 -1
Received: from [195.120.135.127] by infocomm.it id 7c950.wrk; Fri, 21 Mar 1997 15:36:42 -1
Received: from [195.120.135.127] by infocomm.it id 7c900.wrk; Fri, 21 Mar 1997 15:36:32 -1
Received: from [195.120.135.127] by infocomm.it id 7c7d0.wrk; Fri, 21 Mar 1997 15:36:02 -1
Received: from [195.120.135.127] by infocomm.it id 7c6d0.wrk; Fri, 21 Mar 1997 15:35:28 -1
Received: from [195.120.135.127] by infocomm.it id 7c600.wrk; Fri, 21 Mar 1997 15:35:02 -1
Received: from [195.120.135.127] by infocomm.it id 7c4e0.wrk; Fri, 21 Mar 1997 15:34:32 -1
Received: from [195.120.135.127] by infocomm.it id 78811.wrk; Fri, 21 Mar 1997 15:04:02 -1
Received: from [195.120.135.127] by infocomm.it id 78760.wrk; Fri, 21 Mar 1997 15:03:46 -1
Received: from [132.239.1.54] by infocomm.it id 73e60.wrk; Fri, 21 Mar 1997 14:31:16 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA03917 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 03:52:07 -0800 (PST)
Received: by noc.ucsd.edu; id CAA22393
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 02:52:33 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id CAA22377
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 02:52:28 -0800 (PST)
Message-Id: <199703211052.CAA22377@noc.ucsd.edu>
Date: Fri, 21 Mar 97 02:52:26 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #187
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

<uuencoded_portion_removed>
7E1J1W0;6]#15&;36Z"B@044`%%`'_]FK
`
end
END -- Cut Here -- cut here

Date: Thu, 20 Mar 97 16:38:24 GMT
From: brinkal@worldaccess.nl
Subject: ?? TR-7200 A mike pinouts ??

Aan 19-03-97 4:07, in bericht <332F586A.65E5@lightspeed.net>, jtz
<rapuppa@lightspeed.net> schreef:

> hi i recently aquired a kenwood tr 7200
> sans 1 mike & cord. & after rooting through
> some boxes of... well i found a mike and correct
> plug for the radio yet i know not the pinout.
> can someone help? wires as follows
> mike side> 2 black
> 1 white
> 1 red
> plug > 2O 4O
> 1O 3 O

----
1 = Microphone
2 + 3 = PTT
4 = Ground
----

greetings /_/
/ /ARRY PD o GBJ

>E-mail: brinkal@worldaccess.nl<
********> Fido: 2:283/312.34 <********

Date: Sat, 8 Mar 1997 19:49:31 GMT
From: mzenier@netcom.com (Mark Zenier)
Subject: FM transmitter and FCC approval

in <3321643C.6E1B@postoffice.worldnet.att.net>,
: Thomas Isgro (kc8dgu@postoffice.worldnet.att.net) wrote:
: Mark Mansfield wrote:
: > What if you keyed a repeater with your transmitter that was legal (below the
: > maximum field strength and you are not licensed)? T

3270. Re: BIG PSU

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: wk@killspam.frc.niwa.cri.nz
Message-ID: <3333bc1a.902609794@131.203.59.8>
Source record: 95748

>Martyn Watts wrote:
>>
>> I�m trying to build a substantial (35-50A, 13.8 V) PSU for my
>> radio as an experiment. My only problem is that I can�t find a
>> suitable regulator for it. If anyone out there can help me with
>> a circuit diagram for a suitable regulator or another way of
>> doing it, I�d be very grateful. I have the transformer, diodes,
>> caps etc

The L200 may be worth a look. I use it in a 12V/25A homebrew power supply and have had no trouble with RFI. The L200 has current limit capability if you want to use it (I don't). You'll need external transistors to boost current handling though.

On the subject of crowbars...mine has the thyristor short the supply at the collectors of the series pass transistors. It has a resettable breaker between the capacitor bank and the collectors of the pass transistors.

When the crowbar comes in, the charge in the capacitor bank pops the breaker, thus avoiding a high shorting current through the pass transistors. Crowbar sensing of course takes place from the supply output through a 13V dropper zener diode back to the thyristor.

The breaker also acts as short circuit protection. I recommend a crowbar if you are planning on running something expensive off it. Hope this helps...good luck.

Wilbert, ZL2BSJ/PA3EYI

PS: remove killspam. bit before replying by Email.

3271. Re: 88Mh Coils needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970322134700.IAA13060@ladder01.news.aol.com>
Source record: 95749

He can make a better BP filter around a TL084 op-amp than he'll ever get with 88 mH toroids. Costum about 100 Yen

W4ZCB

3272. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Bob Morris K2RK <robrk@fyi.net>
Message-ID: <333402D7.7BBB@fyi.net>
Source record: 95750

John Stroppel wrote:
>
> <3331ef8b.53186746@netnews.worldnet.att.net>
<jupiter-ya023580002003972212550001@news.europa.com>
<33328928.2726713@netnews.worldnet.att.net>
> Distribution:
>
> Tom:
>
> Got the 95 handbook out and it appears your right. It is a bad pratice to
> do this with the ground and neutral. That was what I was tryiung to bring
> out in the post. Even to refer to them as the same thing.
>
> But if both the neutral and the ground open somethings going to be hot
> thats not suppose to. You have got no saftey if both break. And RF by-pass
> capacitors at line frequency pass enough current to get you shocked real
> good if those are the only thing between the hot,neutral, and ground.
>
> WA0VYZ
> john
>
> --
> John Stroppel | Internet: jstroppe@uhl.uiowa.edu
> The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
> Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
> Iowa City, IA 52242 | Fax: (319) 335-4555

I posted this somewhere and forgot what news-group it started..

The 3-500 AC wiring...in the ARRL Handbook. I couldn't even
figure out what they were saying to comment on it...

Quote---- 1995 ARRL Handbook - 1995, page 13.36, fig 13.37

"Chassis ground is not equivalent to the ac-line ground.
The ac neutral wire is connected to chassis ground, so the chassis
must be isolated from the equipment cabinet, which must be connected
to the ac ground conductor"

Not just ac but there's 3 0r 4 kv going to this box....

Get an extra copy of the Handbook, so your widow can give it to
her lawyer....

Or does the membership jump up and force the ARRL to print in
big red letters on the cover....

There are some real stupid mistakes in this book and you will kill yourself, if you follow these designs.

GL rk

3273. Keyboard Interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: grader@wazoo.com
Message-ID: <5h0vmm$jec@hume.nmia.com>
Source record: 95751

Hi,

Has anybody interfaced an IBM type keyboard to a Motorola MC68HC11 or
MC68HC16 microprocessor?

Please send info to grader@wazoo.com

Thanks,

George KA5UHF

3274. Good Source For Amplifier Tips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bc3680$468a16e0$4c229bcf@kn6dv.qnet.com>
Source record: 95752

For those who are interested in the discussion I have uploaded Part 14! to
my home page web side:

http://www.av.qnet.com/~kn6dv

Looks like things are slowing down so this might be the last upload, I will
leave this archive on the web till after Dayton and maybe I can transfer it
to some FTP side for down loading.
Thanks 73 Will KN6DV

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for attractive vices, he will fail.
(Walter Lippmann)

3275. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: ke4zv@radio.org
Message-ID: <859048131.7070@dejanews.com>
Source record: 95753

In article <F89lJKADU5MzEwGV@lfheller.demon.co.uk>,
Leon Heller <leon@lfheller.demon.co.uk> wrote:
>
> >The "gotcha" on using a razor blade for the detector is it had to be a
> >"Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
> >with a material that would behave as a rectifier. The connection could
> >be made via a wire wraped around a sharpened pencil lead. They probably
> >don't make these blades any longer :(
>
> I vaguely remember that the blue finish involves heating with a coating
> of carbon powder on the surface. Something similar is used with gun
> barrels, I think. The iron carbide layer must act as a semiconductor.

The chemical used for bluing is selenium sulphide. So what you had was
a selenium rectifier.

Gary

----------====== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

3276. 9k6 like baycom and sp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Adriaan <adpe1khp@pi.net>
Message-ID: <3334C32A.60ED@pi.net>
Source record: 95754
Body handling: HTML body converted to readable text

This is a multi-part message in MIME format.

Hi,

Are there a lot of hams working with 9k6 packet radio with a modem like
a baycom one for 1k2 ?

It that working on a 486dx2 66Mhz ??

And where can i get the software ??

Cu adriaan

Radioamateurs in Apeldoorn

Welkom op de site van radioamateurs in Apeldoorn. Nieuw is het geluid wat te horen is aan het einde
van deze pagina. Laat eens horen wat jullie er van vinden. En vooral in welke mode er een test gemaakt wordt.
Ook het VHF nieuws is weer aangepast, met het laatste VHF nieuws en tevens
informatie over meteorenscatter en contesten en bakens. Kijk vooral naar de bakenlijst
die aangepast is aan het nieuwe band plan op tweemeter. Daar zijn de nieuwe frequenties te vinden van,
niet alleen de Nederlandse bakens, maar ook van die in het buitenland staan opgesteld. Ook de
site van de Veron afdeling Apeldoorn is update gemaakt. Met daarin activiteiten als vossenjachten,
lezingen, bestuursmededelingen, repeaters en het nieuws uit de uitzendingen van PI4APD. En tevens
zijn daar een aantal fotoboeken te vinden oa de velddag en de verkoping.

De lijst van Radio activiteiten in Apeldoorn

Veron afdeling 05 Apeldoorn

VHF nieuws

Dit is Jos PA3GXM

Dit is Adriaan PE1KHP

Dit is jamboree on the air in Apeldoorn

Digitale stad Apeldoorn

Meer Radioamateur links in de wereld

Elke reactie is welkom, dit alleen nog per email. Ook foto's zijn erg welkom in jpg formaat.
Dit voor andere achtergronden of als versiering van deze pagina's.
Vooral van bijzondere stations zoek ik nog foto's, zoals omzetters-, baken-, contest staions.

Cuagn Adriaan.

U bent de ste bezoeker vandaag

© 23 -maart- 1997 Adriaan pe1khp

3277. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703221316.FAA07927@mailbox1.ucsd.edu>
Source record: 95755

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 73440.wrk; Sat, 22 Mar 1997 14:26:08 -1
Received: from [195.120.135.127] by infocomm.it id 733d0.wrk; Sat, 22 Mar 1997 14:25:58 -1
Received: from [195.120.135.127] by infocomm.it id 73370.wrk; Sat, 22 Mar 1997 14:25:48 -1
Received: from [195.120.135.127] by infocomm.it id 73330.wrk; Sat, 22 Mar 1997 14:25:38 -1
Received: from [195.120.135.127] by infocomm.it id 732d0.wrk; Sat, 22 Mar 1997 14:25:28 -1
Received: from [195.120.135.127] by infocomm.it id 73290.wrk; Sat, 22 Mar 1997 14:25:18 -1
Received: from [195.120.135.127] by infocomm.it id 73260.wrk; Sat, 22 Mar 1997 14:25:12 -1
Received: from [195.120.135.127] by infocomm.it id 73210.wrk; Sat, 22 Mar 1997 14:25:02 -1
Received: from [195.120.135.127] by infocomm.it id 731a0.wrk; Sat, 22 Mar 1997 14:24:52 -1
Received: from [195.120.135.127] by infocomm.it id 73150.wrk; Sat, 22 Mar 1997 14:24:42 -1
Received: from [195.120.135.127] by infocomm.it id 73100.wrk; Sat, 22 Mar 1997 14:24:32 -1
Received: from [195.120.135.127] by infocomm.it id 730b0.wrk; Sat, 22 Mar 1997 14:24:24 -1
Received: from [195.120.135.127] by infocomm.it id 73080.wrk; Sat, 22 Mar 1997 14:24:18 -1
Received: from [195.120.135.127] by infocomm.it id 73030.wrk; Sat, 22 Mar 1997 14:24:08 -1
Received: from [195.120.135.127] by infocomm.it id 72fc0.wrk; Sat, 22 Mar 1997 14:23:58 -1
Received: from [195.120.135.127] by infocomm.it id 72f80.wrk; Sat, 22 Mar 1997 14:23:48 -1
Received: from [132.239.1.53] by infocomm.it id 72ee0.wrk; Sat, 22 Mar 1997 14:23:38 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA07627 for <ham-homebrew-list@mailbox.ucsd.edu>; Sat, 22 Mar
1997 04:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id EAA19281
sendmail 8.8.5/UCSD8.3
Sat, 22 Mar 1997 04:30:43 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA19265
sendmail 8.8.5/UCSD8.3
Sat, 22 Mar 1997 04:30:41 -0800 (PST)
Message-Id: <199703221230.EAA19265@noc.ucsd.edu>
Date: Sat, 22 Mar 97 04:30:40 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #207
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Sat, 22 Mar 97 Volume 97 : Issue 207

Today's Topics:
Cryptic coil description
FM transmitter and FCC approval
need short range xmitter design for packet
non-erotic, non-sexual, but possibly tantalizing linear pics

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Thu, 20 Mar 1997 21:03:38 GMT
From: John Rabson <word.factory@zetnet.co.uk>
Subject: Cryptic coil description

In message <5gjfjv$550$1@news.rwth-aachen.de>
ajass@tabaqui.informatik.rwth-aachen.de (Andreas Junklewitz) writes:

> Hallo,

> in one of the ARRL-Microwave handbooks, there are coil description
> which are absolut cryptic to me.

> What means: 4t, 28 swg e.c.w. ?
> or 2.5t, 28 swg t.c.w. ?

Probably,

e.c.w. = enamelled copper wire
t.c.w = tinned copper wire

Did the book say swg (standard [British] wire gauge) or awg (American gauge)?
73 de G3PAI

Date: Fri, 21 Mar 1997 14:59:15 -0600
From: Demolition Man <nospam.demoman@rollanet.org>
Subject: FM transmitter and FCC approval

> >>> Hmmmm... then what would you say about 2m <-> 10m FM links?
> >>> You know, a 2m box coupled to a 10m box. A Tech can then cause
> >>> the 10m box to transmit without being licensed to transmit

> >>> in that band.
>
> >This used to be illegal. Seems to me it was 5-6 years ago they made a
> >change with the specific intent of allowing this situation.
>
> IF you are a tech no code, THIS IS STILL ILLEGAL. Only those with
> suitable license class can use such an HV/VHF cross-band repeater.
>
no it isn't. the same way you may let a non licensed person talk on your radio while you are there with them, you may allow vhf only hams to talk on 10m thru your repeater. my license class is general and i am the control operator of my multi-cast repeater system, be it remotely or right there sitting by it. when a tech comes in on 440mHz or 6m, they are repeated out on 440mHz, 6m AND 10m simultaneously. this has been accepted and legal practice for years now. techs can even use my remote base and go way down on the hf bands because I, the control operator have the priveleges. just like at field day, the club uses the highest class license in the group and everyone id's with that call sign and so on. the repeater let's me be a remote control operator rather than sitting next to the tech "holding their hand"

hope this clears up the crossband on a repeater system thingy. a few others have said the same thing, i just took up more room yakking.
--
A.C.Curtis
KB0WLF
Missouri's multicast repeater system - 6m, 70cm, 10m, ATV
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

Date: Thu, 20 Mar 1997 20:31:05 GMT
From: ccoupland@pei.sympatico.ca (Chris Coupland)
Subject: need short range xmitter design for packet

I'm looking for a good xmitter design to use for packet radio data. The range needed is about 100 meters. Small size and current use are the primary requirements.

Any ideas?

Chris Coupland
ccoupland@pei.sympatico.ca

Date: Fri, 21 Mar 1997 21:19:28 +0000
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: non-erotic, non-sexual, but possibly tantalizing linear pics

In article <19970321171101.MAA16295@ladder01.news.aol.com>,
lblockhart@aol.com writes

>This "newbie" still doesn't get it does he? Go read a basic FAQ regarding
>what
>is allowable here on the NG. You have flooded the group with multiple almost
>a DOZEN JPG files that it took my setup 10 minutes to download! Further,
>rather than apologize to the group, you take issue and claim you are "blazing
>new territory" and give us some flawed logic about QST and 20 pages of pix.
>GEEZ....

Report him to postmaster@europa.com for net abuse. That should stop him.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

End of Ham-Homebrew Digest V97 #207
****

3278. Converting GE comercial radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: jmello@lynx.dac.neu.edu
Message-ID: <jmello-ya02408000R2203970815270001@nntp.neu.edu>
Source record: 95756

Can any one tell me if early 70s GE Pheonix comercial mobile radios set at
158 megahertz can be converted for amature aplications.
Also is there any market for a 1945 -1950 vintage Motorola stand up
basetation with the same frequencey

THANKS
N1YRM
Jim Mello

3279. IC TA8164p

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: aibes@aibes.ksu.ras.ru
Message-ID: <AAztaTY0pst@aibes.ksu.ras.ru>
Source record: 95757

Hello people,

Is anyone able to help me? I need info about IC TA8164P.
Pinout first of all and discription if possible.

Thanks in advance,- Alex (UA4RO)

3280. Re: Who knows e-mail address TenTec ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33349639.3F82@ix.netcom.com>
Source record: 95758

Bart Mudde wrote:
>
> I am looking for the manual of the TenTec Corsair II.
> Therefor I am looking for the e-mail address of TenTec.
> Who knows an address wich is good and I also will get an answer ?
> 73 de Bart PA3GGM.

Hello Bart -- from the Ten Tec WWW Page:
E-mail sales@tentec.com

If you can access the Web -- they have a page at URL:
http://www.tentec.com/

Good Luck
Rod in San Diego
--
AC6V DX Reference Page
With Over 700 Links To DX And HAm Radio
http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

I Transceive -- Therefore I Perceive -- AC6V

3281. FS Jennings UCS300 vac var caps (2)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Brian <haberlb@no_spamcadvision.com>
Message-ID: <3334986E.3F3@no_spamcadvision.com>
Source record: 95759

I have for sale 2 Jennings UCS300 vacuum variable capacitors.
these are new and unused in the original boxes.
These are labeled 7.5 Kv, 10 to 300 pf.
$125.00 CDN. + shipping

E-mail for more info. (remove "no_spam")
Brian

3282. AL-80 bandswitch photos

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2203971020540001@news.vcnet.com>
Source record: 95760

Two, new righ-res. photographs of a VHF parasitic-arced AL-80 bandswitch wafer, courtesy of George, WA6ALQ, are now available on my Web site at:
http://www.vcnet.com/measures
See Figure 15.

����Warning: These photographs may be unsuitable for viewing by younger audiences or by members of the Rauchian encampment.

--
--Rich-- ag6k, 805-386-3734

3283. Re: Tone Burst Generator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Gene Neill <gneill@ge.maxess.ch>
Message-ID: <333439D4.71DA@ge.maxess.ch>
Source record: 95761

Leon Heller wrote:
>
> In article <3331A8C6.7165@ge.maxess.ch>, Gene Neill
> <gneill@ge.maxess.ch> writes
> >I just got to Europe and my Yaseu FT470 does not have the tone burst
> >generator needed to open repeaters and I'm not good at whistling.
> >Anyone have a schematic for a 1750 Hz tone burst generator?
> >
> >Thanks in advance, WA7NPP/HB9
>
> You need a 4060 CMOS divider IC, which contains an inverter that can be
> used as an oscillator. Pin 16 is +5 to +15V. Ground is pins 8 and 12.
> Take the output from pin 14 via a 100 - 270K resistor. A 455 KHz ceramic
> resonator goes across pins 10 and 11, with a 1M resistor across it. Both
> ends of the resonator are connected via 1n capacitors to ground.
>
> Leon
> --
> Leon Heller
> Amateur radio callsign: G1HSM
> Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
> Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)
Leon,
thank you. I'll do it as soon as I can get the part.

3284. Re: Texas TIC108?????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Bj&#65533;rn S&#65533;derholm <sm2gxn.soederholm@boden.mail.telia.com>
Message-ID: <3334684D.3C6D@boden.mail.telia.com>
Source record: 95762

chalpm@hqlab.ICO.Olivetti.COM wrote:
>
> I have a component Texas TIC108 TO220 case, but I don't know the
> characteristic? It is a SCR or TRIAC???
>
> Thanks
>
> 73 de IW1DZD

Hi!

I'am not sure you've had any reply on your question?
The TIC108 is a 50hz-scr and the characteristics depend on
the letter it ends with, A-Y
Hope this helps.

Bjorn/sm2gxn

3285. Screen supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Bj&#65533;rn S&#65533;derholm <sm2gxn.soederholm@boden.mail.telia.com>
Message-ID: <33346396.2F6A@boden.mail.telia.com>
Source record: 95763

Hello everybody!

I've built a amplifier with a pair of 4x500 tubes for several years ago,
and it is grid driven. A good friend of mine told me how to fix the
screen supply voltage in a way i've never heard before, now i use a
seperate stab supply for the screen. Thing is that i did not quite
understand all of it, he promised to send me a schematic digram over the
circuit, but he has probably forgotten it.
He said that you rectify part of the rf double or triple and fed it to
the screen grid. And the big advantage was that the amplifier became much
easier to drive.
Could this really be something, unstabilized screen supply?
Any thing on the subject will be greatly appreciated whether it come to
ng or my e-mail adr.

Thank's in advance!

Bjorn/sm2gxn

3286. Re: - Untitled QuickPICT 5.JPG (1/1) Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5h099f$qd6@news.Hawaii.Edu>
Source record: 95764

Would someone please go cut the power to this guy's computer?

3287. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: "'Grif' w. keith griffith" <kgriffit@wolfenet.com>
Message-ID: <33346320.1FBD@wolfenet.com>
Source record: 95765

Leon Heller wrote:
>
> In article <33331261.22E9@ix.netcom.com>, Rolf Mathson
> <rmathiso@ix.netcom.com> writes
> >AC6V wrote:
> >>
> >> Claudio Fornaro wrote:
> >> >
> >> > Hi all,
> >> > I'd want to build a "home made" radio receiver for AM (or even SW...)
> ><snip>
> >> > usually
> >> > has no galena crystal at home...
> ><snip>
> >> Hi Claudio -- an admirable project. For the crystal detector -- try a
> >> small whisker wire on a razor blade. It works -- I remember doing this
> >> as a boy experimenting with xtal radios.

major snip or two

I read something years ago about lead sulfide (?) crystals, being made
with plumbers lead and powered sulfer and a short chunk of 3/8 or 1/2
inch copper pipe. You melted this witches brew together and poured it
into the copper pipe, then cut it in half part way and broke it the rest
of the way off, leaving a ragged surface. Now,,, I have no idea what
the ratio was but it didn't seem like a really big problem at the time.
Let's see,,,, if you've never melted sulfer, or lead,,,,,,,, ah hell,,,
your on your own,,, sufice to say, bad things could really happen.

3288. NOAA WX Warning Alarm Tone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5h1roi$oc1@news.Hawaii.Edu>
Source record: 95766

A few weeks ago I posted a note regarding the use of a 567 chip as a 1050 Hz tone decoder, the tone the WX service uses prior to broadcasting a WX warning. One person mentioned that due to EAS replacing EBS, the 1050 Hz tone will no longer be used. To confirm this I called NWS Honolulu - they were unsure, so I then emailed Stan Harter of Calif. OES; he in turn forwarded my query on to NWS Sacramento. Below is the response I received from them.

The upshot is that if you've got a NOAA WX radio with 1050 Hz decoder it will *not* become obsolete anytime in the near future.

Jeff KH2PZ / KH6

Subject: 1050HZ Warning Alarm Tone
From: Larry Krudwig at W-CR-CRH
Date: 3/3/97 7:46AM
To: Thomas Heffner at W-PR-HUB
To: Myron Kerner at W-PR-HUB
cc: Rodney Becker at W-OM14
cc: Myron Berger at W-OM14
cc: Stanley Johnson at W-OSO17
cc: Kenneth Putkovich at W-OSO17
cc: harters@oes.ca.gov at EXTERNAL
cc: jefferyh@hawaii.edu at EXTERNAL
Subject: 1050HZ Warning Alarm Tone
Tom and Myron, a message was relayed to me concerning a comment by someone in the in NWS in Hawaii that once EAS was fully operational and NWR-SAME fully up and running that the NWS would discontinue the use of the 1050Hz warning alarm tone. If indeed that comment was made or someone in the NWS believes it, that is wrong. The 1050Hz Warning Alarm Tone (WAT) will continue to be used probably forever.

There are millions of comsumer and industrial grade receivers in the hands of the public and many institutions. They will continue to be made and sold in very large quantities. I know for a fact that Radio Shack, Maxon, and Midland plan to make and market these radios for the foreseeable future.

Many models of Citizen's Band (CB) receivers on the market now have a WAT feature built into the unit. You can be monitoring any CB channel and if the WAT is detected on the weather radio channel you have set on the unit, the unit will activate a weak tone and switch the unit to the weather radio.

Hopefully you have seen the writeup I did on the reasoning for placement of the WAT in the coding sequence. If not, let me know and

I'll forward a copy. In the SAME environment, the WAT will continue to have a function if for no other reason than as an attention signal to the listener.

Subject: Re[2]: 1050HZ Warning Alarm Tone

The transmitter operates in the narrow band of FM (25 KHz channels). Modulation in this band is confined to +/- 5 KHz of the primary frequency leaving a 7.5 KHz guard on either side of the max. deviations. The audio level from the program console is supposed to deviate the transmitter at a minimum of 4.25 to a max. of 5.0.

We are finding that all over the country, many of our systems are not operating to that standard. We are not really sure how wide spread the problem is but we are taking steps to correct it. If you find the deviation below these stated levels, do not hesitate to call the NWS office and let them know.

Unlike the broadcast industry that uses some very high quality lines or RF Studio to Transmitter Links (STL), we use mostly voice grade telephone lines and the attenuation on these lines can vary. I will pass you comments and concerns on to the appropriate people there in the NWS.

Subject: Re[2]: 1050HZ Warning Alarm Tone

Please do let us know if you observe a problem with a system. We are in the final stages of developing a remote monitoring system but it is still a few months away so the eyes and ears of users such as yourself are appreciated.

3289. Re: WTB: Alpha 77Dx Plate Choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970322004401.TAA09972@ladder01.news.aol.com>
Source record: 95833

Jeez! And all this time I thought the arcing stuff was because ETO didn't use Nichrome wire for his parasitic chokes!

Paul, ring my chimes if you still need one.

W4ZCB

3290. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33330bda.36190235@netnews.worldnet.att.net>
Source record: 95834

On Fri, 21 Mar 1997 12:49:40 -0800, measures@mail.vcnet.com (R. L. Measures) wrote:
>
> • Unlike DC coil relays, AC coil relays are not very satisfactory for
>step-start service because they do not close positively when they reach the
>pull in voltage.
> IMO, it would be preferable to connect a small transformer to the primary
>of the HV transformer. The secondary of the small transformer is
>rectified, filtered, and used to power the DC coil of the step-start relay.
>
>
>The step point can be contolled by placing resistance in series with the
>relay's coil.
>

Not only that, AC relays vibrate.

120 Vdc relays and higher are available.

73 Tom

3291. Radio Shack Multimeter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: tlazzaro@oncomdis.on.ca
Message-ID: <5gvcecdsk2@news>
Source record: 95835

Thanks for reading my post.
I need to know the value of R21 in RADIO SHACK MULTIMETER,
model 22-267. This is an Autoranging digital multimeter with three
banana jacks at the bottom labelled 10A, Common, V, ohm, ma, and diode.
R21 is part of the 10A circuit and mounted on the main board.
The color code can't be read now, cause of the discoloration
due to heat. It appears to be half watt wirewound, and last acted much
like a 'fusible resistor'. Any help would be greatly appreciated.
My name and call has been altered to protect my innosence.
Tom VE3KZJ

3292. FS: Amp parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Gerald Cluff <j142@doitnow.com>
Message-ID: <01bc1622$9fadd500$6e9d62cf@cluffg>
Source record: 95836

have vac var., relays, BIG tubes, 32ufd, 4500v cap, etc
--
W7CKW
GERALD CLUFF
7946 W. OREGON AVE
GLENDALE, AZ 85303
H: (602)872-8888 W: (602)436-6276
http://www.sisna.com/users/cluffg/ham.htm
email: j142@doitnow.com

3293. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703220344.TAA24760@mailbox1.ucsd.edu>
Source record: 95837

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 26ad0.wrk; Sat, 22 Mar 1997 04:53:28 -1
Received: from [195.120.135.127] by infocomm.it id 26a50.wrk; Sat, 22 Mar 1997 04:53:12 -1
Received: from [195.120.135.127] by infocomm.it id 269c1.wrk; Sat, 22 Mar 1997 04:52:58 -1
Received: from [195.120.135.127] by infocomm.it id 26940.wrk; Sat, 22 Mar 1997 04:52:42 -1
Received: from [195.120.135.127] by infocomm.it id 268c0.wrk; Sat, 22 Mar 1997 04:52:26 -1
Received: from [195.120.135.127] by infocomm.it id 26861.wrk; Sat, 22 Mar 1997 04:52:12 -1
Received: from [195.120.135.127] by infocomm.it id 267c0.wrk; Sat, 22 Mar 1997 04:51:58 -1
Received: from [195.120.135.127] by infocomm.it id 26740.wrk; Sat, 22 Mar 1997 04:51:42 -1
Received: from [195.120.135.127] by infocomm.it id 266d0.wrk; Sat, 22 Mar 1997 04:51:28 -1
Received: from [195.120.135.127] by infocomm.it id 26650.wrk; Sat, 22 Mar 1997 04:51:12 -1
Received: from [195.120.135.127] by infocomm.it id 265b0.wrk; Sat, 22 Mar 1997 04:50:56 -1
Received: from [195.120.135.127] by infocomm.it id 26540.wrk; Sat, 22 Mar 1997 04:50:42 -1
Received: from [195.120.135.127] by infocomm.it id 264c1.wrk; Sat, 22 Mar 1997 04:50:26 -1
Received: from [195.120.135.127] by infocomm.it id 26451.wrk; Sat, 22 Mar 1997 04:50:12 -1
Received: from [195.120.135.127] by infocomm.it id 263b1.wrk; Sat, 22 Mar 1997 04:49:56 -1
Received: from [195.120.135.127] by infocomm.it id 26341.wrk; Sat, 22 Mar 1997 04:49:40 -1
Received: from [132.239.1.53] by infocomm.it id 262c0.wrk; Sat, 22 Mar 1997 04:49:26 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id SAA23278 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 18:52:11 -0800 (PST)
Received: by noc.ucsd.edu; id SAA13550
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 18:09:30 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id SAA13530
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 18:09:26 -0800 (PST)
Message-Id: <199703220209.SAA13530@noc.ucsd.edu>
Date: Fri, 21 Mar 97 18:09:25 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #205
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Fri, 21 Mar 97 Volume 97 : Issue 205

Today's Topics:
88Mh Coils needed
Anyone?
Chinese vs. American Tubes?
Crystal Filters - Help
help needed
hlp pls, i need change my tone voice
Home made crystal(?) radio
Info wanted on HBcs-1100
MINI-REVIEW: CPCW-5 xmtr
motorola pager modifications?
non-erotic, non-sexual, but possibly tantalizing linear pics (2 msgs)
QRP Group or List?
Soft-start circuits (4 msgs)
stornophone 4000
Want Camcorder for ATV use - cheap
Who knows e-mail address TenTec ???
WW2W W.W.W Max Spectrum Homepage

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Fri, 21 Mar 1997 21:35:17 +0000
From: Russ Ellsworth <russcwv@cyberhighway.net>
Subject: 88Mh Coils needed

Anyone out there in Homebrew land have any of the famous 88 Mh repeater
coils? I am looking for 6 or 7 to send to a Ham in Japan so he can build
an inexpensive BP filter for RTTY. They aren't easily available there
apparently. I fyou have some you can spare, e-mail me.

Thanks, Russ Ellsworth,WA6CWV Boise,Idaho

Date: Fri, 21 Mar 1997 16:01:51 GMT
From: orion**@capital.net
Subject: Anyone?

On 21 Mar 1997 12:25:42 GMT, ae517@FreeNet.Carleton.CA (Russ Renaud)
wrote:

>
>David LaRue (dal9@axe.humboldt.edu) writes:
>> Has anyone outside of CA heard of the Humboldt Brewing Co.?
>
>You've posted to the wrong newsgroup in error. This group is "devoted" to
>homebrew of the radio electronic sort.
>
>Not to worry, you're not the first.

I always thought that "homebrew" was a silly word to use in the
electronics field. Homebuilt would make a lot more sense and eliminate
this confusion with the homebrewing of beer and spirits, IMHO.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

Date: Thu, 20 Mar 1997 15:40:12 -0800
From: Dan K Nelson <dknelson@pacbell.net>
Subject: Chinese vs. American Tubes?

I have seen postings for 811A tubes of both American and Chinese
manufacture. Usually, the US tubes sell for two to three times the price
of the foreign tubes. I would suspect that the saying "You get what you
pay for" would apply, but I am curious if anyone has had any experience
with the Chinese tubes?

Thanks and 73's,

<<< DAN >>>
--
+---+
|An Armed Man is a Citizen, an Unarmed Man is a Subject.|
+---+

Date: Sun, 09 Mar 1997 10:47:29 +0000
From: Simon Robinson <simon@soft-tools.plasma.co.uk>
Subject: Crystal Filters - Help

Surely there is somebody out there who can help me identify my C R
Snelgrove Crystal Filters ???

Please help

Simon

Date: 21 Mar 1997 18:11:57 GMT
From: baddog@nidlink.com (Bad Dog)
Subject: help needed

Hello Peolple,
I thought I would ask a Question even though I do know the answer
is gonna be NO but does anybody out there have a simple ETT circuit
aka(Roger-Beep) that you would be willing to share with me
baddog@nidlink.com thanks for your time 73

Date: Thu, 20 Mar 1997 03:53:03 GMT
From: bry@mnsinc.com (Brian Carling AF4K/G3XLQ)
Subject: hlp pls, i need change my tone voice

"Andy" <muldowne@wilde.oit.umass.edu> whistled a happy tune like:

|>Leon Heller <leon@lfheller.demon.co.uk> wrote in article
|><UmsBfqASNzJzEwta@lfheller.demon.co.uk>...
|>> In article <5g4o64$5r0$1@diana.ibernet.es>, Alfonso
|>> <alfonsog@redestb.es> writes
|>> >Hi, all.
|>> >
|>> >I need help to modify my tone voice. I have a problem with my voice,
|>> >more people, don't think my age, no think my callsign, is similary a
|>> >girl voice. I want down the frequency to be similary with a men.
|>> >
|>> >Do you know any chip, construccion or circuit to made this mod?
|>> >
|>> >Thanks for your help. The bests 73's EB3FYJ
|>>
|>> OKI have a Speech Pitch Controller chip, the MSM6322GSK, that should do
|>> what you want. It costs #10.20 (UK) from Maplin, and the circuit is in
|>> their current catalogue. You can shift the pitch of input speech in 17
|>> steps either one octave up or one octave down. Maplin is on 01702
|>> 554000.
|>>
|>> Leon
|>> --
|>> Leon Heller, G1HSM

|>You could also try an octaver guitar effect. Just an idea.

Or how about a sex change? :-)

Date: Fri, 21 Mar 1997 17:57:37 -0500
From: Rolf Mathson <rmathiso@ix.netcom.com>
Subject: Home made crystal(?) radio

AC6V wrote:
>
> Claudio Fornaro wrote:
> >
> > Hi all,
> > I'd want to build a "home made" radio receiver for AM (or even SW...)
<snip>
> > usually
> > has no galena crystal at home...
<snip>
> Hi Claudio -- an admirable project. For the crystal detector -- try a
> small whisker wire on a razor blade. It works -- I remember doing this
> as a boy experimenting with xtal radios.

The "gotcha" on using a razor blade for the detector is it had to be a
"Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
with a material that would behave as a rectifier. The connection could
be made via a wire wraped around a sharpened pencil lead. They probably
don't make these blades any longer :(

Regards,
Rolf

Date: 21 Mar 1997 17:57:18 GMT
From: "Marco Bokma" <mbokma@caiw.nl>
Subject: Info wanted on HBcs-1100

Hello,

Who can help me with the datasheets of a HBCS-1100 laser of HP.
It's an 8 pins housing and there's also a number SC9310D written on it.

Thanks,
Marco

e-mail : mbokma@caiw.nl
: pe1obu@caiw.nl

Date: Tue, 11 Mar 1997 11:33:10 GMT
From: bry@mnsinc.com (Brian Carling AF4K/G3XLQ)
Subject: MINI-REVIEW: CPCW-5 xmtr

Someone please copy this mini-review to QRP-L

Here is a "First Impression" of the new CAKE PAN CW-5 transmitter
that arrived today.

It is a new TUBE product on the market for hams! What a great way for
all of those new NO CODE TECHS and other beginners to get their feet
wet with a REAL RADIO!

The radio can be bought assembled or as a kit. It comes with a really good manual and plenty of helpful instructions. Mine was already assembled and worked great right out of the box. I was on the air within 10 minutes.

This CW transmitting device uses a specially designed tranformer that is made just for this rig, plus a 6C4 - 6AQ5 tube line-up, plug-in coils and a PI-NET output. There is plenty of room on the chassis for your own mods or add-ons, and later this month they will begin offering an AM version of the rig, or a modification kit to add modulation to existing rigs.

I can see adding a semi-break-in circuit, maybe a relay for keying from my memory keyer etc, later. For tonight I just used the straight key.

This rig is destined to become a classic!
Once I figured out which tube went where and got the 6C4 and 6AQ5 tubes plugged in OK, I realized that the OTHER 7 pin tube socket is for the crystals to plug in! A novel approach. I had seen something like this done with FT-243 crystals in Octal tube sockets plenty of times.

I plugged it in and
connected an antenna (G5RV and MFJ-949D tuner) and plugged in the crystal for 3640 kHz that came with it. No one around so I tried a CQ. It only has ONE tuning control (plate variable) - the PI-NET has a fixed cap on the antenna side. No problem getting a full 5 watts out right away (according the notoriously inaccurate wattmeter used in tuners of this type) - but certainly in the ballpark of 5-6 watts out all of the time. The rig tunes nicely and has a good note.

Some RTTY signal is hogging the frequency and I get no replies to my CQs, so I plug in the 3700 kHz rock and move up the band.

SO at 0042 UTC I put out my first CQ on 3700 and got a reply from W8TMS in TROY, MI - DX!! AND he gave me RST 599! Not bad for a maiden viyage on the CPCW-5.
Later on I heard K3JO nearby calling CQ and gave 81 year-old Jules a call. He came right back and chatted with me for 35 enjoyable minutes. My report was RST 579 From Narberth, PA up near Philly using his homebrew 2-tube rig with a 6DQ6 final pumping 25 watts to an end-fed wire.

Later at 0135 UTC I tried a CQ again, and got a call from KR4LE. THe band was
getting noisier now, but Emery got me RST 599 in Richmond, VA

My last QSO of the evening came at 0211 UTC, again on 3700 kHz with KB1MJ up in Dedham, MA running a Heath HW-9 QRP rig.
Conditions were awful but Paul and I toughed it out!

I hope to work many of you soon with my delightful new glowbug here!
I will be QRV evenings on 3640 and 3700 kHz with the CPCW5 rig from

VINTAGE RADIO KIT COMPANY.

If you are interested - contact Carl, WB1EYE who supplies these kits
at:

427 N. Main Street
Sharon, MA 02067

or you can read more about it on my web pages at:

http://www.mnsinc.com/bry/hamfiles.htm

I have no financial interest in this company - just a happy user of
their product.

Anyone else using one - please contact me via e-mail at:

bry@mnsinc.com

72 to all - Bry, AF4K in Gaithersburg, MD

Date: Fri, 21 Mar 97 03:28:34 GMT
From: frog200@nospam.juno.com (Ed G.)
Subject: motorola pager modifications?

>>
>> Any of you homebrewers out there know anything about pagers? i'm gonna
>> recrystal this one [a yard sale find with no docs!!] for use with tnc
>> and such. nice CQ vhf article on this subject.
>>
<<SNIP>>

sounds like a Bravo type pager. You may be biting off more than you can
chew trying to modify this one.

Ed

Date: Thu, 20 Mar 1997 18:23:45 -0800
From: jupiter@europa.com
Subject: non-erotic, non-sexual, but possibly tantalizing linear pics

Already, I've gotten complaints from whiners regarding my linear picts.

Well, if political debates regarding "Little LEO's", whatever that means,
can occupy the NG, then you should be complaining to them, not me.

Also, I am very intereested in seeing others' homebrew projects captured
via QuickCams, etc.

If QST can begin with 20pp of pictures then we can assuredly do the same
with this NG. Also, I can put schematics onto JPEGS.

This is brand new territory with this NG, and I am already getting rave
reviews from some of the less timid QST authors.

Anyway, thanks for your time, Rob

Date: 21 Mar 1997 21:24:47 GMT
From: tomb@lsid.hp.com (Tom Bruhns)
Subject: non-erotic, non-sexual, but possibly tantalizing linear pics

lblockhart@aol.com wrote:
: This "newbie" still doesn't get it does he? Go read a basic FAQ
: regarding what is allowable here on the NG. You have flooded
: the group with multiple almost a DOZEN JPG files that it took
: my setup 10 minutes to download! Further, rather than
: apologize to the group, you take issue and claim you are "blazing
: new territory" and give us some flawed logic about QST and 20
: pages of pix. GEEZ....

Amen. Not only that, but now I see a reposting of them all
by some server somewhere that perhaps barfed on them.

As someone else posted: if you have binaries you think are
interesting, just post a simple _pointer_ to them here! Leave
the binaries themselves OFF this (and other text-only) newsgroups.

--
Cheers,
Tom
tomb@lsid.hp.com

Date: Sun, 09 Mar 1997 14:24:20 -0800 (PST)
From: Dick Dillman <ddillman@igc.apc.org>
Subject: QRP Group or List?

Can anyone direct me to a newsgroup or list dealing with QRP equipment
and techniques? If so, please reply directly via email.

Thanks!

Dick Dillman/W6AWO

<ddillman@igc.apc.org>

Date: Thu, 20 Mar 1997 18:53:

3294. Re: 900 mhz amateur operation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Thomas Mahanna <tmahanna@ziplink.net>
Message-ID: <5gvu53elm1@kayrad.ziplink.net>
Source record: 95838

In rec.radio.amateur.homebrew W. D. Milner <wdmilner@atcon.com> wrote:

: >recently, I bought a 800 mhz cordless phone.
: Larry you sure it's 800 MHz? All I've seen are 900's.

Is this the cheapest, easiest way to generate a few milliWatts RF at
900Mhz?

3295. FS: Kenwood YK-455C-1 500Hz Filter , Lower priced.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <33337b32.2408291@news.interbusiness.it>
Source record: 95839
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 70 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

3296. Scanner -> Freq. Synthe?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Thomas Mahanna <tmahanna@ziplink.net>
Message-ID: <5gvuapelm2@kayrad.ziplink.net>
Source record: 95840

Is there anyway to modify my inexpensive scanner for use as a digital frequency synthesizer? I was hoping it was possible to tap the L.O. and get a 50 ohm output of a few uWatts. Is it possible?

3297. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <F89lJKADU5MzEwGV@lfheller.demon.co.uk>
Source record: 95841

In article <33331261.22E9@ix.netcom.com>, Rolf Mathson
<rmathiso@ix.netcom.com> writes
>AC6V wrote:
>>
>> Claudio Fornaro wrote:
>> >
>> > Hi all,
>> > I'd want to build a "home made" radio receiver for AM (or even SW...)
><snip>
>> > usually
>> > has no galena crystal at home...
><snip>
>> Hi Claudio -- an admirable project. For the crystal detector -- try a
>> small whisker wire on a razor blade. It works -- I remember doing this
>> as a boy experimenting with xtal radios.
>
>The "gotcha" on using a razor blade for the detector is it had to be a
>"Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
>with a material that would behave as a rectifier. The connection could
>be made via a wire wraped around a sharpened pencil lead. They probably
>don't make these blades any longer :(

I vaguely remember that the blue finish involves heating with a coating
of carbon powder on the surface. Something similar is used with gun
barrels, I think. The iron carbide layer must act as a semiconductor.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3298. Re: 88Mh Coils needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <HMXlIMAoX5MzEwkH@lfheller.demon.co.uk>
Source record: 95842

In article <3332FF12.3AE7@cyberhighway.net>, Russ Ellsworth
<russcwv@cyberhighway.net> writes
>Anyone out there in Homebrew land have any of the famous 88 Mh repeater
>coils? I am looking for 6 or 7 to send to a Ham in Japan so he can build
>an inexpensive BP filter for RTTY. They aren't easily available there
>apparently. I fyou have some you can spare, e-mail me.
>

88 mH toroids are probably very difficult to obtain, now. He could get
some pot cores and wind his own.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3299. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703220344.TAA24759@mailbox1.ucsd.edu>
Source record: 95843

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 26ad1.wrk; Sat, 22 Mar 1997 04:53:28 -1
Received: from [195.120.135.127] by infocomm.it id 26a61.wrk; Sat, 22 Mar 1997 04:53:12 -1
Received: from [195.120.135.127] by infocomm.it id 269c0.wrk; Sat, 22 Mar 1997 04:52:58 -1
Received: from [195.120.135.127] by infocomm.it id 26951.wrk; Sat, 22 Mar 1997 04:52:42 -1
Received: from [195.120.135.127] by infocomm.it id 268d0.wrk; Sat, 22 Mar 1997 04:52:28 -1
Received: from [195.120.135.127] by infocomm.it id 26850.wrk; Sat, 22 Mar 1997 04:52:12 -1
Received: from [195.120.135.127] by infocomm.it id 267c1.wrk; Sat, 22 Mar 1997 04:51:58 -1
Received: from [195.120.135.127] by infocomm.it id 26741.wrk; Sat, 22 Mar 1997 04:51:42 -1
Received: from [195.120.135.127] by infocomm.it id 266c0.wrk; Sat, 22 Mar 1997 04:51:28 -1
Received: from [195.120.135.127] by infocomm.it id 26651.wrk; Sat, 22 Mar 1997 04:51:12 -1
Received: from [195.120.135.127] by infocomm.it id 265c0.wrk; Sat, 22 Mar 1997 04:50:56 -1
Received: from [195.120.135.127] by infocomm.it id 26541.wrk; Sat, 22 Mar 1997 04:50:42 -1
Received: from [195.120.135.127] by infocomm.it id 264c0.wrk; Sat, 22 Mar 1997 04:50:26 -1
Received: from [195.120.135.127] by infocomm.it id 26450.wrk; Sat, 22 Mar 1997 04:50:12 -1
Received: from [195.120.135.127] by infocomm.it id 263b0.wrk; Sat, 22 Mar 1997 04:49:56 -1
Received: from [195.120.135.127] by infocomm.it id 26330.wrk; Sat, 22 Mar 1997 04:49:40 -1
Received: from [132.239.1.53] by infocomm.it id 262c0.wrk; Sat, 22 Mar 1997 04:49:26 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id SAA23278 for <ham-homebrew-list@mailbox.ucsd.edu>; Fri, 21 Mar
1997 18:52:11 -0800 (PST)
Received: by noc.ucsd.edu; id SAA13550
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 18:09:30 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id SAA13530
sendmail 8.8.5/UCSD8.3
Fri, 21 Mar 1997 18:09:26 -0800 (PST)
Message-Id: <199703220209.SAA13530@noc.ucsd.edu>
Date: Fri, 21 Mar 97 18:09:25 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #205
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

of the HV transformer. The secondary of the small transformer is
rectified, filtered, and used to power the DC coil of the step-start relay.

The step point can be contolled by placing resistance in series with the
relay's coil.

--
--Rich-- ag6k, 805-386-3734

Date: Fri, 21 Mar 1997 12:18:56 -0600
From: Mark Mansfield <mmans@aeneas.net>
Subject: Soft-start circuits

Well, for what it's worth....

Back a couple months ago, we had the mobile TV truck over at our Gym for
a basketball game. We plugged into a service outlet on the outside of the
building. We ran camera cables inside, intercom cables, video for the
announcers booth, audio back down from the announcers booth, you get the
idea.... Well the monitor that the announcers had was a 117VAC grounded
plug. We plugged the monitor into a outlet in the announcers booth instead
of running AC all the way up to it from the truck. Well, as it turns out,
and no one knew this, the whole ground system inside of the gym was not
bonded to neutral or the ground rods at the service entrance. A transformer
shorted in one of the lights inside of the gym and was putting 600VAC on the
whole ground system. The outlets we were plugged into on the outside of gym
were grounded. When the monitor was plugged in, a ground fault breaker
opened. The engineer who was working the truck that night didn't know what
was happening and why the ground fault breakers in the truck kept opening.
He unhooked the video and audio lines to the announcers booth. Presto, no
breaker opening up. He reached over and started to grab the video line with
one hand while his other hand was pressed against a tape machine (case grounded
of course), he was knocked out backwards of the truck, blacked out when
his head hit the ground. He had holes in 3 fingers that touched the video
connector. And if all than wasn't enough, he had a heart pacemaker.
He lived and is doing fine, fingers healed, no problems with his pacemaker.
We now call him LUCKY.

Is there a need for the ground separate from the neutral? Well the system
that was supposed to prevent this, was actually worse than if we had no
ground at all. This was a electrical problem that should have been caught
when the building was constructed. Times past we plugged into the outlets
and had no problems, why, because the transformer was not shorted to
ground. It's amazing someone didn't get killed. The ground and neutral
have to be bonded together at the service feed point for the ground safety
system to work, otherwise you are better off without it. People who work

in the electronics industry naturally 'assume' that ground is ground.
That's a deadly assumption.

My $0.02 worth as well.

> I see in some posts here, reference to neutral and chassis ground as the
> same thing.
>
> The newer books have taken into account the new wiring for neutral and
> ground and do not refer to them as the same.
>
> I think in the (USA) the National Electrical Code has defined neutral and
> ground. They are not the same thing. They are the same at one point. The
> main service entrance. They are bonded together and tied to an earth ground.
> After this point they differ. The neutral carries the unbalanced (240vac)
> load current. The ground carries "fault current".
>
> Why worry, because the wire carrying the neutral current has resistance.
> There for volt drop. Now some place along the system the ground (carrying
> no current) and the neutral are at different potentials. This may be and
> should be a small voltage. The ground is still at earth ground potential.
> The ground conductor is the one bonded to the chassis not the neutral.
>
> If you connect the ground conductor to the neutral at
> some place in the system, other than at the service enterence, the load
> current is divided between the neutral and ground conductors in that
> circuit. The ground is no longer at earth ground potential. There will
> be voltage from ground to say a water pipe (another earth ground). This
> is not a good condition. Any sub-feeder(in the same building) from the main
> service enterence is now required to have a separate ground conductor. The
> neutral and ground are separate.

Date: Sat, 22 Mar 1997 02:08:16 GMT
From: W8JItom@worldnet.att.net (Tom Rauch)
Subject: Soft-start circuits

On Fri, 21 Mar 1997 12:49:40 -0800, measures@mail.vcnet.com (R. L.
Measures) wrote:
>
> • Unlike DC coil relays, AC coil relays are not very satisfactory for
>step-start service because they do not close positively when they reach the
>pull in voltage.
> IMO, it would be preferable to connect a small transformer to the primary
>of the HV transformer. The secondary of the small transformer is
>rectified, filtered, and used to power the DC coil of the step-start relay.
>
>
>The step point can be contolled by placing resistance in series with the
>relay's coil.

>

Not only that, AC relays vibrate.

120 Vdc relays and higher are available.

73 Tom

Date: Fri, 21 Mar 1997 22:26:59 GMT
From: bpearson@helen2.win-uk.net (ROBERT PEARSON)
Subject: stornophone 4000

Hi

I have been trying to get some stornophone 4000's (uhf and vhf)
working on the amature bands with some success..(by interfacing
the PLL to a pc)..
I was going to use a couple of PIC's to finish the project off but
I could not get them in the case ..Also to find a way round the
keypad mapping done my head in..
So to get further on I need to know more about the personality
prom ... Can anybody help,,

Thanks in advance

Bob Pearson (G0PEY)

Date: 20 Mar 1997 22:40:47 GMT
From: John in Roseville <rtwodtwo@jps.net>
Subject: Want Camcorder for ATV use - cheap

Thanks for reading this. I'm looking for a color video camera that I
can use for ATV but don't have much cash so a broken camcorder will do
just fine if the camera part still works and I can get video out.
Let me know what you have and how much you want for it.
$60 is my limit for a broken camcorder.

mailto:rtwodtwo@cwnet.com

John

Date: Thu, 20 Mar 1997 21:27:07 -0800
From: "Allan (VE6AQK)" <doblera@cadvision.com>
Subject: Who knows e-mail address TenTec ???

Bart Mudde wrote:
>
> I am looking for the manual of the TenTec Corsair II.
> Therefor I am looking for the e-mail address of TenTec.

> Who knows an address wich is good and I also will get an answer ?
> 73 de Bart PA3GGM.

http://www.tentec.com/ might be a good start

73 Allan VE6AQK

Date: Tue, 11 Mar 1997 03:36:55 GMT
From: acatalan@pipeline.com (Anthony G. Catalano)
Subject: WW2W W.W.W Max Spectrum Homepage

Ma, allright! Allright! Just let me finish FTPing this thing.
There all done.... ENJOY!
PLEASE SIGN-IN & LET ME KNOW YOU FOUND IT FROM HERE!
QRP rules!
http://www.pipeline.com/~acatalan/
vy 73 de WW2W Tony

End of Ham-Homebrew Digest V97 #205
****

3300. PHOENIX-SX Need Help !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: evincent@mediom.qc.ca
Message-ID: <5h019o$112$3@wagner.spc.videotron.ca>
Source record: 95844

Hello, can you tell me how can y programm this radio (GE Phoenix-SX).

COMB: N5HH1W40TB
SERIAL:4061409

And if possible give me more infos about it, can I programm in ham band...
???

Thank you in advence.

3301. HAMFEST MARCH 29th

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Ken Osborne <n9zip@netnitco.net>
Message-ID: <01bc365f$e90a7160$441fd9cd@n9zip.netnitco.net>
Source record: 95845
Cross-posted to:
rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Michigan City (Indiana) Hamfest is March 29, 1997 @ 8:00am
Vendor Doors open at 6:00am

Talk-in will be 146.970 131.8 PL

For more information contact the MCARC Web Pages
http://ww2.netnitco.net/users/n9zip/homepage.htm

3302. Re: HF "VOX" for 2m preamp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: wk@killspam.frc.niwa.cri.nz
Message-ID: <3333b739.901359730@131.203.59.8>
Source record: 95846

On Thu, 20 Mar 1997 08:21:04 GMT, keinanen@sci.fi (Paul Kein&#65533;nen)
wrote:

[good stuff deleted]

>For SSB operation, I would recommend controlling the [pre]amplifier
>directly with the PTT (and not the RF VOX), since this will reduce the
>risk for preamplifier damage.

'RF VOX' controlled TR switching always strikes me as slightly Mickey
Mouse.

Unless you are using very low power levels, you always wind up with
undesirable side effects such as hot switching the relay contacts and
pumping RF into the preamp output, as indicated by Paul.

It has the potential to eventually fry the relay contacts and/or cause
preamp, RF final failure.

My suggestion is to do it properly, run a control wire up to the
preamp and use properly timed switching to avoid any of the above. The
ARRL handbook has a TR switch sequencer in it if memory serves me.

Wilbert, ZL2BSJ/PA3EYI

PS: remove killspam. bit before replying by Email...

3303. Heath DX20 Plate Transformer Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-22 00:00:00 UTC
From: Rye Gewalt <ryeg@vais.net>
Message-ID: <3333D1F7.7D19@vais.net>
Source record: 95847

Anybody got a plate xfmr for a DX 20 laying around that they want to get rid of (sell). Getting my old novice rig running from the 60s and the dammed transformer is arcing over.

Rye Gewalt
K9LCJ

3304. Re: Avionics techs and installers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <3335b654.29732831@news.flash.net>
Source record: 95648
Cross-posted to:
rec.aviation.marketplace,rec.aviation.misc,rec.aviation.piloting,rec.aviation.products,rec.radio.amateur.homebrew,us.jobs.offered

On 19 Mar 1997 05:33:04 GMT, "Glenn Haddon" <glennh@smartlink.net>
wrote:
>Good saleries good benifits.

And, they don't count off for spelling!
Kerry

(sorry, couldn't help it)!
:-)

3305. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: hynde@flash.net
Message-ID: <33358BFE.37F5@flash.net>
Source record: 95649

L. DE BRUIJN wrote:
>
> In article <332E58B6.41C6@athena.polito.it>,
> Claudio Fornaro <fornaro@athena.polito.it> wrote:
> >Hi all,
> >I'd want to build a "home made" radio receiver for AM (or even SW...) by
> >putting
> >together pieces that can be found at home, that is you have not to buy
> >them in an
> >electronic shop.
> >To explain better: I intend to build capacitors (maybe with alluminium
> >sheets and
> >plastic bags), inductors (copper wire), the crystal is a problem... one
> >usually
> >has no galena crystal at home... the loudspeaker maybe is a bigger
> >one...
> >Has anyone ever seen such a project made or has s/he any idea about
> >building it?
> >Thanks in advance.
> > Claudio
> You wouldn't *need* a crystal, you could use an inductor/capacitor vfo.
>
> 73 & good luck de Laurens

He already has the vfo, thats the "oatmeal box" or "toilett paper roll"
inductor with a variable cap. The crystal he's referencing is the one
used to detect the audio from the AM signal not one used in the vfo.

You could build a variable cap, but Im pretty sure the default meathod
would be to build an inductor around a tube, about 160 turns of #22, 24,
26 wire around a toilett paper roll will get you in the ball park for
use with a 365 pf cap. You can use a fixed value cap and then build a
device to allow you to slide along the inductor. Glue the coil to the
form with dope and when dry use very light sandpaper to remove the
insulation in a straight line across the coil, your frequency will
change depending on where you tap the coil.

You will definatly need a set of old WW2 high impeadence phones or a
cyrstal earphone, there is not enough energy to drive 8ohm headsets or
speakers.

To keep your spirits high though, you may want to use a 365pf tuning cap
from an old AM radio and use a diode instead of the cat whisker
arrangement. Once you get that working you can experiment with different
detectors and tuning meathods. I just finished one for my bosses son

using the above. They are still fun to build.

73, Tim, ka8ddz

3306. 2SC2221 ---> NTE322??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5h2afl$37g@news.Hawaii.Edu>
Source record: 95650

Hi folks - I melted the 2SC2221 transistor in the final amp of my
Tempo S1 HT. Honolulu Electronics says that a replacement for the
2221 is an ECG322, and a replacement for that is an NTE322 (which
is what they sold me).

Two things bother me:
1. The 2SC2221's case was similar to a TO-39 (round, metal); the
case was soldered to the circuit board ground (for heat dissipation
I suppose). The NTE322's case is similar to a TO-220 and is plastic.
Should the NTE322's metal stub be soldered to ground?
(i.e., are the 2221 and 322 electrically identical? I'd hate
to ground the case if its not meant to be.)

2. The small amount of data that came on the 322 package says:
"NPN - Si, RF Pwr Amp, CB, Po 3.5W Min, 27 MHz"

This 2m HT (with the original 2SC2221 PA) was rated at 1.5W output.
Can I exppect the NTE322 "CB PA" to have a similar output at 2m?

Thanks in advance!
Jeff KH2PZ

3307. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5h4b46$8lo@news.Hawaii.Edu>
Source record: 95651

Tom Rauch <W8JItom@worldnet.att.net> wrote:
>John, If you look at the 95 Handbook, they return filament transformer
>and other leads to the chassis in some PA designs, that is a bad idea
>and against wiring standards.

My Heath transmitters are wired that way. If a filament was above
ground potential couldn't that adversely effect the operation of the
tube? Electrons boiled off the cathode might flow towards the
filament instead of the plate.

Jeff KH2PZ / KH6

3308. Need Help With Microwave TWT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: sidener@saucer.cc.umr.edu
Message-ID: <5h1v5h$ch2$3@news.cc.umr.edu>
Source record: 95767

Hi, I just got an unused Hughes TWT amplifier module and I need to find out what frequency it is for and how to make a power supply for it and how to use it.

I'n not asking much :)

Here is the info on the label:

HUGHES Type 640HS-8 Ser# H-4952

Ef 6.3V Ik 82.6 ma Ek -3.38 kV VEb -1.69 kV Ea 200 V

If anyone can help me identify this orgive me any advice, I would really appreciate it!

Thanks,

Scott Sidener N0WFL sidener@umr.edu

3309. GaAsFETs: Where to buy them?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: jspatric@mailhost.ecn.uoknor.edu
Message-ID: <5h20c1$6tp$1@independence.ecn.ou.edu>
Source record: 95768

I'm designing a preamp (with RF sensing) for 10m, 2m, 70cm, and whatever other bands I need one for. I have designed one for each with standard N-channel MOSFETs. Now, I see that all the preamps sold advertise GaAs (Gallium Arsenide) FETs. I've looked in my Digikey, Mouser, etc. catalogs, but cannot find a GaAsFET. Where can I buy one? if you can help me out, I'd really appreciate it. If everything goes well, I may try to publish the designs in some Ham-related magazine. The way I've designed the ones so far, to choose which band you want, you just change the values of parts in the design. All the preamps have the same template (sorta).

Thanks,
John
--
John Patrick (jpatrick@ou.edu) - KC5VEI
Electrical/Computer Engineering Grad @ The University of Oklahoma
* John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *

3310. Re: Value of 1N714 Zener??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: michael thomas <mjthomas@interpath.com>
Message-ID: <01bc3743$c00f5ca0$c8023bcf@mjthomas.interpath.net>
Source record: 95769

Grant
A 1N714 cross references with a SK10A and the ratings on the SK are 10
volts 1/2 watt.

mjthomas@inthpath.com

Seppo Nurmi <seppo@rulla.me.tut.fi> wrote in article
<5gr9rt$p07@cc.tut.fi>...
> Grant Youngman <nq5t@gte.net> wrote:
>
> >Anyone know the voltage and power rating of a 1N714 zener?
>
> >Doesn't show up in any reference I have laying around.
>
> >Thanks ..
>
>
> >-----------------------------------
> >Grant Youngman / NQ5T
> >nq5t@gte.net
> >http://home1.gte.net/nq5t/index.htm
> >-----------------------------------
>
>
> The Motorola Master Index says that a direct replacement is 1N5240A.
> It says further that power rating is 250 mW and zener current is 12
> mA, but it says nothing about the voltage.
>
> 1N5240A in turn says that the zener voltage is 10 volts, zener current
> 10 mA and power rating 500 mW.
>
> A very good German manual says that 10 volts at 12 mA. Hope this
> helps.
>
> Seppo Nurmi 73 DE OH3LYA
>
>
>

3311. F.S. - Tubes, etc...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970323055300.AAA06630@ladder01.news.aol.com>
Source record: 95770

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #322-T.

3312. Re: GaAsFETs: Where to buy them?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970323062000.BAA07956@ladder01.news.aol.com>
Source record: 95771

In article <5h20c1$6tp$1@independence.ecn.ou.edu>, jspatric@mailhost.ecn.uoknor.edu (John Stephen Patrick) writes:

>
>I'm designing a preamp (with RF sensing) for 10m, 2m, 70cm, and whatever
>other bands I need one for. I have designed one for each with standard
>N-channel MOSFETs. Now, I see that all the preamps sold advertise GaAs
>(Gallium Arsenide) FETs. I've looked in my Digikey, Mouser, etc.
>catalogs, but cannot find a GaAsFET. Where can I buy one? if you can
>help me out, I'd really appreciate it. If everything goes well, I may
>try to publish the designs in some Ham-related magazine. The way I've
>designed the ones so far, to choose which band you want, you just change
>the values of parts in the design. All the preamps have the same
>template (sorta).
>
>Thanks,
>John

Hi John --

Why would you want use an expensive GaAsFET in a 10 meter
preamp? There are plenty of good low-noise FETs or bipolar
devices that will do just fine up to and including two-meters.

Peter

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

3313. Pointer to Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2303970504580001@wd1v.mv.com>
Source record: 95772
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

3314. Mac Ham Software - Free on WWW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2303970503330001@wd1v.mv.com>
Source record: 95773
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing New WWW Site for Macintosh Ham Radio Enthusiasts

http://www.mv.com/ipusers/wd1v

Mac Ham Software including:

Macnet Roster:
a database of all hams in the world using Mac computers

WD1V's Ham Radio EXAM Simulators:
the fast path for upgrading your ham license with a Mac

Plus more Mac information - come see!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

3315. Pointer to Digital Oscilloscope FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2303970502160001@wd1v.mv.com>
Source record: 95774
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Digital Scope.FAQ Main Menu
(in order of appearance)

* WELCOME! This FAQ Welcomes YOU
* DSO INDUSTRY TRENDS Whats happening in DSO technology this year?
* DSO FUNDAMENTALS - A TUTORIAL and Keywords List - What are the current buzzwords?
* DSO FORM FACTORS What types of DSOs are there?
* PRIMARY DSO FUNCTIONS What can DSOs actually do?
* COMMON MISTAKES How can I really mess it up with a DSO?
* COMPARISONS How can I best compare various models?
* DSO APPLICATIONS What are the most common DSO applications?
* ADCs What speed do I really need on each channel?
* BANDWIDTH & TRIGGER What numbers & functions are right?
* ARCHIVAL & MEMORY How fast, how deep, & can I get more?
* DISPLAYS What am I really looking at?
* MEASUREMENTS How much is my signal changing over time?
* DIGITAL SIGNAL PROCESSING How can I obtain more useful data?
* DEMOS & PURCHASING How can I see & get the DSO I really need?

IF... you want the complete version
of this Digital Scope.FAQ file sent
to you automatically as an
ATTACHED TEXT FILE <47 k TEXT File>.

send me (john@wd1v.mv.com).....
an EMAIL where the subject contains
the text "subscribe scope.faq".....

or

go to my Home Page.

Best regards,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

3316. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2303970246210001@news.vcnet.com>
Source record: 95775

In article <n7ws.278.01106695@azstarnet.com>, n7ws@azstarnet.com (Wes Stewart) wrote:

> In article <measures-ya02408000R2003970753440001@news.vcnet.com> measures@mail.vcnet.com (R. L. Measures) writes:
> >From: measures@mail.vcnet.com (R. L. Measures)
> >Subject: Re: Soft-start circuits
> >Date: Thu, 20 Mar 1997 07:53:44 -0800
>
> [SNIP]
>
> I hope your lapdog Tony is reading this group too Rich, cuz here is another
> example where you are dead wrong (no pun intended).
>
> >>
> >Whether one or two step-start resistors is used with a 240v amplifier, the
> >chassis is always connected to the mains-neutral. What safety issues?
>
> The safety issue is the one you just introduced.

In an amplifier that uses 240v single-primary transformers, Wes, neutral is not connected in any way to the transformer windings. Thus, no current flows through the neutral wire whether one or two stepstart resistors are used. The safety ground/neutral wire is connected to the amplifier chassis whether one or two stepstart resistors are used. What safety issues?

> THE NEUTRAL IS TIED TO EARTH AT THE SERVICE ENTRANCE.....

True.

After that, it is
> treated as a current carrying conductor.

NOT in the case described above. Please explain how the neutral could carry fault current from the HV supply.

> The safety ground (what you
> should be tying to the chassis) carries fault current only, as John, WA0VYZ,
> clearly points out in his post.
>
> N7WS
> >--
> >--Rich-- ag6k, 805-386-3734

--
--Rich-- ag6k, 805-386-3734

3317. real, legal, easy ca$h

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: ron_c@geocities.com
Message-ID: <333b0e79.440958921@news.alt.net>
Source record: 95776
Cross-posted to: rec.puzzles,rec.pyrotchnics,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

If this is not of interest to you, please accept my apologies for intruding on your newsgroup and ignore this. If this is a pictures newsgroup I will follow this post up with some tasty pics. I hate spammers as much as the next guy, but we're talking about some very easy money to be made !! If you are still interested (and YOU SHOULD BE)......

-!!!-PLEASE READ THIS VERY IMPORTANT NOTICE- NOW!!!
!!! MAKE MONEY-LEGAL AND EASY WITH YOUR VERY OWN MAILING LIST BUSINESS!!!
THIS IS THE FAIREST, MOST HONEST WAY I KNOW OF TO SHARE THE WEALTH!!

Hello! Would you like to make thousands of dollars,quickly, legally, with NO CATCH? Then keep reading.... Please take a few minutes to read this article, and it just may just change your life. I SWEAR I'M NOT LYING TO YOU, ANDTHIS IS NOT A SCAM! If you're interested, please, keep reading. If you're not, then, again, I apologize for wasting your time.

The following concept of making money with your computer essentially began in the US and has now spread throughout the Western World. It is perhaps unique inasmuch as there's no risk - people from all over the world are currently participating and those that follow the initial concept are earning large amounts of cash.
Read the following carefully and you too could be joining the many thousands of Internet users who are currently earning quite reasonable sums of money with a few hours work using their computers via the Internet!
****
This posting has been appearing for quite some time and has now literally got thousands of people actively involved. No doubt like me, you may have seen it before and become a little confused by the way it's been explained. However, I personally have never believed in a so called "Free lunch" and have always worked hard to support my family. But this idea is so simple involving only a modest $5.00 investment that I simply had to try it. At first, it took me quite a while to figure it out - my first impressions led me to believe that there must be some catch to it. But this isn't so, you only have to look at the various postings to realise this; the thousands of postings that are made all carry different names and addresses. So with so many people involved I became convinced that with this particular program I too could benefit. Although many of the postings have been modified the

basic principal remains the same, in my opinion the only problem has been the way the initial concept has been repeatedly changed.
With this in mind I have set out to explain what I consider to be a clearer version, in the hope there is no doubt in people's minds that it's fully understood. Because believe me, this system does work!
****
Essential Information to Assist Your Success!!

These articles have been modified over and over again, and embody over exaggerated claims of vast earnings. While this cannot be disputed it is essential in order to receive the attention of those who read it to post an article that gives out the right signals to the recipient. I believe this article does just that, it's not full of unnecessary $$$ signs, neither does it contain ridiculous claims which only puts people off. If you want to get started right away, simply amend the address section by removing the top location and place your own name and address at the bottom.
****
In general, these postings lead you to believe you can make $50,000 within a month, which I think is a little over the top.
But now after only a few day's of my initial involvement, I'm beginning to get a reasonable and realistic return with a further understanding of just how big this concept is. The money is coming in from all over the world, and sure comes in useful but what's more important is the fact I have proved this to be a totally workable and legitimate system, involving no risk and no major cash outlay.
My other concern was the legal aspect, so I checked this through and was told that providing I mail one dollar to the person I am asking to put me on their mailing list, I am in fact paying for a service. And that service consists of using the Internet to advertise a business.
So what is this business? Well this business is to do with assembling a mailing list of people who are interested in working from home using their computers to generate an income.
****
Ok...if your interested there are three basic steps: All of which are pretty simple. Think positive, after all, the people below became involved just like you!

Let me tell you how AND WHY this works .. also, MAKE SURE YOU PRINT A COPY OF THIS ARTICLE NOW, so you can get the information off it as you need it.

STEP 1:
Get 5 seperate pieces of paper and write the following on each piece of paper "PLEASE PUT ME ON YOUR MAILING LIST." (In this way you are not just sending a dollar bill to someone, you are paying for a legitimate service.) Fold a $1 bill inside each piece of paper with your name and address on it, and mail these 5 letters to the following 5 addresses:

1- SRO Services
PO Box 909
Puunene, HI 96784
USA

2- Aumakua Enterprises
PO Box 277-316
Kihei, HI 96753
USA

3- Ross McCrindle
2-28 Cambridge St. S.,
Lindsay,Ontario
K9V 3B6
Canada

4- Sean Ringle
PO Box 1
Lanesville, IN 47136
USA

5- Ron Campbell
106-1309 West 14th Avenue
Vancouver BC V6H 1R2
Canada

STEP 2:
Now take the #1 name off of the list that you see below, move the other 4 names up. (5 becomes 4, etc.) and add your own name as number 5 on the list.

STEP 3:
Change anything you wish to, but try keep this article as close to original as possible. Now, Post your amended article to at least 200 newsgroups. (there are around 19,000 groups). All you NEED is 200, but remember, the MORE YOU POST , THE MORE MONEY YOU MAKE!!!

You are now in the mailing list business, and should start seeing returns within a week or two. Of course, the more newsgroups you post to, the greater your return will be. If you wish to remain anonymous, you may use a pseudonym, but make sure address is correct.

LEGAL ???

People have thoroughly discussed whether this is really legal. You are using the Internet to advertise your business. What is that business? You are assembling a mailing list of people who are interested in home based computer and online businesses and methods of generating income at home.
REMEMBER - people send you small fee to be added to your list. It is legal. What will you do with your list of thousands of names? That's up to you.

HERE IS WHY THE SYSTEM WORKS:

The internet is growing at a tremendous rate - it doubles in size every 4 months. Think about it. You see those "Make Money Fast" posts more and more. All that growth means potentially big profits for everyone who participates.

Of every 200 posts you make, you should receive roughly 5 responses. That probably doesn't seem like much. You make $5.00 for every 200 posts with your name at #5.

Each person who sent you $1.00 now also makes 200 additional postings with your name at #4. i.e. 1000 postings. On average, 50 people will send you $1.00 with your name at #4. That's $50.00

Your 50 new agents make 200 postings each with your name at #3 or 10,000 postings. Average return 500 people=$500.00. They make 200 postings each with your name at #2=100,000 postings=5000 returns at $1.00 each=$5,000.

Finally, 5,000 people make 200 postings with your name at #1 and you get a return of $50,000 before your name drops off the list. AND THAT'S IF EVERYONE DOWN THE LINE MAKES ONLY 200 POSTINGS! Potential income in one cycle = $50,000.

REMEMBER THIS ---- thousands of people all over the world are joining the internet every day and reading these articles every day just like you are now. So can you afford $5 dollars and see if it really works??? I think so.....

Lets review why you should do this. THE ONLY COST IS $5.00, 5 STAMPS, AND 5 ENVELOPES. Anyone can afford $5.00 for such an effortless investment with such SPECTACULAR RETURNS.

There are millions of internet users, and millions of new net surfers every month. REMEMBER - read the instructions carefully, and play fairly. THAT'S the only way this will work. Get a printout so you can refer back to this article easily.

Keep a list of everyone that sends you money, keep good books, pay your taxes, and always keep an eye on the postings to make sure everyone is playing fairly. You know where your name should be.

If you're really not sure or still think this can't be for real, then don't do it. But please print this article and pass it along to someone you know who really needs the bucks, and see what happens.

REMEMBER - HONESTY IS THE BEST POLICY. WHAT IS $5.00 TO YOU? YOU DON'T NEED TO CHEAT THIS IDEA TO MAKE MONEY!!! This is the easiest way that you can make a buck. Think how excited you'll be to open up your mailbox day after day! Will it be $50.00 or $5,000.00?? Start making your plans, because it can happen to you.

DON'T PASS UP THIS ONCE IN A LIFETIME OPPORTUNITY

3318. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2303970258310001@news.vcnet.com>
Source record: 95777

In article <33330bda.36190235@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Fri, 21 Mar 1997 12:49:40 -0800, measures@mail.vcnet.com (R. L.
> Measures) wrote:
> >
> > > • Unlike DC coil relays, AC coil relays are not very satisfactory for
> > >step-start service because they do not close positively when they reach the
> > >pull in voltage.
> > > IMO, it would be preferable to connect a small transformer to the primary
> > >of the HV transformer. The secondary of the small transformer is
> > >rectified, filtered, and used to power the DC coil of the step-start relay.
> >
> >
> > >The step point can be contolled by placing resistance in series with the
> > >relay's coil.
> >
>
> Not only that, AC relays vibrate.
>
> 120 Vdc relays and higher are available.
>
> 73 Tom

The problem is that when the 240vac from the HV transformer primary winding
is rectified and filtered, it produces an unwieldy 300vdc. Since 24vdc
relays are fairly common, when I specify the windings for a Peter Dahl
custom made transformer, I include a 15vac@1a winding to power the
step-start relay.

--
--Rich-- ag6k, 805-386-3734

3319. Re: WTB: Alpha 77Dx Plate Choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2303970428170001@news.vcnet.com>
Source record: 95778

In article <19970322004401.TAA09972@ladder01.news.aol.com>,
johnsonhe@aol.com (JohnsonHE) wrote:

> Jeez! And all this time I thought the arcing stuff was because ETO didn't
> use Nichrome wire for his parasitic chokes!
>
> Paul, ring my chimes if you still need one.
>
> W4ZCB

HV-RFC arcing is most commonly caused by a self-resonance in the choke being too close to an operating frequency. This problem can be avoided by checking the choke with a dipmeter after it is installed--before 'firing up'. If you find a self-resonance within 5% of an operating frequency, remove turns as needed---unless you are into fireworks.

The only amplifiers I know of that have a HV-RFC VHF-resonance problem is the Henry 2K4/3kA series that use a 29uH HV-RFC, which Henry says has 50uH.

--
--Rich-- ag6k, 805-386-3734

3320. Drawing Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc37a8$f33e21a0$011810d1@dale>
Source record: 95779

This may be an old question, so my apologies upfront.....

Does anyone have any recommendations for software for creating schematics and wiring diagrams? I have tried a couple of low-end programs and found them too labor intensive and not really suitable.

I'd appreciate anyone's suggestions, recommendations, and/or ideas.

Thanks in advance.

73,
--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

3321. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2303970321060001@news.vcnet.com>
Source record: 95780

In article <jupiter-ya023580002003971424500001@news.europa.com>,
jupiter@europa.com wrote:

> :> I think the inrush stuff is minor compared to safety issues.
> :>
> :Whether one or two step-start resistors is used with a 240v amplifier, the
> :chassis is always connected to the mains-neutral. What safety issues?
> :
> :--
> :--Rich-- ag6k, 805-386-3734
>
>
> Rich,
>
> I don't think most of these people have ever built anything, let alone a
> high power amp.
...snip...

So it seems, Rob. There is normally no connection between the
neutral/chassis wire and any part of the step-start circuit, so it matters
not whether one or two step-start resistors are used.

EDITORIAL: It seems to me that it might be a good idea to take a look at a
schematic diagram before looking for the 'Send' button.

--
--Rich-- ag6k, 805-386-3734

3322. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5h3qs3$mou@camel4.mindspring.com>
Source record: 95781

aruder@pipeline.com (Lou or Annette Hinshaw) wrote:

>Are there any investors that can talk to an inventor
>without trying to grab the goodies free?

>I haven't seen any.

>I, BTW, am WB0NRU, and my QTH is domewhat
>displaced. I live in Tulsa, 5-land. My call became
>a zero area in '75 or so, and I was five years or more
>learning not to give my old 4-call.

>So, When I moved to 5 country, I kept the zero call.

>Nothing wrong, of course, with my
> brain
> brai
> bra
> br

> but I do
>lose track.

>For this reason, I like most other prolific inventors,
>cannot sell or manage a business, wherewith
>leaving myself in the cold.

>I have discovered a way to xmit music over a
>bandspread of =< 100 Hz. Note that is Hertz
>not KiloHertz.

>I cannot talk well in a face-off, so I blow it every time.
>Any suggestions?

>I have already heard the one about find a salesman.

>My prob is that I must first sell that person on the idea.
>If I COULD sell them, I wouldn't need them.

>Catch 22

>Hope to hear from someone soon.

>Thanx

>Prolific inventor,
>Lousy Salesman,
>Incompetent businessman.
>(Typical)

Since posting the above, I have received 37 replies telling me it
can't be done.

To most of those I did not replly.

Several said it caint be done, but if it looks interesting, send it to
me, and I MAY get interested.

to all but one of those, I said "the world is full of people who
got no idea what is going on, but who know why it won't work.

I wish to call to everyone's attention that Lee DeForest was
sued by the then scientific authorities to keep him from putting a
triode on the market ! ! !

I believe everyone knows that almost every home in the USA
and most other industrial countries has at least one LARGE triode or
bigger tube in their TV.

Semmelweiss, and Pasteur, and God alone knows how many others have
seen this from the sharp end, and repeatedly proven that if you don't
know, you don't know. BUT the "wisdoms" of theland, still can tell us

why whatever it is don't work, even though they've never seen one.

Ain't it a wonderful world?

To top it off, I recently read a book by Georgetta Heyer (The
definitive historian in several places) who wrote several light
Regency novels, and in one of them the hero says to a girl
"There is no sense to tell me I can't do what I HAVE done."

I say the same.

Ciao, people.

WB0NRU

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

3323. Re: Cryptic coil description

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5h3qs5$mou@camel4.mindspring.com>
Source record: 95782

CBS5LD@leeds.ac.uk (L. DE BRUIJN) wrote:

>Is it possible to just use enamelled copper wire for all coils (provided the
>insulation is scraped away if a tap has to be made)? Or is there some good
>reason for using bare/tinned copper wire (RF signal handling etc.)? TIA

> 73 de Laurens

The tinning handles RF slightly, but has offsetting problems when the
surface begins to passivate.

Generally, the only reason I use tinned wire for a big RF coil is to
make it easier to solder a tap in place when the coil is already
installed. Scraping can be a **** then.

For real fine tuning of a coil of that sort, you often want it in
circuit, surrounded by all its chums before final placement of taps.

Hope this helps.

73

WB0NRU

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

3324. Writers needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: David Hamilton <bdx@magi.com>
Message-ID: <5h3qml$pds@news.istar.ca>
Source record: 95783
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

We need fresh, new, and fun ham radio articles and stories for a new publication to be launched this fall. No boring stuff allowed! Our audience comprises many beginners to all modes of operation, so use your imagination. We pay $$ upon publication.
Interested? Great! Send your story/article ideas - or better yet, the entire manuscript - to me. Let's discuss.

David Hamilton, VA3UE
BDX Radio
17 Equestrian Drive
Kanata, Ontario K2M 1B8
Canada

http://www.bushdog.com

3325. Re: Drawing Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: Randy Jones <rjones@plix.com>
Message-ID: <33357806.D44@plix.com>
Source record: 95784

Dale Martin wrote:
>
> This may be an old question, so my apologies upfront.....
>
> Does anyone have any recommendations for software for creating
> schematics and wiring diagrams? I have tried a couple of low-end
> programs and found them too labor intensive and not really suitable.
>
> I'd appreciate anyone's suggestions, recommendations, and/or ideas.
>
> Thanks in advance.
>
> 73,
> --
> Dale Martin
> kg5u@hal-pc.org
> http://www.hal-pc.org/~kg5u

Two programs, I know of, are Electronics Workbench and CircuitMaker.

These programs let you draw AND debug (both analog and digital) circuits on your computer. Both also cost about $300 each. These may be more than you are really looking for.

A good reference for these and (drawing only) software would be Electronics Now magazine "www.gernsback.com" who, recently, did a comparison of several drawing and simulation software packages.

Hope this helps.

Radio Randy

3326. Re: Schematics and plans online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: Randy Jones <rjones@plix.com>
Message-ID: <33357DB1.797C@plix.com>
Source record: 95785

Matthew Ballance wrote:
>
> Does anoyone know of a site on the web where you can download schematics,
> plans, or other information on homebrew TX/RX equipment?
>
> Matthew Ballance
> KF4BGQ Greensboro, NC

Matthew,

When you find one, make sure to post it's location on this news group.
Thanks.

Radio Randy

3327. Re: Who knows e-mail address TenTec ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <333583ea.0@cheese.pcug.org.au>
Source record: 95786

Bart - Have a look at the Australian QRP Home Page (URL below). Click on
Links and then 'Ten Tec'. You should find their e-mail address there.

73,
--

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

3328. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: Tim Hynde <hynde@flash.net>
Message-ID: <5h232k$18b$1@excalibur.flash.net>
Source record: 95787

Rolf Mathson <rmathiso@ix.netcom.com> writes: > AC6V wrote:
> >
> > Claudio Fornaro wrote:
> > >
> > > Hi all,
> > > I'd want to build a "home made" radio receiver for AM (or even SW...)
> <snip>
> > > usually
> > > has no galena crystal at home...
> <snip>
> > Hi Claudio -- an admirable project. For the crystal detector -- try a
> > small whisker wire on a razor blade. It works -- I remember doing this
> > as a boy experimenting with xtal radios.
>
> The "gotcha" on using a razor blade for the detector is it had to be a
> "Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
> with a material that would behave as a rectifier. The connection could
> be made via a wire wraped around a sharpened pencil lead. They probably
> don't make these blades any longer :(
>
> Regards,
> Rolf

Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!

Tim, ka8ddz

3329. Does this sound good???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: Thor Harald Johansen <thorhajo@arcticnet.no>
Message-ID: <3335A5C9.38C4@arcticnet.no>
Source record: 95788

This is a WEB-page about the NorCal 40A CW-Transceiver. Will someone reply to me, and tell me if this is a good choice for a transceiver?

----------CUT----------
The revision B NorCal 40A is a third-generation 40-meter QRP transceiver kit, designed by Wayne Burdick,
N6KR. The rig covers any 40KHz portion of the CW band, with a very stable VFO operating in the 2MHz range.
The receiver is a superhet with crystal filter, AGC, and RIT. The frequency coverage can be increased up to
150kHz with one capacitor change. Since varactor tuning is used, a 10-turn potentiometer can be substituted for
the supplied 1-turn unit if better tuning resolution is desired. (If you make this modification, we suggest using the
KC1 Keyer/Frequency Counter for keeping track of your operating frequency.)

The first batch of NorCal 40A's had significantly better performance than the original NorCal 40, having more
AGC range, a more stable VFO pot, and a more sensitive receiver that would drive a speaker directly. The
Wilderness kit (revision B), besides having a painted and screened enclosure, has a number of additional
refinements. These include improved receiver image rejection, better-sounding AGC and QSK, and a bit more
power output (around 3 watts with a 14V supply).

Receive-mode current drain is VERY low--about 15mA--leading to long battery life for portable operation. The
transmitter puts out 1.8 to 3 watts, depending on supply voltage, and has full QSK.

Physically, the rig is very small (2.25"H x 4.5"W x 4.5"D), about one-half the volume of an OHR Explorer. One
double-sided, screened and plated through PC board is used. There is NO chassis wiring: all controls and
connectors and even the case parts themselves mount directly to the board, resulting in an uncluttered interior.
The custom .060 case is quite rugged, and is designed to allow the top and bottom to be removed easily for
alignment or test. Long-life plastic latches are provided on the top so no screwdriver is needed to access internal
controls.

The '40A has plenty of empty front- and rear-panel and interior space for your modifications. Wilderness Radio

encourages you to customize the '40A, and will continue to provide support, even if you put it on 80 meters or some other band! The rig comes with a professionally-written, 30+ page assembly and operating manual.

What others say about the Norcal 40A

"Most of all, however, it was the quality of the kit--board, silk-screening, and case--and the excellent manual, that really made this a great FIRST kit for me. Wayne and the NORCAL gang really deserve an enormous hand for their efforts...kit building has been something I always wanted to get my feet wet in, and this was a fine, encouraging introduction." -- Matt, KN6CR

"I continue to be amazed at the receiver...I often put a separate 40m antenna on the NorCal and on my Yaesu 990, then stick one earphone from each rig on my head. The NorCal is much, much quieter than the 990. Weak signals are far easier to copy on the NorCal. I've told friends of this phenomenon, and they just don't believe me. I think you have to hear it to believe it." -- Bruce, AA6KX

NorCal 40A compared to similar kits:

-By far the cleanest construction of any low-cost kit.

-Much lower receive-mode current drain than the OHR Explorer and most other kits.

-Rock-stable down to a battery voltage of 9.5V.

-Compared to the SWL NE40-40, you'll get much higher performance, plus all the controls and connectors, no chassis wiring, and a custom, painted/screened enclosure

-Proven highly stable in the field due to its ultra-low frequency VFO

-KC1 Keyer/Frequency counter is tailored to the '40A, providing much more functionality than Curtis 8044-based keyers

NorCal 40A Pricing

The new Wilderness NorCal 40A is $129 plus shipping ($5 U.S., $10 Canada/Mexico, $15 DX).
------------------CUT---------------------

Sounds good to me, but you experienced guys may be thinking something else...

..Thor Harald..

3330. Forgot!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: Thor Harald Johansen <thorhajo@arcticnet.no>
Message-ID: <3335A6BA.34F4@arcticnet.no>
Source record: 95789

In my message 'Does this sound good???' i forgot to mention the URL to
the WEB-page i got it from: http://www.fix.net/~jparker/Norcal40A.html

..Thor Harald..

3331. WTB Millen Band Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: DK <dk@nerc.com>
Message-ID: <3335DC19.4428@nerc.com>
Source record: 95790

I'm looking for a band switch for a linear amp project. Trying to
locate a Millen #51001 switch or something similar. 6 Position 1 pole
60degree indexing, ceramic high voltage type. If you have one, please
contact me directly, as I don't get to read the newsgroups often.
Dave Kalokitis N2DK email dkalokitis@sarnoff.com phone 609-734-3296

3332. Test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: William Nolle <wa8inz@cris.com>
Message-ID: <5h4d48$p3f@chronicle.concentric.net>
Source record: 95791

Organisation: None

##
This message is create by Dynamic Mail - a most advanced bulk email software
for the online marketer to extract MILLIONS of email address from the internet
, send message to unlimited email addresses, or post ads to any number of selected
newsgroup. For more information please send email to : apexpi@tig.com.au
or visit our web site at : http://homepages.tig.com.au/~apexpi/dynamail.htm
##

Sorry for the bandwidth, just a test.

3333. HELP! COSSOR SCOPE /EHT transformer RQd

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: CHRIS PURDY <jj56@dial.pipex.com>
Message-ID: <3335BCEF.47A2@dial.pipex.com>
Source record: 95792

HELP! COSSOR SCOPE /EHT transformer RQd

BY any chance has anyone ex-cossors/harlow etc
got in their junk box a COSSOR CDU120 little
EHT transformer-4 inches square,5 -pins primary
and 2 pins secondary(1kv and 2kv),ferrite core?

or has anyone got an old CDU 110,120,150 for
spares/repair in their junk shack?
I believe I saw one at Cambridge ham rally
end Febuary-but mine was ok then!

If not does anyone know calendar dates/locations
of Sunday Ham Rallies this year?

email to: chris purdy
jj56@dial.pipex.com
or
chrisp@spl.co.uk

--
regards Chris R. Purdy Signal Processors Ltd,Cambridge Science
Park,Cambridge CB4 4GJ ENGLAND
voice: 01223 420357 fax: 01223 420883 main E-mail: chrisp@spl.co.uk

website: www.spl.co.uk/satcomms/index.html bbs:01223 576895 alternative
email: jj56@dial.pipex.com

3334. HELP large SMART/TANDY YELLOW DVM FAULT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: CHRIS PURDY <jj56@dial.pipex.com>
Message-ID: <3335BD27.4C81@dial.pipex.com>
Source record: 95793

HELP large SMART/TANDY YELLOW DVM FAULT

SMART DVM,YELLOW 1" high digits model 22-7215
from TANDY(imported for intertan UK)

Help! just zapped 200s ranges on my DVM
(was on 1000v when 1500v applied it went phut)
other ranges & digits are ok but failed ranges are

200v,200uA,200mA,200ohms,200k

anyone got a circuit or know wether its likely
main DVM chip has gone or which chip /diodes
might need replacing?
(or have another faulty one for spares)

email to: chris purdy
jj56@dial.pipex.com
or
chrisp@spl.co.uk

--
regards Chris R. Purdy Signal Processors Ltd,Cambridge Science
Park,Cambridge CB4 4GJ ENGLAND
voice: 01223 420357 fax: 01223 420883 main E-mail: chrisp@spl.co.uk

website: www.spl.co.uk/satcomms/index.html bbs:01223 576895 alternative
email: jj56@dial.pipex.com

3335. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970323234501.SAA25900@ladder01.news.aol.com>
Source record: 95794

In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde <hynde@flash.net> writes:

>
>Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
>
>Tim, ka8ddz
>
>

You can try it, but it won't work. You need a germanium diode, not
silicon. Try a 1N34A.

Pete

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

3336. Re: Writers needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2303971253290001@news.vcnet.com>
Source record: 95795
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5h3qml$pds@news.istar.ca>, 17, Equestrian, Drive, KANATA, ON, K2M, 1B8, CANADA wrote:

> We need fresh, new, and fun ham radio articles and stories for a new
> publication to be launched this fall. No boring stuff allowed!

'Tis a good thing, David. The boring stuff market seems to be pretty well sewed-up on this side of the border.

--
--Rich-- ag6k, 805-386-3734

3337. Re: Schematics and plans online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5h4u23$5br@mtinsc05.worldnet.att.net>
Source record: 95796

Matthew,

There are a few on my www page. Also there are links to several other
sites which have circuits.....

73, Woody

Matthew Ballance wrote:
>
> Does anoyone know of a site on the web where you can download schematics,
> plans, or other information on homebrew TX/RX equipment?
>
> Matthew Ballance
> KF4BGQ Greensboro, NC

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3338. Surplus Precision Ovened Crystal Oscillators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-23 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <8NUUIHAxyQNzEwby@ddwyer.demon.co.uk>
Source record: 95797

Oven Controlled Crystal Oscillators OCXOs at 16.384 MHz.
These PCB mounting hermetic oscillators are 77X51X32mm high they divide by 2 to the power 14 to give 1 kHz to function as the reference for frequency synthesisers as used in instruments, radio, cellular, TV Transmitters..
Oscillators are stable to a few parts in ten to the ten over 1 second and to parts in ten to the nine over -40+70C. Supplied with calibration data so can be used to check counters etc to +-0.2ppm.
SSB noise plots available showing -125dbc@+-10 hz -155dbc floor
12 V supply 600mA on warm up
200mA when running@23C
Warm up time 6minutes approx.
Built in 8V reference so that fine frequency adjustment can be carried out with external potentiometer.
Electrical control of frequency (typical) +0.12ppm/Volt
These units are latest technology incorporating SC cut low ageing crystals typically < 0.1 part in 1 million / year.
Output 1.5Vpp 50ohms source resistance.
CALIBRATION
Every unit supplied with Voltage to apply to freq control pin to set to nominal frequency +-0.1ppm.............
$90 including postage to almost anywhere! $ or sterling eq cheque to Freq Precision Ltd

SHORTS, NORTHLEW
OKEHAMPTON DEVON EX20 3NR UK
Phone/fax +44 (0)1837 810590
Email 101505.3427@Compuserve.Com
http://ourworld.compuserve.com/homepages/Frequency_Precision/

3339. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <859163901@infoway.com>
Source record: 95652

> The safety ground (what you
> should be tying to the chassis) carries fault current only, as John, WA0VYZ,
> clearly points out in his post.
>
> N7WS

Not so, if you follow all these circuits that tie bypass capacitors
and MOV surge suppressors from the hot 230 and neutral back to
chassis ground. If any of these devices conducts surges and
spikes to ground, then ground is carrying these.

It seems to me, that these surge suppressors could actually be
increasing power line noise EMI, which I was trying to eliminate.
So I am inclinded to just place these devices across the 230 and
to neutral.

Please comment. I am about to put in a bunch of these in my
rewiring and EMI compain.

73, Don, N6MCE

PS. I was using a slow start circuit, put the bounce in
my relay was blowing fuses. So I put a diode in series with
the 120 volt relay coil. Then the relay went up in smoke and flames.
Luckily I was there and blew it out. So I now switch on the whole load.
So far, it works.

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

3340. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc3806$bf596f80$e7102399@desktop>
Source record: 95653

commquart@aol.com wrote in article
<19970323234501.SAA25900@ladder01.news.aol.com>...
> In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde
<hynde@flash.net> writes:
>
> >
> >Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
> >
> >Tim, ka8ddz
> >
> >
>
> You can try it, but it won't work. You need a germanium diode, not
> silicon. Try a 1N34A.

Why won't it work, if you have enough signal strength?

The Si diode only takes about 2x the voltage to conduct as the Ge diode...

Am I missing something?

(Not that 1N34A's are that hard to get)

3341. Re: GaAsFETs: Where to buy them?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: ka0yos@arn.net
Message-ID: <5h4teu$6g2$1@services.arn.net>
Source record: 95654

In article <5h20c1$6tp$1@independence.ecn.ou.edu>,
jspatric@mailhost.ecn.uoknor.edu says...
>
>I'm designing a preamp (with RF sensing) for 10m, 2m, 70cm, and
whatever
>other bands I need one for. I have designed one for each with
standard
>N-channel MOSFETs. Now, I see that all the preamps sold advertise
GaAs
>(Gallium Arsenide) FETs. I've looked in my Digikey, Mouser, etc.
>catalogs, but cannot find a GaAsFET. Where can I buy one? if you can
>help me out, I'd really appreciate it. If everything goes well, I may
>try to publish the designs in some Ham-related magazine. The way I've
>designed the ones so far, to choose which band you want, you just
change
>the values of parts in the design. All the preamps have the same
>template (sorta).
>
>Thanks,
>John
>--
> John Patrick (jpatrick@ou.edu) - KC5VEI
> Electrical/Computer Engineering Grad @ The University of Oklahoma
> * John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *

California Eastern Laboratories
4590 Patrick Henry Drive
Santa Clara, CA 95054
(408) 988-3500

Also Down East Microwave sells some of them. Try doing a web search
for them.

73, and Good Luck,
Joe ka0yos

3342. HLP: TWT 7.0-12.4Ghz xr603-1 Aiken Keltec Watkins-Johnson

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: "d_trade@bigfoot.com" <d_trade@bigfoot.com>
Message-ID: <33361392.6D02@bigfoot.com>
Source record: 95655

Help:
Who know the specification of.

TWT Amplifier XR603-1
7.0-12.4Ghz
Keltec Florida
Aiken industries Fort Walton beach FLA
Inside a: Watkins-Johnson WJ-3503-9 7.0-12.4Ghz (2200Hours)

How muts is the power input/output ?
Please help me

Dick, (The Netherlands)

3343. WTB: 3-500 CHIMNEY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: nimski1@aol.com
Message-ID: <19970324135400.IAA03151@ladder01.news.aol.com>
Source record: 95656

I AM LOOKING FOR A SINGLE 3-500Z CHIMNEY. IF YOU HAVE SUCH PLEASE CONTACT
ME AT 508-222-1261. OR E-MAIL AT NIMSKI1@AOL.COM 73'S STEVE W1SN

3344. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <5h67cf$ac4@flood.weeg.uiowa.edu>
Source record: 95657

GL Has given a wiring diagram for example.

1995 Handbook page 123.31 ; The 1500 watt amp using 3-500z.

Where is the problem? I think this is one design that conforms to the code. They have kept the ground separte from the neutral. The chassis is connected to the ground. They have used the neutral for loads, using the ground for saftey.

Is it the B+ return raised above ground potential by the metering resistor? Isn't the resistor there so the meter does not need an insultion for the 4KV B+ supply? Not many 1 amp meters are rated for 4KV ? Is there a problem with this? Have I missed something?

The post about transient supressors, the commercial units I have seen by-pass the (240vac) Hot(line) to Hot(lline); Hot(Lines) to neutral; then neutral to ground: This is not to say that is right just what I have seen.

WA0VYZ
john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

3345. UHF PA-Module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: DC6SN <DC6SN@aol.com>
Message-ID: <01bc386e$e7b83b60$LocalHost@default>
Source record: 95658
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

UHF Power Amplifier Modules

The MITSUBISHI M67729H2 has been developed and produced in large
quantities
for UHF cellular telephone applications.

Technical Data:
Output Power = 20 W
Gain = 21 dB
Harmonics = -40 db
Spurious Outputs = -70 dB
50 Ohm in/out

This module is also excellent suited for class C Amateur Radio PA's in the
70 cm-Band.
The low output of a UHF handheld may be amplified to about 20 W output! The
use of these modules is the easiest way to build a PA. There are various
discriptions in the ham literature.

I am now able to offer you this excellent module with a more than 10 dB!
price
reduction:

1 ea for DM 35,--
10 ea for DM 300,--

plus postage with C.O.D. charge.

Klaus-J. Sauvant Tel.: (+49) 2405-85123
DC6SN FAX: (+49) 2405-84623
Im Groetchen 38 Email: dc6sn@aol.com
D-52146 W&#65533;rselen
GERMANY

3346. Re: Screen supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33368578.5344796@netnews.worldnet.att.net>
Source record: 95659

On Sat, 22 Mar 1997 14:56:22 -0800, Bj&#65533;rn S&#65533;derholm
<sm2gxn.soederholm@boden.mail.telia.com> wrote:

>Hello everybody!
>
>I've built a amplifier with a pair of 4x500 tubes for several years ago,
>and it is grid driven. A good friend of mine told me how to fix the
>screen supply voltage in a way i've never heard before, now i use a
>seperate stab supply for the screen. Thing is that i did not quite
>understand all of it, he promised to send me a schematic digram over the
>circuit, but he has probably forgotten it.
>He said that you rectify part of the rf double or triple and fed it to
>the screen grid. And the big advantage was that the amplifier became much
>easier to drive.
>Could this really be something, unstabilized screen supply?

That is the worse imaginable way to get sceen voltage.

It is a very high IMD circuit.

The loading on the exciter varies with drive and screen current, since
the rectifiers load input RF on peaks ONLY.

I measured several PA's built this way, and the IMD was worse than
placing them in simple grounded grid.

That is probably why the circuit never became accepted in popular
usage.

Stick with your regular circuit, it works much better.

73 Tom

3347. Question: Charger for the HTX202

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: maynards@pacbell.net
Message-ID: <33364684.2305894@news.pacbell.net>
Source record: 95660
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I've misplaced the wallcharger for my HTX202 battery pack. The charger is 12vdc, 200ma. I have a couple of other wall plugs that are:

9vdc, 1A
12vdc, 1A

As long as I have the polarity correct on these plugs, could I charge from these and not hurt the nicads?

73,

Sam

3348. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703241352.FAA13786@mailbox1.ucsd.edu>
Source record: 95661

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 782a0.wrk; Mon, 24 Mar 1997 15:01:20 -1
Received: from [195.120.135.127] by infocomm.it id 78250.wrk; Mon, 24 Mar 1997 15:01:10 -1
Received: from [195.120.135.127] by infocomm.it id 781d0.wrk; Mon, 24 Mar 1997 15:01:00 -1
Received: from [195.120.135.127] by infocomm.it id 78190.wrk; Mon, 24 Mar 1997 15:00:50 -1
Received: from [195.120.135.127] by infocomm.it id 78130.wrk; Mon, 24 Mar 1997 15:00:40 -1
Received: from [195.120.135.127] by infocomm.it id 780e0.wrk; Mon, 24 Mar 1997 15:00:30 -1
Received: from [195.120.135.127] by infocomm.it id 78090.wrk; Mon, 24 Mar 1997 15:00:20 -1
Received: from [195.120.135.127] by infocomm.it id 78040.wrk; Mon, 24 Mar 1997 15:00:10 -1
Received: from [195.120.135.127] by infocomm.it id 777d0.wrk; Mon, 24 Mar 1997 15:00:00 -1
Received: from [195.120.135.127] by infocomm.it id 77780.wrk; Mon, 24 Mar 1997 14:59:50 -1
Received: from [195.120.135.127] by infocomm.it id 77730.wrk; Mon, 24 Mar 1997 14:59:40 -1
Received: from [195.120.135.127] by infocomm.it id 776e0.wrk; Mon, 24 Mar 1997 14:59:30 -1
Received: from [195.120.135.127] by infocomm.it id 77690.wrk; Mon, 24 Mar 1997 14:59:20 -1
Received: from [195.120.135.127] by infocomm.it id 77640.wrk; Mon, 24 Mar 1997 14:59:10 -1
Received: from [195.120.135.127] by infocomm.it id 775d0.wrk; Mon, 24 Mar 1997 14:59:00 -1
Received: from [195.120.135.127] by infocomm.it id 77580.wrk; Mon, 24 Mar 1997 14:58:50 -1
Received: from [132.239.1.53] by infocomm.it id 77470.wrk; Mon, 24 Mar 1997 14:58:16 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA12391 for <ham-homebrew-list@mailbox.ucsd.edu>; Mon, 24 Mar
1997 04:52:09 -0800 (PST)
Received: by noc.ucsd.edu; id EAA27233
sendmail 8.8.5/UCSD8.3
Mon, 24 Mar 1997 04:30:48 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA27212
sendmail 8.8.5/UCSD8.3
Mon, 24 Mar 1997 04:30:44 -0800 (PST)
Message-Id: <199703241230.EAA27212@noc.ucsd.edu>
Date: Mon, 24 Mar 97 04:30:43 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #210
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Mon, 24 Mar 97 Volume 97 : Issue 210

Today's Topics:
900 mhz amateur operation
C&K DT-3 10 Ghz Gunn DATASHEET
Drawing Software
GaAsFETs: Where to buy them?
Home made crystal(?) radio (3 msgs)
PHOENIX-SX Need Help !!!
Radio Shack Multimeter
Scanner -> Freq. Synthe?
Schematics and plans online
Screen supply
Soft-start circuits
Texas TIC108?????
WTB Millen Band Switch

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 22 Mar 1997 06:27:47 GMT
From: Thomas Mahanna <tmahanna@ziplink.net>
Subject: 900 mhz amateur operation

In rec.radio.amateur.homebrew W. D. Milner <wdmilner@atcon.com> wrote:

: >recently, I bought a 800 mhz cordless phone.
: Larry you sure it's 800 MHz? All I've seen are 900's.

Is this the cheapest, easiest way to generate a few milliWatts RF at
900Mhz?

Date: Sat, 22 Mar 1997 20:00:38 GMT
From: pa3cev_@_amsat.org (J.H.M. Wosten)
Subject: C&K DT-3 10 Ghz Gunn DATASHEET

Hi guys,

Would like to have info on a C&K DT-3 10 Ghz Gunn Module.

TIA Eric

pa3cev@amsat.org

Date: Sun, 23 Mar 1997 10:35:50 -0800
From: Randy Jones <rjones@plix.com>
Subject: Drawing Software

Dale Martin wrote:
>
> This may be an old question, so my apologies upfront.....
>
> Does anyone have any recommendations for software for creating
> schematics and wiring diagrams? I have tried a couple of low-end
> programs and found them too labor intensive and not really suitable.
>
> I'd appreciate anyone's suggestions, recommendations, and/or ideas.
>
> Thanks in advance.
>
> 73,
> --
> Dale Martin
> kg5u@hal-pc.org
> http://www.hal-pc.org/~kg5u

Two programs, I know of, are Electronics Workbench and CircuitMaker.

These programs let you draw AND debug (both analog and digital) circuits
on your computer. Both also cost about $300 each. These may be more than
you are really looking for.

A good reference for these and (drawing only) software would be
Electronics Now magazine "www.gernsback.com" who, recently, did a
comparison of several drawing and simulation software packages.

Hope this helps.

Radio Randy

Date: 24 Mar 1997 03:46:38 GMT
From: ka0yos@arn.net (ka0yos)
Subject: GaAsFETs: Where to buy them?

In article <5h20c1$6tp$1@independence.ecn.ou.edu>,
jspatric@mailhost.ecn.uoknor.edu says...
>
>I'm designing a preamp (with RF sensing) for 10m, 2m, 70cm, and
whatever
>other bands I need one for. I have designed one for each with
standard
>N-channel MOSFETs. Now, I see that all the preamps sold advertise
GaAs

>(Gallium Arsenide) FETs. I've looked in my Digikey, Mouser, etc.
>catalogs, but cannot find a GaAsFET. Where can I buy one? if you can
>help me out, I'd really appreciate it. If everything goes well, I may
>try to publish the designs in some Ham-related magazine. The way I've
>designed the ones so far, to choose which band you want, you just
change
>the values of parts in the design. All the preamps have the same
>template (sorta).
>
>Thanks,
>John
>--
> John Patrick (jpatrick@ou.edu) - KC5VEI
> Electrical/Computer Engineering Grad @ The University of Oklahoma
> * John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *

California Eastern Laboratories
4590 Patrick Henry Drive
Santa Clara, CA 95054
(408) 988-3500

Also Down East Microwave sells some of them. Try doing a web search
for them.

73, and Good Luck,
Joe ka0yos

Date: 23 Mar 1997 02:04:04 GMT
From: Tim Hynde <hynde@flash.net>
Subject: Home made crystal(?) radio

Rolf Mathson <rmathiso@ix.netcom.com> writes: > AC6V wrote:
> >
> > Claudio Fornaro wrote:
> > >
> > > Hi all,
> > > I'd want to build a "home made" radio receiver for AM (or even SW...)
> <snip>
> > > usually
> > > has no galena crystal at home...
> <snip>
> > Hi Claudio -- an admirable project. For the crystal detector -- try a
> > small whisker wire on a razor blade. It works -- I remember doing this
> > as a boy experimenting with xtal radios.
>
> The "gotcha" on using a razor blade for the detector is it had to be a
> "Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
> with a material that would behave as a rectifier. The connection could
> be made via a wire wraped around a sharpened pencil lead. They probably
> don't make these blades any longer :(

>
> Regards,
> Rolf

Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!

Tim, ka8ddz

Date: 24 Mar 1997 03:54:27 GMT
From: "Peter Gottlieb" <peter_gottlieb@msn.com>
Subject: Home made crystal(?) radio

commquart@aol.com wrote in article
<19970323234501.SAA25900@ladder01.news.aol.com>...
> In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde
<hynde@flash.net> writes:
>
> >
> >Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
> >
> >Tim, ka8ddz
> >
> >
>
> You can try it, but it won't work. You need a germanium diode, not
> silicon. Try a 1N34A.

Why won't it work, if you have enough signal strength?

The Si diode only takes about 2x the voltage to conduct as the Ge diode...

Am I missing something?

(Not that 1N34A's are that hard to get)

Date: Sun, 23 Mar 1997 12:01:03 -0800
From: hynde@flash.net
Subject: Home made crystal(?) radio

L. DE BRUIJN wrote:
>
> In article <332E58B6.41C6@athena.polito.it>,
> Claudio Fornaro <fornaro@athena.polito.it> wrote:
> >Hi all,
> >I'd want to build a "home made" radio receiver for AM (or even SW...) by
> >putting
> >together pieces that can be found at home, that is you have not to buy
> >them in an
> >electronic shop.
> >To explain better: I intend to build capacitors (maybe with alluminium

> >sheets and
> >plastic bags), inductors (copper wire), the crystal is a problem... one
> >usually
> >has no galena crystal at home... the loudspeaker maybe is a bigger
> >one...
> >Has anyone ever seen such a project made or has s/he any idea about
> >building it?
> >Thanks in advance.
> > Claudio
> You wouldn't *need* a crystal, you could use an inductor/capacitor vfo.
>
> 73 & good luck de Laurens

He already has the vfo, thats the "oatmeal box" or "toilett paper roll" inductor with a variable cap. The crystal he's referencing is the one used to detect the audio from the AM signal not one used in the vfo.

You could build a variable cap, but Im pretty sure the default meathod would be to build an inductor around a tube, about 160 turns of #22, 24, 26 wire around a toilett paper roll will get you in the ball park for use with a 365 pf cap. You can use a fixed value cap and then build a device to allow you to slide along the inductor. Glue the coil to the form with dope and when dry use very light sandpaper to remove the insulation in a straight line across the coil, your frequency will change depending on where you tap the coil.

You will definatly need a set of old WW2 high impeadence phones or a cyrstal earphone, there is not enough energy to drive 8ohm headsets or speakers.

To keep your spirits high though, you may want to use a 365pf tuning cap from an old AM radio and use a diode instead of the cat whisker arrangement. Once you get that working you can experiment with different detectors and tuning meathods. I just finished one for my bosses son using the above. They are still fun to build.

73, Tim, ka8ddz

Date: 22 Mar 1997 07:21:28 GMT
From: evincent@mediom.qc.ca (Eric Vincent)
Subject: PHOENIX-SX Need Help !!!

Hello, can you tell me how can y programm this radio (GE Phoenix-SX).

COMB: N5HH1W40TB
SERIAL:4061409

And if possible give me more infos about it, can I programm in ham band...
???

Thank you in advence.

Date: 22 Mar 1997 01:25:32 GMT
From: tlazzaro@oncomdis.on.ca (Tom Molica Lazzaro)
Subject: Radio Shack Multimeter

Thanks for reading my post.
I need to know the value of R21 in RADIO SHACK MULTIMETER,
model 22-267. This is an Autoranging digital multimeter with three
banana jacks at the bottom labelled 10A, Common, V, ohm, ma, and diode.
R21 is part of the 10A circuit and mounted on the main board.
The color code can't be read now, cause of the discoloration
due to heat. It appears to be half watt wirewound, and last acted much
like a 'fusible resistor'. Any help would be greatly appreciated.
My name and call has been altered to protect my innosence.
Tom VE3KZJ

Date: 22 Mar 1997 06:30:49 GMT
From: Thomas Mahanna <tmahanna@ziplink.net>
Subject: Scanner -> Freq. Synthe?

Is there anyway to modify my inexpensive scanner for use as a digital
frequency synthesizer? I was hoping it was possible to tap the L.O. and
get a 50 ohm output of a few uWatts. Is it possible?

Date: Sun, 23 Mar 1997 22:59:12 -0500
From: Woody White <"eMail "@my.www.page.Mailto>
Subject: Schematics and plans online

Matthew,

There are a few on my www page. Also there are links to several other
sites which have circuits.....

73, Woody

Matthew Ballance wrote:
>
> Does anoyone know of a site on the web where you can download schematics,
> plans, or other information on homebrew TX/RX equipment?
>
> Matthew Ballance
> KF4BGQ Greensboro, NC

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

Date: Sat, 22 Mar 1997 14:56:22 -0800
From: Bj&#65533;rn S&#65533;derholm <sm2gxn.soederholm@boden.mail.telia.com>
Subject: Screen supply

Hello everybody!

I've built a amplifier with a pair of 4x500 tubes for several years ago,
and it is grid driven. A good friend of mine told me how to fix the
screen supply voltage in a way i've never heard before, now i use a
seperate stab supply for the screen. Thing is that i did not quite
understand all of it, he promised to send me a schematic digram over the
circuit, but he has probably forgotten it.
He said that you rectify part of the rf double or triple and fed it to
the screen grid. And the big advantage was that the amplifier became much
easier to drive.
Could this really be something, unstabilized screen supply?
Any thing on the subject will be greatly appreciated whether it come to
ng or my e-mail adr.

Thank's in advance!

Bjorn/sm2gxn

Date: Fri, 21 Mar 1997 12:58:36 -0800
From: measures@mail.vcnet.com (R. L. Measures)
Subject: Soft-start circuits

In article <3331ed1a.52561626@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On 20 Mar 1997 22:09:10 GMT, jstroppe@uhl.uiowa.edu (John Stroppel)
> wrote:
>
>
> >
> >Well this is my $.02
> >
> >
> >WA0VYZ
> >john
>
> John, If you look at the 95 Handbook, they return filament transformer
> and other leads to the chassis in some PA designs, that is a bad idea
> and against wiring standards.
>
> If the neutral and ground lead should ever break or become
> disconnected, the chassis would be hot with 120 VAC.
>
> If you look at the two HV power supplies by Mark Wilson, neither has a
> chassis safety ground. Not a good idea.

3349. IC TA8164p

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: aibes@aibes.ksu.ras.ru
Message-ID: <AA0u4UY0pst@aibes.ksu.ras.ru>
Source record: 95662

Is anyone able to help me? I need info about IC TA8164P.
Pinout first of all and discription if possible.

Thanks in advance,- Alex (UA4RO)

3350. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703240118.RAA22950@mailbox1.ucsd.edu>
Source record: 95663

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 13640.wrk; Mon, 24 Mar 1997 02:27:08 -1
Received: from [195.120.135.127] by infocomm.it id 135c0.wrk; Mon, 24 Mar 1997 02:26:56 -1
Received: from [195.120.135.127] by infocomm.it id 13550.wrk; Mon, 24 Mar 1997 02:26:44 -1
Received: from [195.120.135.127] by infocomm.it id 134c0.wrk; Mon, 24 Mar 1997 02:26:26 -1
Received: from [195.120.135.127] by infocomm.it id 13420.wrk; Mon, 24 Mar 1997 02:26:06 -1
Received: from [195.120.135.127] by infocomm.it id 13380.wrk; Mon, 24 Mar 1997 02:25:52 -1
Received: from [195.120.135.127] by infocomm.it id 13310.wrk; Mon, 24 Mar 1997 02:25:36 -1
Received: from [195.120.135.127] by infocomm.it id 132a0.wrk; Mon, 24 Mar 1997 02:25:22 -1
Received: from [195.120.135.127] by infocomm.it id 13230.wrk; Mon, 24 Mar 1997 02:25:08 -1
Received: from [195.120.135.127] by infocomm.it id 131a1.wrk; Mon, 24 Mar 1997 02:24:54 -1
Received: from [195.120.135.127] by infocomm.it id 13120.wrk; Mon, 24 Mar 1997 02:24:38 -1
Received: from [195.120.135.127] by infocomm.it id 13090.wrk; Mon, 24 Mar 1997 02:24:18 -1
Received: from [195.120.135.127] by infocomm.it id 13000.wrk; Mon, 24 Mar 1997 02:24:00 -1
Received: from [195.120.135.127] by infocomm.it id 12f80.wrk; Mon, 24 Mar 1997 02:23:48 -1
Received: from [195.120.135.127] by infocomm.it id 12f00.wrk; Mon, 24 Mar 1997 02:23:34 -1
Received: from [195.120.135.127] by infocomm.it id 12e81.wrk; Mon, 24 Mar 1997 02:23:18 -1
Received: from [132.239.1.53] by infocomm.it id 12dd0.wrk; Mon, 24 Mar 1997 02:23:00 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id QAA21347 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 23 Mar
1997 16:22:05 -0800 (PST)
Received: by noc.ucsd.edu; id PAA13334
sendmail 8.8.5/UCSD8.3
Sun, 23 Mar 1997 15:54:50 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id PAA13315
sendmail 8.8.5/UCSD8.3
Sun, 23 Mar 1997 15:54:47 -0800 (PST)
Message-Id: <199703232354.PAA13315@noc.ucsd.edu>
Date: Sun, 23 Mar 97 15:54:46 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #209
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

##This message is create by Dynamic Mail - a most advanced bulk email software for the online marketer to extract MILLIONS of email address from the internet , send message to unlimited email addresses, or post ads to any number of selected newsgroup. For more information please send email to : apexpi@tig.com.au or visit our web site at : http://homepages.tig.com.au/~apexpi/dynamail.htm##Sorry for the bandwidth, just a test.

Date: Sat, 22 Mar 1997 20:58:12 +0100
From: Gene Neill <gneill@ge.maxess.ch>
Subject: Tone Burst Generator

Leon Heller wrote:
>
> In article <3331A8C6.7165@ge.maxess.ch>, Gene Neill
> <gneill@ge.maxess.ch> writes
> >I just got to Europe and my Yaseu FT470 does not have the tone burst
> >generator needed to open repeaters and I'm not good at whistling.
> >Anyone have a schematic for a 1750 Hz tone burst generator?
> >
> >Thanks in advance, WA7NPP/HB9
>
> You need a 4060 CMOS divider IC, which contains an inverter that can be
> used as an oscillator. Pin 16 is +5 to +15V. Ground is pins 8 and 12.
> Take the output from pin 14 via a 100 - 270K resistor. A 455 KHz ceramic
> resonator goes across pins 10 and 11, with a 1M resistor across it. Both
> ends of the resonator are connected via 1n capacitors to ground.
>
> Leon
> --
> Leon Heller
> Amateur radio callsign: G1HSM
> Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
> Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)
Leon,
thank you. I'll do it as soon as I can get the part.

Date: 23 Mar 97 19:26:34 GMT
From: Peter Parker <parkerp@pcug.org.au>
Subject: Who knows e-mail address TenTec ???

Bart - Have a look at the Australian QRP Home Page (URL below). Click on Links and then 'Ten Tec'. You should find their e-mail address there.

73,
--

____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
____

Date: Sat, 22 Mar 1997 18:32:25 -0800
From: AC6V <ac6v@ix.netcom.com>
Subject: Who knows e-mail address TenTec ???

Bart Mudde wrote:
>
> I am looking for the manual of the TenTec Corsair II.
> Therefor I am looking for the e-mail address of TenTec.
> Who knows an address wich is good and I also will get an answer ?
> 73 de Bart PA3GGM.

Hello Bart -- from the Ten Tec WWW Page:
E-mail sales@tentec.com

If you can access the Web -- they have a page at URL:
http://www.tentec.com/

Good Luck
Rod in San Diego
--
AC6V DX Reference Page
With Over 700 Links To DX And HAm Radio
http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

I Transceive -- Therefore I Perceive -- AC6V

Date: Sun, 23 Mar 1997 04:28:17 -0800
From: measures@mail.vcnet.com (R. L. Measures)
Subject: WTB: Alpha 77Dx Plate Choke

In article <19970322004401.TAA09972@ladder01.news.aol.com>,
johnsonhe@aol.com (JohnsonHE) wrote:

> Jeez! And all this time I thought the arcing stuff was because ETO didn't
> use Nichrome wire for his parasitic chokes!
>
> Paul, ring my chimes if you still need one.

>
> W4ZCB

HV-RFC arcing is most commonly caused by a self-resonance in the choke
being too close to an operating frequency. This problem can be avoided by
checking the choke with a dipmeter after it is installed--before 'firing
up'. If you find a self-resonance within 5% of an operating frequency,
remove turns as needed---unless you are into fireworks.

The only amplifiers I know of that have a HV-RFC VHF-resonance problem is
the Henry 2K4/3kA series that use a 29uH HV-RFC, which Henry says has 50uH.

--
--Rich-- ag6k, 805-386-3734

Date: 23 Mar 1997 22:36:16 GMT
From: pkluwe@aol.com (PKluwe)
Subject: WTB: Alpha 77Dx Plate Choke

Rich-- ag6k wrote:
>HV-RFC arcing is most commonly caused by a self-resonance in the choke
>being too close to an operating frequency. This problem can be avoided
by
>checking the choke with a dipmeter after it is installed--before 'firing
>up'. If you find a self-resonance within 5% of an operating frequency,
>remove turns as needed---unless you are into fireworks.

Correct: in this case, the former owner of this Alpha 77D amplifier tried
to operate it on 24 mhz to ill effect. The original plate choke in this
unit is a B&W number 800 with 6 turns removed. Judging from the evidence,
it would appear that the 24 mhz self-resonance broke the winding, thereby
unraveling the coil, thereby shorting 4000 VDC to ground in several places
as it unwound. "Fireworks" might be too restrained as a descriptive term.

HE Johnson - - W4ZCB wrote:
> Paul, ring my chimes if you still need one.

Nope, I found one, but thank you very much for the offer. Now if you
happen to have some low beta (red dot) MRF421 transistors lying around
(for my signal/one milspec 1030c), please let me know...

Thanks to everyone who helped me out with this item.

73, Paul Kluwe, W8ZO

Date: Fri, 21 Mar 1997 12:55:56 GMT
From: tpotts@clemson.edu
Subject: wtb:kenwood MJ8/4

i need kenwood mj8/4 cable used to adapt mc60 mike to 830s radio.
thanks keruuc.

```
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End of Ham-Homebrew Digest V97 #209
******************************
```

3351. WANTED: plug-in coil forms and sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5h6bli$b32@sf18.dseg.ti.com>
Source record: 95664
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I need at least two each of the old plug-in coil forms and sockets for a CW transmitter project I'm working on (a 6V6 oscillator driving an 807 PA). Either 4-pin or 5-pin types would be fine, about 1-1/4" in diameter or close to that.

I could also use a couple of Millen ceramic plug-bars and jack-bars for my parts stock (future projects, y'know?).

ALSO... I need some B & W 3011 and 3015 coils (unused only, please) for transmitter projects.

73 de K5DH! :)

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

3352. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703240118.RAA22951@mailbox1.ucsd.edu>
Source record: 95665

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 13630.wrk; Mon, 24 Mar 1997 02:27:08 -1
Received: from [195.120.135.127] by infocomm.it id 13590.wrk; Mon, 24 Mar 1997 02:26:50 -1
Received: from [195.120.135.127] by infocomm.it id 13520.wrk; Mon, 24 Mar 1997 02:26:38 -1
Received: from [195.120.135.127] by infocomm.it id 134b0.wrk; Mon, 24 Mar 1997 02:26:24 -1
Received: from [195.120.135.127] by infocomm.it id 13460.wrk; Mon, 24 Mar 1997 02:26:12 -1
Received: from [195.120.135.127] by infocomm.it id 133c0.wrk; Mon, 24 Mar 1997 02:25:56 -1
Received: from [195.120.135.127] by infocomm.it id 13340.wrk; Mon, 24 Mar 1997 02:25:40 -1
Received: from [195.120.135.127] by infocomm.it id 132d0.wrk; Mon, 24 Mar 1997 02:25:26 -1
Received: from [195.120.135.127] by infocomm.it id 13240.wrk; Mon, 24 Mar 1997 02:25:10 -1
Received: from [195.120.135.127] by infocomm.it id 131a0.wrk; Mon, 24 Mar 1997 02:24:52 -1
Received: from [195.120.135.127] by infocomm.it id 13131.wrk; Mon, 24 Mar 1997 02:24:38 -1
Received: from [195.120.135.127] by infocomm.it id 130d0.wrk; Mon, 24 Mar 1997 02:24:26 -1
Received: from [195.120.135.127] by infocomm.it id 13050.wrk; Mon, 24 Mar 1997 02:24:12 -1
Received: from [195.120.135.127] by infocomm.it id 12fa0.wrk; Mon, 24 Mar 1997 02:23:54 -1
Received: from [195.120.135.127] by infocomm.it id 12f01.wrk; Mon, 24 Mar 1997 02:23:34 -1
Received: from [195.120.135.127] by infocomm.it id 12e80.wrk; Mon, 24 Mar 1997 02:23:18 -1
Received: from [132.239.1.53] by infocomm.it id 12dd0.wrk; Mon, 24 Mar 1997 02:23:00 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id QAA21347 for <ham-homebrew-list@mailbox.ucsd.edu>; Sun, 23 Mar
1997 16:22:05 -0800 (PST)
Received: by noc.ucsd.edu; id PAA13334
sendmail 8.8.5/UCSD8.3
Sun, 23 Mar 1997 15:54:50 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id PAA13315
sendmail 8.8.5/UCSD8.3
Sun, 23 Mar 1997 15:54:47 -0800 (PST)
Message-Id: <199703232354.PAA13315@noc.ucsd.edu>
Date: Sun, 23 Mar 97 15:54:46 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #209
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Sun, 23 Mar 97 Volume 97 : Issue 209

Today's Topics:
88Mh Coils needed (2 msgs)
Drawing Software
F.S. - Tubes, etc...
FS Jennings UCS300 vac var caps (2)
Good Source For Amplifier Tips
HELP! COSSOR SCOPE /EHT transformer RQd
HELP large SMART/TANDY YELLOW DVM FAULT
hlp pls, i need change my tone voice
Home made crystal(?) radio (2 msgs)
Making Coils
Manuell for HW-8 ??
Need Help With Microwave TWT
Soft-start circuits (3 msgs)
Test
Tone Burst Generator
Who knows e-mail address TenTec ??? (2 msgs)
WTB: Alpha 77Dx Plate Choke (2 msgs)
wtb:kenwood MJ8/4

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 22 Mar 1997 13:47:15 GMT
From: johnsonhe@aol.com (JohnsonHE)
Subject: 88Mh Coils needed

He can make a better BP filter around a TL084 op-amp than he'll ever get
with 88 mH toroids. Costum about 100 Yen

W4ZCB

Date: Sat, 22 Mar 1997 08:18:48 +0000
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: 88Mh Coils needed

In article <3332FF12.3AE7@cyberhighway.net>, Russ Ellsworth
<russcwv@cyberhighway.net> writes

>Anyone out there in Homebrew land have any of the famous 88 Mh repeater
>coils? I am looking for 6 or 7 to send to a Ham in Japan so he can build
>an inexpensive BP filter for RTTY. They aren't easily available there
>apparently. I fyou have some you can spare, e-mail me.
>

88 mH toroids are probably very difficult to obtain, now. He could get
some pot cores and wind his own.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

Date: 23 Mar 1997 16:41:55 GMT
From: "Dale Martin" <kg5u@hal-pc.org>
Subject: Drawing Software

This may be an old question, so my apologies upfront.....

Does anyone have any recommendations for software for creating
schematics and wiring diagrams? I have tried a couple of low-end
programs and found them too labor intensive and not really suitable.

I'd appreciate anyone's suggestions, recommendations, and/or ideas.

Thanks in advance.

73,
--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Date: 23 Mar 1997 05:53:08 GMT
From: rog42@aol.com (Rog42)
Subject: F.S. - Tubes, etc...

FOR SALE: Tubes, test equipment, radios including Hallicrafters,
Hammarlund, and Philco. Other older tube type radios and radio related
publications. Schematics for many older radios just $1. Tube Manuals,
Tube Substitution books, Service Manuals, QST magazines, much more from
the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock -
Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings
on RADIO list - #322-T.

Date: Sat, 22 Mar 1997 19:41:50 -0700
From: Brian <haberlb@no_spamcadvision.com>
Subject: FS Jennings UCS300 vac var caps (2)

I have for sale 2 Jennings UCS300 vacuum variable capacitors.
these are new and unused in the original boxes.
These are labeled 7.5 Kv, 10 to 300 pf.
$125.00 CDN. + shipping

E-mail for more info. (remove "no_spam")
Brian

Date: 22 Mar 1997 05:18:00 GMT
From: "Will, KN6DV" <kn6dv@qnet.com>
Subject: Good Source For Amplifier Tips

For those who are interested in the discussion I have uploaded Part 14! to
my home page web side:

http://www.av.qnet.com/~kn6dv

Looks like things are slowing down so this might be the last upload, I will
leave this archive on the web till after Dayton and maybe I can transfer it
to some FTP side for down loading.
Thanks 73 Will KN6DV

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for attractive vices, he will fail.
(Walter Lippmann)

Date: Sun, 23 Mar 1997 23:29:51 +0000
From: CHRIS PURDY <jj56@dial.pipex.com>
Subject: HELP! COSSOR SCOPE /EHT transformer RQd

HELP! COSSOR SCOPE /EHT transformer RQd

BY any chance has anyone ex-cossors/harlow etc
got in their junk box a COSSOR CDU120 little
EHT transformer-4 inches square,5 -pins primary
and 2 pins secondary(1kv and 2kv),ferrite core?

or has anyone got an old CDU 110,120,150 for
spares/repair in their junk shack?
I believe I saw one at Cambridge ham rally
end Febuary-but mine was ok then!

If not does anyone know calendar dates/locations
of Sunday Ham Rallies this year?

email to: chris purdy
jj56@dial.pipex.com

or
chrisp@spl.co.uk

--
regards Chris R. Purdy Signal Processors Ltd,Cambridge Science
Park,Cambridge CB4 4GJ ENGLAND
voice: 01223 420357 fax: 01223 420883 main E-mail: chrisp@spl.co.uk

website: www.spl.co.uk/satcomms/index.html bbs:01223 576895 alternative
email: jj56@dial.pipex.com

Date: Sun, 23 Mar 1997 23:30:47 +0000
From: CHRIS PURDY <jj56@dial.pipex.com>
Subject: HELP large SMART/TANDY YELLOW DVM FAULT

HELP large SMART/TANDY YELLOW DVM FAULT

SMART DVM,YELLOW 1" high digits model 22-7215
from TANDY(imported for intertan UK)

Help! just zapped 200s ranges on my DVM
(was on 1000v when 1500v applied it went phut)
other ranges & digits are ok but failed ranges are

200v,200uA,200mA,200ohms,200k

anyone got a circuit or know wether its likely
main DVM chip has gone or which chip /diodes
might need replacing?
(or have another faulty one for spares)

email to: chris purdy
jj56@dial.pipex.com
or
chrisp@spl.co.uk

--
regards Chris R. Purdy Signal Processors Ltd,Cambridge Science
Park,Cambridge CB4 4GJ ENGLAND
voice: 01223 420357 fax: 01223 420883 main E-mail: chrisp@spl.co.uk

website: www.spl.co.uk/satcomms/index.html bbs:01223 576895 alternative
email: jj56@dial.pipex.com

Date: Wed, 12 Mar 1997 22:50:58 +0000
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: hlp pls, i need change my tone voice

In article <5g4o64$5r0$1@diana.ibernet.es>, Alfonso
<alfonsog@redestb.es> writes
>Hi, all.

>
>I need help to modify my tone voice. I have a problem with my voice,
>more people, don't think my age, no think my callsign, is similary a
>girl voice. I want down the frequency to be similary with a men.
>
>Do you know any chip, construccion or circuit to made this mod?
>
>Thanks for your help. The bests 73's EB3FYJ

OKI have a Speech Pitch Controller chip, the MSM6322GSK, that should do
what you want. It costs #10.20 (UK) from Maplin, and the circuit is in
their current catalogue. You can shift the pitch of input speech in 17
steps either one octave up or one octave down. Maplin is on 01702
554000.

Leon
--
Leon Heller, G1HSM
leon@lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home)
+44 (0) 1344 385556 (work)

Date: 23 Mar 1997 23:45:44 GMT
From: commquart@aol.com
Subject: Home made crystal(?) radio

In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde <hynde@flash.net> writes:

>
>Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
>
>Tim, ka8ddz
>
>

You can try it, but it won't work. You need a germanium diode, not
silicon. Try a 1N34A.

Pete

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

Date: Sat, 22 Mar 1997 08:14:59 +0000
From: Leon Heller <leon@lfheller.demon.co.uk>
Subject: Home made crystal(?) radio

In article <33331261.22E9@ix.netcom.com>, Rolf Mathson
<rmathiso@ix.netcom.com> writes
>AC6V wrote:
>>
>> Claudio Fornaro wrote:
>> >
>> > Hi all,
>> > I'd want to build a "home made" radio receiver for AM (or even SW...)
><snip>
>> > usually
>> > has no galena crystal at home...
><snip>
>> Hi Claudio -- an admirable project. For the crystal detector -- try a
>> small whisker wire on a razor blade. It works -- I remember doing this
>> as a boy experimenting with xtal radios.
>
>The "gotcha" on using a razor blade for the detector is it had to be a
>"Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
>with a material that would behave as a rectifier. The connection could
>be made via a wire wraped around a sharpened pencil lead. They probably
>don't make these blades any longer :(

I vaguely remember that the blue finish involves heating with a coating
of carbon powder on the surface. Something similar is used with gun
barrels, I think. The iron carbide layer must act as a semiconductor.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

Date: Mon, 10 Mar 1997 18:17:03 -0500
From: Madjid <mboukri@cam.org>
Subject: Making Coils

Meg wrote:
>
> Does any one know how to make a .5uf and a 1uf coil ??
> Like.... give the info on what AWG # on the wire and how long it should be
> and how many times you wrap it around something, like a pencil.

Coils are measured in Henries ;(
There is coil calculation program at:
http://oak.oakland.edu:8080/pub/hamradio/arrl/bbs/programs/coil112.exe

----
Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

Date: 14 Mar 1997 11:50:17 GMT
From: Uwe Cappeller <cappelle@mailer.uni.marburg.de>
Subject: Manuell for HW-8 ??

Thank for reading this message!

I am searching a manuall an the connecting diagramm for a Heathkit
HW-8. Can anybody help me ?

73/55 de Uwe
DL5FDK

Date: 23 Mar 1997 00:57:21 GMT
From: sidener@saucer.cc.umr.edu (Scott Sidener)
Subject: Need Help With Microwave TWT

Hi, I just got an unused Hughes TWT amplifier module and I need to find
out what frequency it is for and how to make a power supply for it and
how to use it.

I'n not asking much :)

Here is the info on the label:

HUGHES Type 640HS-8 Ser# H-4952

Ef 6.3V Ik 82.6 ma Ek -3.38 kV VEb -1.69 kV Ea 200 V

If anyone can help me identify this orgive me any advice, I would really
appreciate it!

Thanks,

Scott Sidener N0WFL sidener@umr.edu

Date: Sun, 23 Mar 1997 02:58:31 -0800
From: measures@mail.vcnet.com (R. L. Measures)
Subject: Soft-start circuits

In article <33330bda.36190235@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

> On Fri, 21 Mar 1997 12:49:40 -0800, measures@mail.vcnet.com (R. L.
> Measures) wrote:
> >
> > > Unlike DC coil relays, AC coil relays are not very satisfactory for
> >step-start service because they do not close positively when they reach the
> >pull in voltage.
> > IMO, it would be preferable to connect a small transformer to the primary
> >of the HV transformer. The secondary of the small transformer is
> >rectified, filtered, and used to power the DC coil of the step-start relay.
> >

> >
> >The step point can be contolled by placing resistance in series with the
> >relay's coil.
> >
>
> Not only that, AC relays vibrate.
>
> 120 Vdc relays and higher are available.
>
> 73 Tom

The problem is that when the 240vac from the HV transformer primary winding
is rectified and filtered, it produces an unwieldy 300vdc. Since 24vdc
relays are fairly common, when I specify the windings for a Peter Dahl
custom made transformer, I include a 15vac@1a winding to power the
step-start relay.

--
--Rich-- ag6k, 805-386-3734

Date: Sun, 23 Mar 1997 03:21:06 -0800
From: measures@mail.vcnet.com (R. L. Measures)
Subject: Soft-start circuits

In ar

3353. ScoutElmer Award for you!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: myriad1@ix.netcom
Message-ID: <myriad1-ya02348000240397100017000 1@nntp.ix.netcom.com>
Source record: 95666
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

YOU DON'T NEED TO BE A SCOUT OR LEADER TO EARN THE ScoutElmer AWARD!!!
ScoutElmer Award for helping Scouts become ham ops

WHO QUALIFIES FOR THE AWARD?
1. Licensed ham op (any level)
2. Scout or Adult Leader (past or present) or...
3. Any ham that know someone (Scout or leader) currently active in a Scout unit.

WHAT IS REQUIRED FOR THE AWARD?
1. Agree to respond to Scouts via email with their questions about ham radio in your local area, for 1 month.

HOW DO I SIGN-UP FOR THE AWARD?
Email to the address below and fill in the blanks.... that's it!
1. Name & Ham Call Sign:

2. Email address:

3. Locations: (ie London, UK; Los Angeles, CA, USA; etc)

4. What do you want to do: (email only; email & phone; email, phone & ham class)

5. Your Scout affiliation & position (enter past affiliation and date if applies):
(If no current or past affiliation) Your Scout or Scout leader sponsor:

6. Optional comments for your ScoutElmer listing: (ie. ARC Club listing, Explorer post, Troop etc.)

WHAT DO I GET?
ScoutElmer Award recipients will receive special award logo graphic you can add to your website. You also get a certificate (suitable for framing).
Lastly the satisfaction that you helped promote amateur radio in Scouting.

If you've already applied for the award, sorry for the email. You should receive confirmation in the next few days.
YIS
73
Mel Goldberg KO6TF
ASM Troop 319 & Webmaster Advisor
myriad1@ix.netcom.com
http://www.ocbsa.org/troop319/ham.htm

ScoutRadio WWW is a "good turn project" of Troop 319, Huntington Beach, California USA.

There are over 250,000 (500,000 worldwide) hams who are or have been envolved in the Scouting movement, helping their communities in times of natural disasters, emergencies and humanitarian aid. We hope you or your ARC can help local Scouts get into ham radio and keep the amateur radio service strong.

3354. Re: 900 MHz power question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <RfV3HOAsosNzEwfh@two-way.demon.co.uk>
Source record: 95667

You'll probably give up trying to get your 900Mhz unit to talk farther,
it's down to the design.
I sell Long Range Cordless Phones and to get decent range at 900Mhz you
would have to run to a non-approved unit. Some of the Panasonics claim
several Km, but even with the optional antenna for the base thtill ..P.
I don't know what country you are in but you may wish to check out the
different frequencies allowed and consider trying somerthing else.
I've put a marine cellular 9db antenna on a Rabbit 900Mhz digital phone,
even with seriously expensive coax and it;'s still C..P!
I could bancrupt you and sell you a Senao unit out of Taiwan to give you
50Km+....
Phil UK.
(The Long Range Cortdless Phone Man.)In article <01bc326d$f99ef6e0$ac1e9
2d0@lcarlson.northernnet.com>, Les <lcarlson@northernnet.comX> writes
> Any ideas on where one might look or ask to get information to
>increase
>the distance a 900 MHz cordless home telephone could operate
>between the handset and the base.
> I live in a rural setting and work in several different out
>buildings. None of which are over 100 feet apart. A brand new
>fully charged battery in
>my 900 MHz phone will barely allow operation between hand set
>and base. After the new battery has been used a couple of
>weeks, and even if it is
>fully charged, operation of the phone breaks up. I normally let
>the battery
>near fully discharge before fully recharging.
> What I'm wondering is if it is possible to connect an
>additional 1 1/2
>volt rechargeable battery in series? Will this (without ruining
>any
>circuitry) allow the phone to have a greater more reliable
>range?
>
> Thanks,
> Les
>
>"Bulk e-mailers can be thwarted by adding an
> unnecessary 'character' to your e-mail return address.
>-Remove the trailing 'X' from
> my address if you wish to reply."
>
>Hillary commenting on the release of subpoenaed documents:
> "I'm not going to have some reporters

> pawing through our papers.
> We are the president."
>--

--
philip de cadenet

Turnpike evaluation. For information, see http://www.turnpike.com/

3355. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3336c59f.5653894@netnews.worldnet.att.net>
Source record: 95668

On 24 Mar 1997 15:42:07 GMT, jstroppe@uhl.uiowa.edu (John Stroppel)
wrote:
>
> Where is the problem? I think this is one design that conforms to the
>code. They have kept the ground separte from the neutral. The chassis is
>connected to the ground. They have used the neutral for loads, using the
>ground for saftey.

Look again. Tansformers and other 120 v devices return to the chassis.
That is against code. If the ground lead would ever fail, the chassis
would be at 120 volts!

All line operated devices need to return only to the power line
neutral, and not be connected to the chassis by any means.

Only the safety ground should be connected to the chassis.

Read the text, they specifically tell you the chassis MUST be
insulated from the cabinet.

Please tell me HOW to build a shielded RF amplifier, and insulate the
chassis from the cabinet.

> Is it the B+ return raised above ground potential by the metering
>resistor? Isn't the resistor there so the meter does not need an
>insultion for the 4KV B+ supply? Not many 1 amp meters are rated for
>4KV ? Is there a problem with this? Have I missed something?

Yes, if there is a fault the negative rail will fly up to full high
voltage. Negative rails should be clamped with diodes, and other
compinents that fail shorted. Not with resistors that fail open during
faults.

> The post about transient supressors, the commercial units I have seen
>by-pass the (240vac) Hot(line) to Hot(lline); Hot(Lines) to neutral;
>then neutral to ground: This is not to say that is right just what I
>have seen.

But the neutral is not grounded to the chassis or safety ground, only
a safety ground is tied to the chassis.

73 Tom

3356. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <5h71u0$p3k@flood.weeg.uiowa.edu>
Source record: 95669

<5h6rfh$s6u@flood.weeg.uiowa.edu>
Distribution:

Tom:

Ok. I agree on the clamping of the resistor. I can see how it will take
time to open the fuses in the primary of the step start circuit. During that
time the B- rail will go twords B+ with respect to the chassis ground.

WA0VYZ
john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

3357. search for solid state Grid Dip Meter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: techno@actcom.co.il
Message-ID: <E7KJo6.7t5@nonexistent.com>
Source record: 95670
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.antenna,sci.electronics.equipment

Hi All,

I'm looking for a solid state Grid Dip Meter (preferably the Millen
Solid State version). Delivery is to Israel.
Can anyone help?

regards,
techno

(P.S: please email me directly in addition to posting here, so no
responses are missed. Thanks!)

3358. FS:rg-178 mini coax

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: DENNYV <DENNYV@clarityconnect.com>
Message-ID: <3337519B.3A36@clarityconnect.com>
Source record: 95671

I have a quantity of RG-174 minature 50 ohm coax for sale as follows:
25ft for $6 ppd. 50ft for $11 ppd and 100ft for $20 ppd. It is in new
condition but has been in storage for several years.

I have a somewhat limited supply so please E mail me First
ADDR is
Dennis Voorhees
712 North Elmer Ave
Sayre,PA 18840-1804

3359. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <5h6rfh$s6u@flood.weeg.uiowa.edu>
Source record: 95672

eeg.uiowa.edu> <3336c59f.5653894@netnews.worldnet.att.net>
Distribution:

Tom:

He (designer) has put the chassis off from ground. If this chassis is in another enclosure (cabinet) and the cabinet is ground has this violated the code? How many analog/digital systems are around that have two or three levels of ground? Once inside the enclosure which is "grounded" can you run another rail?

WA0VYZ
john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

3360. Re: 900 MHz power question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: taylord@ecn.purdue.edu
Message-ID: <taylord-2403971821080001@instru1.ecn.purdue.edu>
Source record: 95673

In article <01bc326d$f99ef6e0$ac1e92d0@lcarlson.northernnet.com>, "Les"
<lcarlson@northernnet.comX> wrote:

> Any ideas on where one might look or ask to get information to
> increase
> the distance a 900 MHz cordless home telephone could operate
> between the handset and the base.
> I live in a rural setting and work in several different out
> buildings. None of which are over 100 feet apart. A brand new
> fully charged battery in
> my 900 MHz phone will barely allow operation between hand set
> and base. After the new battery has been used a couple of
> weeks, and even if it is
> fully charged, operation of the phone breaks up. I normally let
> the battery
> near fully discharge before fully recharging.
> What I'm wondering is if it is possible to connect an
> additional 1 1/2
> volt rechargeable battery in series? Will this (without ruining
> any
> circuitry) allow the phone to have a greater more reliable
> range?
>

You must have either one of the poorer designs, or a defective unit.

I have two Uniden 900 MHz units: the EXP-901 (? model from memory) and the
EXP-9100 Spread Spectrum version. Both have a range of 2500+ feet with the
base in my office inside a brick home on the first floor. At work, I can
roam a 5 story brick/steel/concrete building with very few dead spots,
including none in the computer room.

You can buy these phones for $125-150 at discount stores, maybe even less.
I had a GE, and took it back because it was worse than my Uniden 46 MHz
model.... YMMV

(all views are my own, I don't have any interest in any commercial co., etc..)
73's, de KB9KNS

--
taylord@ecn.purdue.edu

3361. - RE: Untitled QuickPICT *

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: Kevin Muenzler WB5RUE <wb5rue.at@amsat.org>
Message-ID: <01IGRCZINOPC9ZTX6H@ARWEN.UTHSCSA.EDU>
Source record: 95674

jupiter@europa.com posted some LARGE files...

May I make a friendly suggestion...PLEASE don't post these
to this group. Some of us have slow modems and expensive
phone lines. As an alternative tell us where the images
are (on what site) so we can download them.

Thanks

Kevin, WB5RUE
wb5rue@amsat.org <- my real address, no junk mail please

3362. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: nospam@nowhere.com
Message-ID: <nospam.75.002045A4@nowhere.com>
Source record: 95675

>yourself. Its fun, and you just might gain another hobby! By the way,
>iron pyrite, oxided iron filings, powdered ZnS (zinc sulfide, or the
>mineral sphalerite - many times associated with pyrite and galena) also
>work to a lesser extent. Good Luck!

>Dave - W6LEV
>r

I've heard that silicon carbide can be used. The forward voltage drop
is a bit on the high side for a crystal receiver, but I remember seeing a
circuit using a "D" cell and a 1 meg pot to forward bias the silicon carbide
almost to the point of conduction. A very tiny radio signal could push it over
the edge.

Another interesting detector I have read about is called a "ticker".
Basicially it amounts to a small brass pulley on the shaft of a little motor.
One pole is a brass contact which slides on the face of the pully. The
other contact is composed of a piece of music wire or other springy wire,
which is laid in the groove of the rotating pulley, and kind of drags there. I
here tell that it is essentially useless for am, but that you can actually
hear cw morse code type stuff with it. (This is circa 1915-1920)

Still another involved a flat razor blade and a pencil lead. The blades are
(or at least were!) plated or or sputtered with a thin layer of something to
discourage corrosion. This in combination with a small piece of graphite
apparently creates a nonlinear junction - a diode if you will. I have my
doubts about the sensitivity of this device, but I suppose you could forward
bias it like the carbide and get more sensitivity out of it.

3363. Re: packet radio from 8051 microcontroller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: altavoz <altavoz@mail.idt.net>
Message-ID: <33377E82.2363@mail.idt.net>
Source record: 95676
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.packet,sci.electronics

It's so low cost/simple to use a TMS3105/3101 for the
1200/2200 hz tones . I still have 10 BAYCOM modems using
the 3101 .

3364. Re: Question: Charger for the HTX202

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-24 00:00:00 UTC
From: wb8spv <********@mail.bright.net>
Message-ID: <33368DC6.49F9@mail.bright.net>
Source record: 95677
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Sam wrote:
>
> I've misplaced the wallcharger for my HTX202 battery pack. The
> charger is 12vdc, 200ma. I have a couple of other wall plugs that
> are:
>
> 9vdc, 1A
> 12vdc, 1A
>
> As long as I have the polarity correct on these plugs, could I charge
> from these and not hurt the nicads?
>
> 73,
>
> Sam

I would advise to NOT use these chargers, Sam. The current capability of both units far exceed the maximum safe charging current for the NiCads in the 202's battery pack. The packs get quite warm using the standard 200 mA charger; imagine what a 1000 mA charger will do. If I have the time I usually charge my 202 with a 50 mA supply: Much kinder to the NiCads.

73,

Gary

gtrustle@bright.net

3365. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: tm_crw4d@srv.net
Message-ID: <5h7m4d$dqh@mars.hyperk.com>
Source record: 95678

I remember reading about making a detector using a penny (or other piece of metal) and touching a thin wire to it (the cat wisker). It appears that any corrosion on the surface will give the non-linear contact. I've never tried it, but I remember reading about it - maybe 20 years ago. Good luck.

Tom Crawford
KI7HC

3366. NBFM pre-emphasis, how much?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: wk@killspam.frc.niwa.cri.nz
Message-ID: <3337688a.159629127@131.203.59.8>
Source record: 95679

Thanks for reading this message.

I am in the process of nutting out a 2m xtal controlled TX strip to be used for packet. FM is obtained from a varicap diode across the xtal.

My question is: how much pre-emphasis (dB/octave) should I apply, and at what frequency should it start? My books talk about time constants (50, 75 and 100us) which presumably define the frequency at which the pre-emphasis kicks in. Also, a slope of 6dB/octave is mentioned. Does this sound reasonable? Any comments appreciated.

Wilbert, ZL2BSJ.

PS: please remove killspam. from Email address before replying.

3367. Re: Question: Charger for the HTX202

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: unregistered.dns@nowhere.com
Message-ID: <5h7qd3$a13@usenet88.supernews.com>
Source record: 95680
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <33364684.2305894@news.pacbell.net>,
maynards@pacbell.net (Sam) wrote:
>I've misplaced the wallcharger for my HTX202 battery pack. The
>charger is 12vdc, 200ma. I have a couple of other wall plugs that
>are:
>
>9vdc, 1A
>12vdc, 1A
>
>As long as I have the polarity correct on these plugs, could I charge
>from these and not hurt the nicads?
>
>73,
>
>Sam

Radio Shack says NO WAY.

With that said, I charge mine from the car's DC power jack (aka cigarette
lighter socket) wit regularity, but no ill effects. Polarity is tip positive.
The 9 Volt unit may work.

7 3 de Matt KE6ALM
--

##
The things we do # Reply to:
to avoid spam. # ke6alm
die.evil.spambot.#.@loop.com
##

3368. CRETE HOLIDAYS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: MANOS NERANTZULIS <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc38ed$f569fda0$f1915cc1@dummy.forthnet.gr>
Source record: 95681

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/4/97 TO
31/10/97.FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR
FAX AT ++30 81 761382.

3369. CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Thor Harald Johansen <thorhajo@arcticnet.no>
Message-ID: <33379D7F.7BA3@arcticnet.no>
Source record: 95682
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

How do i build my own affordable CW transceiver quick and easy? I want a CW capable of receiving and transmitting in frequently used bands. Is it possible for less than $100 (650 NKR)? If someone has cirquit-diagrams for such a CW, please reply and send them to me.

..Thor Harald..

3370. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: escape@tbsa.COM.AU
Message-ID: <199703251120.WAA12325@tbsa.com.au>
Source record: 95683

In a post WW2 edition Radio TV & Hobbies, there was an article on making crystals due to a shortage of manufactured ones.

The process was to heat a piece of lead (fishing sinker) in a crucible until melted and red hot (used a meeker burner to do this) then drop in some sulfur. Allow to cool then pull off a piece that looked different from the original lead.

Cheers
Graeme VK3JUD

3371. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: tom.twist@hydro.com
Message-ID: <5h8bll$mit@vkhdsu01.hda.hydro.com>
Source record: 95684
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thor Harald Johansen <thorhajo@arcticnet.no> wrote:

>How do i build my own affordable CW transceiver quick and easy? I want a
>CW capable of receiving and transmitting in frequently used bands. Is it
>possible for less than $100 (650 NKR)? If someone has cirquit-diagrams
>for such a CW, please reply and send them to me.

>..Thor Harald..

You can buy several kits for less than $100.

Have a look at Dan's ~ "Small Parts" at http://www.fix.net/dans.html

He supplies two different kits for CW transceivers, as well as
otherwise hard to get parts for the homebrewer.

Personally I have built the NN1G Mark 3 transceiver for 80 m, and I'm
very satisfied with the kit.

Tom

Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

3372. WTB: 1.2 ghz Duplexor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Ron Curry <recurry@insighttec.com>
Message-ID: <01bc38d2$39edbaa0$5ba19ecd@expressp5.insighttec.com>
Source record: 95685
Cross-posted to:
rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Please Email with price and specs if you have a set.
--
Ron Curry
KE6WED
recurry@insighttec.com
recurry@inside.intel.com

3373. Re: Schematics and plans online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Steve Simpson <Steve@chubs.demon.co.uk>
Message-ID: <Mu2YyKAO17NzEwOg@chubs.demon.co.uk>
Source record: 95686

You could also my site, (URL below) for links and also a few circuits to download/view.

Let me know what you want more of and I'll post them on my site.

Regards all.
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
G-QRP Club Member 9631
Visit Radio World -
HTTP://www.chubs.demon.co.uk

3374. Re: Question: Charger for the HTX202

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc3915$47e1ad40$7c60b6cd@cbx-nt>
Source record: 95687
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi Guys. The trick with "feeding" NiCads is to limit their intake while charging, even from a car. You can use a Voltage regulator like a 7805 or 7812 for this by putting the regulator in series following the Input from the supply side and output to the battery with the ground post attached via a resistor to the output pin. The feed rate is calculated by I=Vr/R where I=current, Vr=VoltageRatingOfTheRegulator R=resistor so a 7805 with a 33 Ohm resistor in place feeds at a .151 Amp or 151ma. I do not know what the feed rate should be for those NiCads, but I am sure it is mentioned somewhere.

Regards

Christopher Cox
KC8FRJ
TRA#4901

Another bob <unregistered.dns@nowhere.com> wrote in article <5h7qd3$a13@usenet88.supernews.com>...
> In article <33364684.2305894@news.pacbell.net>,
> maynards@pacbell.net (Sam) wrote:
> >I've misplaced the wallcharger for my HTX202 battery pack. The
> >charger is 12vdc, 200ma. I have a couple of other wall plugs that
> >are:
> >
> >9vdc, 1A
> >12vdc, 1A
> >
> >As long as I have the polarity correct on these plugs, could I charge
> >from these and not hurt the nicads?
> >
> >73,
> >
> >Sam
>
> Radio Shack says NO WAY.
>
> With that said, I charge mine from the car's DC power jack (aka cigarette

> lighter socket) wit regularity, but no ill effects. Polarity is tip positive.
> The 9 Volt unit may work.
>
> 7 3 de Matt KE6ALM
> --

>
> ##
> # The things we do # Reply to: #
> # to avoid spam. # ke6alm #
> # die.evil.spambot.#.@loop.com #
> ##
>
>

3375. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3337cbef.664135@netnews.worldnet.att.net>
Source record: 95688

On 24 Mar 1997 21:25:05 GMT, jstroppe@uhl.uiowa.edu (John Stroppel)
wrote:

>eeg.uiowa.edu> <3336c59f.5653894@netnews.worldnet.att.net>
>Distribution:
>
>Tom:
>
> He (designer) has put the chassis off from ground. If this chassis is in
>another enclosure (cabinet) and the cabinet is ground has this violated the
>code?

Transformers and other line operated devices connect to the chassis. A
chassis line connection (even a "ground" connection) requires the
chassis be isolated from any possible contact by the operator.

That's tough to do, especially since the connectors and relay control
jack are grounded to the chassis. That means the PA has to be a box
inside a box, with full low frequency ac and dc isolation.

The correct solution is simple. Don't connect power line operated
transformer primaries and such to the chassis. If 120 volts is needed,
use an isolated neutral lead from the outlet to the PA.

> How many analog/digital systems are around that have two or three
>levels of ground?

Plenty, but you won't find any UL/CSA/CE devices that have 120 vac
return through the case or any chassis to cabinet path where 120 volts
could harm the operator from a simple broken wire.

>Once inside the enclosure which is "grounded" can you run
>another rail?

That would be the way to do it, and keep the rail isolated from the
chassis. The rail could connect to a neutral lead that is isolated
from the chassis.

That way, if the neutral opens, the op won't get fried.

73 Tom

3376. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <5h8kbs$kco@flood.weeg.uiowa.edu>
Source record: 95689

Tom:

Isn't the amp in a box in a box. The author has a chassis in a cabinet.
He has isolated the chassis and cabinet. Keeping the neutral and ground
separate. The chassis is bonded to the neutral and the cabinet to the ground.
He could have called the chassis a neutral rail and the cabinet ground rail.
I can see that the input/output jacks cause a problem with operator
contact.
With isolation transformer are you going to bond either side of the
secondary to the neutral or chassis, or just float the secondary?
The filament transformer could have had a 220vac primary. That would
have solved that.

WA0VYZ
john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

3377. Daves Programing Hut ????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: dave
Message-ID: <3338d3ed.3066389@news>
Source record: 95690

Need your radio programed, most mods done to C.B radio, U.H.F
commercial two way, high band & low band radios.

D.J.M ELECTRONICS Unit 1, 543 Churchill Rd
Kilburn S.A 5084 PH (08) 8349 6308 , FAX (08) 8349 6308

Programing for most radios.

PHILIPS 8010 / 8020 / 8030 / 8040 TAIT T700
FM900 / 91 / 92 / 93
PRP 80 Handhelds

ELECTROPHONES TX4000 STANARD A340D
TX4200
GX2000
TX5200

MOTOROLA SYNTRX PLUS ICOM
U210T
GP300
H21T
HT600
M4004
MAXTRAC
MT1000
MT1000A
MTX810
MTX820
SYNTRX

UNIDEN SMU300
SMU3000
SMH4000
SMH400
SPU48
SPU480
SPH58
SPH580
IMH4100
IMH4100 (EURO)
IMU3100
CPU 416K
CHP516D

Give me a call lets see what we can do for you PH (08) 8349 6308

3378. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703251414.GAA22604@mailbox1.ucsd.edu>
Source record: 95691

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7aea0.wrk; Tue, 25 Mar 1997 15:23:22 -1
Received: from [195.120.135.127] by infocomm.it id 7ae00.wrk; Tue, 25 Mar 1997 15:23:02 -1
Received: from [195.120.135.127] by infocomm.it id 7ad80.wrk; Tue, 25 Mar 1997 15:22:50 -1
Received: from [195.120.135.127] by infocomm.it id 7ad10.wrk; Tue, 25 Mar 1997 15:22:34 -1
Received: from [195.120.135.127] by infocomm.it id 7aca0.wrk; Tue, 25 Mar 1997 15:22:22 -1
Received: from [195.120.135.127] by infocomm.it id 7ab70.wrk; Tue, 25 Mar 1997 15:21:48 -1
Received: from [195.120.135.127] by infocomm.it id 7aae0.wrk; Tue, 25 Mar 1997 15:21:28 -1
Received: from [195.120.135.127] by infocomm.it id 7aa70.wrk; Tue, 25 Mar 1997 15:21:14 -1
Received: from [195.120.135.127] by infocomm.it id 7a9d1.wrk; Tue, 25 Mar 1997 15:21:00 -1
Received: from [195.120.135.127] by infocomm.it id 7a950.wrk; Tue, 25 Mar 1997 15:20:44 -1
Received: from [195.120.135.127] by infocomm.it id 7a8e1.wrk; Tue, 25 Mar 1997 15:20:28 -1
Received: from [195.120.135.127] by infocomm.it id 7a840.wrk; Tue, 25 Mar 1997 15:20:10 -1
Received: from [195.120.135.127] by infocomm.it id 7a7d0.wrk; Tue, 25 Mar 1997 15:19:58 -1
Received: from [195.120.135.127] by infocomm.it id 7a760.wrk; Tue, 25 Mar 1997 15:19:46 -1
Received: from [195.120.135.127] by infocomm.it id 7a710.wrk; Tue, 25 Mar 1997 15:19:34 -1
Received: from [195.120.135.127] by infocomm.it id 7a640.wrk; Tue, 25 Mar 1997 15:19:10 -1
Received: from [132.239.1.53] by infocomm.it id 7a550.wrk; Tue, 25 Mar 1997 15:18:46 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA20389 for <ham-homebrew-list@mailbox.ucsd.edu>; Tue, 25 Mar
1997 04:52:13 -0800 (PST)
Received: by noc.ucsd.edu; id EAA02305
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 04:30:52 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA02286
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 04:30:49 -0800 (PST)
Message-Id: <199703251230.EAA02286@noc.ucsd.edu>
Date: Tue, 25 Mar 97 04:30:48 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #212
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

> example where you are dead wrong (no pun intended).
>
> >>
> >Whether one or two step-start resistors is used with a 240v amplifier, the
> >chassis is always connected to the mains-neutral. What safety issues?
>
> The safety issue is the one you just introduced.

In an amplifier that uses 240v single-primary transformers, Wes, neutral is
not connected in any way to the transformer windings. Thus, no current
flows through the neutral wire whether one or two stepstart resistors are
used. The safety ground/neutral wire is connected to the amplifier chassis
whether one or two stepstart resistors are used. What safety issues?

> THE NEUTRAL IS TIED TO EARTH AT THE SERVICE ENTRANCE.....

True.

After that, it is
> treated as a current carrying conductor.

NOT in the case described above. Please explain how the neutral could
carry fault current from the HV supply.

> The safety ground (what you
> should be tying to the chassis) carries fault current only, as John, WA0VYZ,
> clearly points out in his post.
>
> N7WS
> >--
> >--Rich-- ag6k, 805-386-3734

--
--Rich-- ag6k, 805-386-3734

Date: 24 Mar 1997 21:25:05 GMT
From: jstroppe@uhl.uiowa.edu (John Stroppel)
Subject: Soft-start circuits

eeg.uiowa.edu> <3336c59f.5653894@netnews.worldnet.att.net>
Distribution:

Tom:

He (designer) has put the chassis off from ground. If this chassis is in
another enclosure (cabinet) and the cabinet is ground has this violated the
code? How many analog/digital systems are around that have two or three
levels of ground? Once inside the enclosure which is "grounded" can you run

another rail?

WA0VYZ
john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

Date: 24 Mar 1997 16:55:14 GMT
From: k5dh@dlep1.itg.ti.com (Dean Hemphill K5DH)
Subject: WANTED: plug-in coil forms and sockets

I need at least two each of the old plug-in coil forms and sockets for
a CW transmitter project I'm working on (a 6V6 oscillator driving an
807 PA). Either 4-pin or 5-pin types would be fine, about 1-1/4" in
diameter or close to that.

I could also use a couple of Millen ceramic plug-bars and jack-bars for
my parts stock (future projects, y'know?).

ALSO... I need some B & W 3011 and 3015 coils (unused only, please) for
transmitter projects.

73 de K5DH! :)

--
Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
. . . . . .
Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
Die-cast model car collector (mainly Ford products, in all scales)
Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
Glass insulator collector (specializing in "oddball" pieces)
. . . . . .

End of Ham-Homebrew Digest V97 #212
****

3379. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703251414.GAA22605@mailbox1.ucsd.edu>
Source record: 95692

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 7aea1.wrk; Tue, 25 Mar 1997 15:23:22 -1
Received: from [195.120.135.127] by infocomm.it id 7ae40.wrk; Tue, 25 Mar 1997 15:23:08 -1
Received: from [195.120.135.127] by infocomm.it id 7adb0.wrk; Tue, 25 Mar 1997 15:22:56 -1
Received: from [195.120.135.127] by infocomm.it id 7ad30.wrk; Tue, 25 Mar 1997 15:22:38 -1
Received: from [195.120.135.127] by infocomm.it id 7acb0.wrk; Tue, 25 Mar 1997 15:22:22 -1
Received: from [195.120.135.127] by infocomm.it id 7aba0.wrk; Tue, 25 Mar 1997 15:21:56 -1
Received: from [195.120.135.127] by infocomm.it id 7aae1.wrk; Tue, 25 Mar 1997 15:21:28 -1
Received: from [195.120.135.127] by infocomm.it id 7aa60.wrk; Tue, 25 Mar 1997 15:21:14 -1
Received: from [195.120.135.127] by infocomm.it id 7a9d0.wrk; Tue, 25 Mar 1997 15:21:00 -1
Received: from [195.120.135.127] by infocomm.it id 7a961.wrk; Tue, 25 Mar 1997 15:20:44 -1
Received: from [195.120.135.127] by infocomm.it id 7a8e0.wrk; Tue, 25 Mar 1997 15:20:28 -1
Received: from [195.120.135.127] by infocomm.it id 7a880.wrk; Tue, 25 Mar 1997 15:20:18 -1
Received: from [195.120.135.127] by infocomm.it id 7a820.wrk; Tue, 25 Mar 1997 15:20:06 -1
Received: from [195.120.135.127] by infocomm.it id 7a761.wrk; Tue, 25 Mar 1997 15:19:46 -1
Received: from [195.120.135.127] by infocomm.it id 7a6d0.wrk; Tue, 25 Mar 1997 15:19:26 -1
Received: from [195.120.135.127] by infocomm.it id 7a641.wrk; Tue, 25 Mar 1997 15:19:10 -1
Received: from [132.239.1.53] by infocomm.it id 7a550.wrk; Tue, 25 Mar 1997 15:18:46 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA20389 for <ham-homebrew-list@mailbox.ucsd.edu>; Tue, 25 Mar
1997 04:52:13 -0800 (PST)
Received: by noc.ucsd.edu; id EAA02305
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 04:30:52 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA02286
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 04:30:49 -0800 (PST)
Message-Id: <199703251230.EAA02286@noc.ucsd.edu>
Date: Tue, 25 Mar 97 04:30:48 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #212
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Tue, 25 Mar 97 Volume 97 : Issue 212

Today's Topics:
(none)
- RE: Untitled QuickPICT *
- Untitled QuickPICT 5.JPG (1/1) Re: Soft-start circuits
AL-80 bandswitch photos
Foxhunt xmtr regulations
GaAsFETs: Where to buy them?
Ground Rod Installation w/pipe
Home made crystal(?) radio (2 msgs)
NBFM pre-emphasis, how much?
packet radio from 8051 microcontroller?
Schematics and plans online
Screen supply
Soft-start circuits (3 msgs)
WANTED: plug-in coil forms and sockets

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 25 Mar 97 11:20:25 GMT
From: escape@tbsa.COM.AU (Graeme Moss)
Subject: (none)

In a post WW2 edition Radio TV & Hobbies, there was an article on making
crystals due to a shortage of manufactured ones.

The process was to heat a piece of lead (fishing sinker) in a crucible
until melted and red hot (used a meeker burner to do this) then drop in
some sulfur. Allow to cool then pull off a piece that looked different
from the original lead.

Cheers
Graeme VK3JUD

Date: 24 Mar 1997 20:15:38 -0500
From: Kevin Muenzler WB5RUE <wb5rue.at@amsat.org>
Subject: - RE: Untitled QuickPICT *

jupiter@europa.com posted some LARGE files...

May I make a friendly suggestion...PLEASE don't post these
to this group. Some of us have slow modems and expensive
phone lines. As an alternative tell us where the images
are (on what site) so we can download them.

Thanks

Kevin, WB5RUE
wb5rue@amsat.org <- my real address, no junk mail please

Date: 22 Mar 1997 09:37:51 GMT
From: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Subject: - Untitled QuickPICT 5.JPG (1/1) Re: Soft-start circuits

Would someone please go cut the power to this guy's computer?

Date: Sat, 22 Mar 1997 10:20:54 -0800
From: measures@mail.vcnet.com (R. L. Measures)
Subject: AL-80 bandswitch photos

Two, new righ-res. photographs of a VHF parasitic-arced AL-80 bandswitch
wafer, courtesy of George, WA6ALQ, are now available on my Web site at:
http://www.vcnet.com/measures
See Figure 15.

����Warning: These photographs may be unsuitable for viewing by younger
audiences or by members of the Rauchian encampment.

--
--Rich-- ag6k, 805-386-3734

Date: 13 Mar 1997 18:57:02 -0500
From: cmlong@mtu.edu (Mike)
Subject: Foxhunt xmtr regulations

Allen Wallace (allen_wallace@powertalk.dtint.com) wrote:
: In article <3327143A.6AB@umich.edu> Robert Lyons, boblyons@umich.edu
: writes:
: >I'd like to adapt a published circuit for an FM broadcast-
: >band transmitter, to be used as a flea-powered foxhunt xmtr
: >on the 2M band. Can anyone tell me the rules regarding such
: >transmitters?
:
: Put a voice or CW id on it, but I wouldn't bother with automatic control,
: just keep a control operator within 10-15 minutes away. This should
: suffice the control requirment.

It's pretty simple to build a 10min. timer with a 555 IC also, that way
when the radio is triggered after 10min you either have a CW id or voice
id.

TTYL,
Mike

--
/\
\ Michael Long || President /
/ Callsign: N3YPA || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/

Date: 23 Mar 1997 06:20:57 GMT
From: commquart@aol.com
Subject: GaAsFETs: Where to buy them?

In article <5h20c1$6tp$1@independence.ecn.ou.edu>, jspatric@mailhost.ecn.uoknor.edu (John
Stephen Patrick) writes:

>
>I'm designing a preamp (with RF sensing) for 10m, 2m, 70cm, and whatever
>other bands I need one for. I have designed one for each with standard
>N-channel MOSFETs. Now, I see that all the preamps sold advertise GaAs
>(Gallium Arsenide) FETs. I've looked in my Digikey, Mouser, etc.
>catalogs, but cannot find a GaAsFET. Where can I buy one? if you can
>help me out, I'd really appreciate it. If everything goes well, I may
>try to publish the designs in some Ham-related magazine. The way I've
>designed the ones so far, to choose which band you want, you just change
>the values of parts in the design. All the preamps have the same
>template (sorta).
>
>Thanks,
>John

Hi John --

Why would you want use an expensive GaAsFET in a 10 meter
preamp? There are plenty of good low-noise FETs or bipolar
devices that will do just fine up to and including two-meters.

Peter

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

Date: 11 Mar 1997 22:51:00 GMT
From: kral@hpl.hp.com (Joseph Kral)
Subject: Ground Rod Installation w/pipe

In article <5fp6t2$a3u@top.mitre.org>, <cjl@mitre.org> wrote:
>Regarding the use of a common point for all grounds, I've been wondering
>what this means in the context of the power company's local distribution
>system. I suspect I probably misunderstand how they handle local
>distribution, but my impression is that you have:
>
> - Several houses wired in parallel off of a single transformer,
>
> - Each house grounded independently,
>
> - All grounds connected together via long and comparatively "thin"
> conductors (in the context of lightning protection),
>
> - Perhaps additional grounds at the pole connections for user drop
> cables.
>
>From the point of view of lightning strikes, isn't this local distribution
>configuration subject to severe ground loop problems?

Electrical distribution is a multiple-grounded neutral system. The neutral conductor is grounded at many points in the distribution. The safety ground in your house is local to your house. It does not go house to house. The safety ground is bonded to the neutral at one point, at the service entrance. The neutral is also grounded at the step down transformer on the pole (or underground). Your houses' safety ground is not for lightning protection.

Date: Sat, 22 Mar 1997 14:54:24 -0800
From: "'Grif' w. keith griffith" <kgriffit@wolfenet.com>
Subject: Home made crystal(?) radio

Leon Heller wrote:
>
> In article <33331261.22E9@ix.netcom.com>, Rolf Mathson
> <rmathiso@ix.netcom.com> writes
> >AC6V wrote:
> >>
> >> Claudio Fornaro wrote:
> >> >
> >> > Hi all,
> >> > I'd want to build a "home made" radio receiver for AM (or even SW...)
> ><snip>
> >> > usually
> >> > has no galena crystal at home...
> ><snip>
> >> Hi Claudio -- an admirable project. For the crystal detector -- try a
> >> small whisker wire on a razor blade. It works -- I remember doing this

> >> as a boy experimenting with xtal radios.

major snip or two

I read something years ago about lead sulfide (?) crystals, being made
with plumbers lead and powered sulfer and a short chunk of 3/8 or 1/2
inch copper pipe. You melted this witches brew together and poured it
into the copper pipe, then cut it in half part way and broke it the rest
of the way off, leaving a ragged surface. Now,,, I have no idea what
the ratio was but it didn't seem like a really big problem at the time.
Let's see,,,, if you've never melted sulfer, or lead,,,,,,,, ah hell,,,
your on your own,,, sufice to say, bad things could really happen.

Date: Mon, 24 Mar 1997 19:15:37 LOCAL
From: nospam@nowhere.com (pfriedr)
Subject: Home made crystal(?) radio

>yourself. Its fun, and you just might gain another hobby! By the way,
>iron pyrite, oxided iron filings, powdered ZnS (zinc sulfide, or the
>mineral sphalerite - many times associated with pyrite and galena) also
>work to a lesser extent. Good Luck!

>Dave - W6LEV
>r

I've heard that silicon carbide can be used. The forward voltage drop
is a bit on the high side for a crystal receiver, but I remember seeing a
circuit using a "D" cell and a 1 meg pot to forward bias the silicon carbide
almost to the point of conduction. A very tiny radio signal could push it over
the edge.

Another interesting detector I have read about is called a "ticker".
Basicially it amounts to a small brass pulley on the shaft of a little motor.
One pole is a brass contact which slides on the face of the pully. The
other contact is composed of a piece of music wire or other springy wire,
which is laid in the groove of the rotating pulley, and kind of drags there. I
here tell that it is essentially useless for am, but that you can actually
hear cw morse code type stuff with it. (This is circa 1915-1920)

Still another involved a flat razor blade and a pencil lead. The blades are
(or at least were!) plated or or sputtered with a thin layer of something to
discourage corrosion. This in combination with a small piece of graphite
apparently creates a nonlinear junction - a diode if you will. I have my
doubts about the sensitivity of this device, but I suppose you could forward
bias it like the carbide and get more sensitivity out of it.

Date: Tue, 25 Mar 1997 06:05:23 GMT
From: wk@killspam.frc.niwa.cri.nz (Wilbert Knol)
Subject: NBFM pre-emphasis, how much?

Thanks for reading this message.

I am in the process of nutting out a 2m xtal controlled TX strip to be used for packet. FM is obtained from a varicap diode across the xtal.

My question is: how much pre-emphasis (dB/octave) should I apply, and at what frequency should it start? My books talk about time constants (50, 75 and 100us) which presumably define the frequency at which the pre-emphasis kicks in. Also, a slope of 6dB/octave is mentioned. Does this sound reasonable? Any comments appreciated.

Wilbert, ZL2BSJ.

PS: please remove killspam. from Email address before replying.

Date: Mon, 24 Mar 1997 23:28:02 -0800
From: altavoz <altavoz@idt.net>
Subject: packet radio from 8051 microcontroller?

It's so low cost/simple to use a TMS3105/3101 for the
1200/2200 hz tones . I still have 10 BAYCOM modems using
the 3101 .

Date: Tue, 25 Mar 1997 11:55:58 +0000
From: Steve Simpson <Steve@chubs.demon.co.uk>
Subject: Schematics and plans online

You could also my site, (URL below) for links and also a few circuits to download/view.

Let me know what you want more of and I'll post them on my site.

Regards all.
--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
G-QRP Club Member 9631
Visit Radio World -
HTTP://www.chubs.demon.co.uk

Date: Mon, 24 Mar 1997 16:42:01 GMT
From: W8JItom@worldnet.att.net (Tom Rauch)
Subject: Screen supply

On Sat, 22 Mar 1997 14:56:22 -0800, Bj&#65533;rn S&#65533;derholm <sm2gxn.soederholm@boden.mail.telia.com> wrote:

>Hello everybody!
>

>I've built a amplifier with a pair of 4x500 tubes for several years ago,
>and it is grid driven. A good friend of mine told me how to fix the
>screen supply voltage in a way i've never heard before, now i use a
>seperate stab supply for the screen. Thing is that i did not quite
>understand all of it, he promised to send me a schematic digram over the
>circuit, but he has probably forgotten it.
>He said that you rectify part of the rf double or triple and fed it to
>the screen grid. And the big advantage was that the amplifier became much
>easier to drive.
>Could this really be something, unstabilized screen supply?

That is the worse imaginable way to get sceen voltage.

It is a very high IMD circuit.

The loading on the exciter varies with drive and screen current, since
the rectifiers load input RF on peaks ONLY.

I measured severa

3380. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: jstroppe@uhl.uiowa.edu
Message-ID: <5h8l3b$kco@flood.weeg.uiowa.edu>
Source record: 95693

Tom:

OK<OK I get it..... If he would not have bonded the one side of
the primary on any of the transformers to his chassis. This would have
been like running the neutral rail in a sub-feeder service panel isolated
from the ground. And would have been much simpler than isolating the
chassis. Would be no need for an isolation transformer then either, each of
the transformers would have been their own isolation.

WA0VYZ
john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

3381. Re: Schematics and plans online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: bry@mns.net
Message-ID: <5h8nj2$359@news1.mnsinc.com>
Source record: 95694

Guys - there are a bunch of these available at:

http://www.mnsinc.com/bry/hamfiles.htm

I would like to know of MORE schematics on the web too, such as
transistor xtal oscillators etc.

Anyone know of any more?

ENJOY!

Randy Jones <rjones@plix.com> wrote:

>Matthew Ballance wrote:
>>
>> Does anoyone know of a site on the web where you can download schematics,
>> plans, or other information on homebrew TX/RX equipment?
>>
>> Matthew Ballance
>> KF4BGQ Greensboro, NC

>Matthew,

>When you find one, make sure to post it's location on this news group.
>Thanks.

>Radio Randy

3382. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: charles1@netcom.com
Message-ID: <charles1E7LuDo.Bs6@netcom.com>
Source record: 95695
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <33379D7F.7BA3@arcticnet.no>,
Thor Harald Johansen <thorhajo@arcticnet.no> wrote:
>How do i build my own affordable CW transceiver quick and easy? I want a
>CW capable of receiving and transmitting in frequently used bands. Is it
^^^^^
>possible for less than $100 (650 NKR)? If someone has cirquit-diagrams
>for such a CW, please reply and send them to me.

There are 6 or 12 kits you can buy for $50-$100 that cover
part of one band. Multiple bands costs 2-3 times that figure.

The Norcal40a kit costs $129 and is the best.
KB0WOB

3383. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: bry@mns.net
Message-ID: <5h8n3q$2b1@news1.mnsinc.com>
Source record: 95696

ROB - GREAT - ignore the garbage. THANK YOU for posting those
pictures.
I LIKE To see hams' pictures and schematics. THIS is the kind of thing
the Internet does very well at.

The guys who complain are either -

1) Living in Russia and pay for their access by the kilobyte (yes this
is true!!)

or

2) Using a 286 that doesn't load stuff very fast!

Heck they can always push DELETE or IGNORE the articles, sheesh!

jupiter@europa.com wrote:

>Already, I've gotten complaints from whiners regarding my linear picts.

>Well, if political debates regarding "Little LEO's", whatever that means,
>can occupy the NG, then you should be complaining to them, not me.

>Also, I am very intereested in seeing others' homebrew projects captured
>via QuickCams, etc.

>If QST can begin with 20pp of pictures then we can assuredly do the same
>with this NG. Also, I can put schematics onto JPEGS.

>This is brand new territory with this NG, and I am already getting rave
>reviews from some of the less timid QST authors.

>Anyway, thanks for your time, Rob

3384. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5h8ss3$1f8m@info4.rus.uni-stuttgart.de>
Source record: 95697
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

>How do i build my own affordable CW transceiver quick and easy? I want a
>CW capable of receiving and transmitting in frequently used bands. Is it
>possible for less than $100 (650 NKR)? If someone has cirquit-diagrams
>for such a CW, please reply and send them to me.

There is a french design, published in VHF communications, which was
supposed to cost about 100DM, and that was not just QRP. VHF
communications have a web page.

73, Moritz DL5UH

3385. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Mar25.155547.21926@ke4zv.atl.ga.us>
Source record: 95698

In article <19970323234501.SAA25900@ladder01.news.aol.com> commquart@aol.com writes:
>In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde <hynde@flash.net> writes:
>>Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
>>
>>Tim, ka8ddz
>
>You can try it, but it won't work. You need a germanium diode, not
>silicon. Try a 1N34A.
>
>Pete
>
>Peter Bertini K1ZJH
>Senior Technical Editor, Communications Quarterly Magazine
>"The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

??? Of course it will work, you'll just need signals which are a bit stronger. The 1N34A has a barrier potential of about 0.2 V while the 1N914 will have a barrier potential of about 0.6 V. That'll require signals about 9.5 db stronger to overcome the threshold. In practice, that won't be a problem. Any signal strong enough to drive your headphones to a comfortable level will be strong enough to overcome the silicon diode potential barrier. You will miss some weak signals, of course. The best diode to use would be a point contact type like the IN21B used for years in radar receivers. Its barrier potential is slightly lower than either of the other types.

Now you *can* bias the diode to improve weak signal detection. That does require a battery (you can use a homemade "potato" battery), and a bias circuit. This will allow you to set the threshold arbitrarily close to conduction, and thus allow you to detect arbitrarily weak signals (radar receivers worked essentially this way before low noise SHF active devices became available). Of course the signals will be too weak to hear in the headphones without amplification. (In a receiver with very poor front end selectivity, such as the classic crystal set circuit, biasing the diode may bring on more troubles than it is worth since the selectivity will now be inadequate to avoid receiving virtually every signal on the band at once.)

Now if you allow a battery, then you could add an audio amplifier to boost the weaker signals so that they are audible in the headphones. But if you allow a battery and an active device, then you might want to go ahead and build a regenerative receiver. That's pretty simple too, and will normally perform better than a simple diode detector if the active device has adequate performance at the reception frequency.

(With a CK722, you'd stick with the biased diode and use the transistor as an audio amp at frequencies above about 2 MHz. With a more modern transistor (almost any small signal type), you'd do better to use the transistor in the regenerative detector circuit up through at least 60 MHz, and for most types, higher than that.)

Note that it is not impossible to make transistors at home, at least on the level of the CK722. There was a series of articles in the Amateur Scientist column of Scientific American in the early 1960s describing how to do it. (The hard part is refining the pure germanium or silicon wafer. The series showed how to build a zone melting refiner to do that.) It'd be easier to master glassblowing and make your own tubes, however. This definitely falls outside the competence of the typical crystal set builder, but might be of interest to someone looking for a *real* homebrew challenge.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

3386. HELP! MAXIM MAX2450 /51/52

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: maroof@triton.kaifnet.com
Message-ID: <33380450.3476463@news.kaifnet.com>
Source record: 95699
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.components

Hi,

Can anybody give me any contact address of MAXIM for technical/designer's support?
I'm trying to design a Weaver method SSB Xciever using MAX2450 (51/52) quadrature modulator/demodulators. The built in LO is designed to work at 70MHz~160MHz. I need to make my radio work in the HF band. So is it possible to inject carrier into the Qmodulators from external oscilators? Has anyone tried this? Also will the Qmodulators/demodulators work properly (with external injection) at <30MHz & if possible as low as 1KHz? It took a long 2 months for my samples to arrive, so I don't want take any risks. Please help.

Thanks for reading.

Maroof
<maroof@triton.kaifnet.com>

3387. Good source for amplifier tips (End?)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: "Will, KN6DV" <kn6dv@qnet.com>
Message-ID: <01bc3930$2d0d6fc0$3b229bcf@kn6dv.qnet.com>
Source record: 95700

For those who are interested in the discussion I have uploaded Part 14! to
my home page web side:

http://www.av.qnet.com/~kn6dv

Looks like things are slowing down so this might be the last upload, I will
leave this archive on the web till after Dayton and maybe I can transfer it
to some FTP side for down loading.
Thanks 73 Will KN6DV

--
http://www.av.qnet.com/~kn6dv

REFORM
Unless the reformer can invent something which substitutes attractive
virtues for atractive vices, he will fail.
(Walter Lippmann)

3388. WANTED: AUDIO TRANSFORMER UTC LS-47X

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: owens@stout.atd.ucar.edu
Message-ID: <5h9474pfi1@ncar.ucar.edu>
Source record: 95701
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

WANTED: I'm looking for a UTC LS-47X transformer. If you have one
in good condition please let me know. This is for a ham project.

Thanks!, Chip Owens

--
Chip Owens NW0O, (owens@stout.atd.ucar.edu)

3389. Thanks for address TenTec

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <33381b6d.1698171@news5.inter.NL.net>
Source record: 95702

Hello all OM's,
thanks for all your advises. I was now able to contact TenTec and they
have answered allready. I am now able to buy the manual. Thanks.
73 de Bart PA3GGM.

3390. NEED HELP IDENTIFYING HP TRANSFORMER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: owens@stout.atd.ucar.edu
Message-ID: <5h99op$1pf$1@ncar.ucar.edu>
Source record: 95703

Can anyone help in identifying an audio transformer with a
Hewlett-Packard part number: 9120-0026?

I believe this is a low-frequency audio transformer from a
HP audio generator similar to the 200CD. In the HP 200CD,
the low-frequency transformer is part number: 9120-0016.

I'd like to find any/all specs available on this transformer
and would appreciate any help.

Thanks!, Chip Owens

--
Chip Owens NW0O, (owens@stout.atd.ucar.edu)

3391. FS: Teflon Wire #18,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: dallen@melpar.esys.com
Message-ID: <5h997a$qk319@fcserv3.fcd.esys.com>
Source record: 95704

I have teflon wire available in several colors in the listed
sizes.
Thank you,
Dale

3392. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: orion**@capital.net
Message-ID: <333935ca.2542358@news.capital.net>
Source record: 95705

On Tue, 25 Mar 1997 14:24:50 GMT, bry@mns.net (Brian Carling G3XLQ / AF4K) wrote:

>ROB - GREAT - ignore the garbage. THANK YOU for posting those
>pictures.
>I LIKE To see hams' pictures and schematics. THIS is the kind of thing
>the Internet does very well at.
>
>The guys who complain are either -
>
>1) Living in Russia and pay for their access by the kilobyte (yes this
>is true!!)
>
>or
>
>2) Using a 286 that doesn't load stuff very fast!
>
>Heck they can always push DELETE or IGNORE the articles, sheesh!

What the Hell is wrong with you, Carling, encouraging this guy to post these huge binaries on this newsgroup? This is a DISCUSSION group. Text Only. You should know better. There are proper places for binaries to be posted, and this group aint one of 'em.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

3393. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33382edd.25994860@netnews.worldnet.att.net>
Source record: 95706

On 25 Mar 1997 13:48:27 GMT, jstroppe@uhl.uiowa.edu (John Stroppel)
wrote:

>
>Tom:
>
> OK<OK I get it..... If he would not have bonded the one side of
>the primary on any of the transformers to his chassis. This would have
>been like running the neutral rail in a sub-feeder service panel isolated
>from the ground. And would have been much simpler than isolating the
>chassis. Would be no need for an isolation transformer then either, each of
>the transformers would have been their own isolation.

Hi John,

Yes, that was my point. Sorry I didn't make it better.

Many things can be dangerous or complex, but why make something more
dangerous or complex than it needs to be?

Connecting any power line return path to the chassis is unnecessary.

73 Tom

3394. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <33384F81.62A0@staffnet.com>
Source record: 95707
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

charles copeland wrote:
>
> In article <33379D7F.7BA3@arcticnet.no>,
> Thor Harald Johansen <thorhajo@arcticnet.no> wrote:
> >How do i build my own affordable CW transceiver quick and easy? I want a
> >CW capable of receiving and transmitting in frequently used bands. Is it
> ^^^^^
> >possible for less than $100 (650 NKR)? If someone has cirquit-diagrams
> >for such a CW, please reply and send them to me.
>
> There are 6 or 12 kits you can buy for $50-$100 that cover
> part of one band. Multiple bands costs 2-3 times that figure.
>
> The Norcal40a kit costs $129 and is the best.
> KB0WOB
The Sierra by NORCAL is more costly but you can add additional band
modules later on. The Ten-Tech is one of the least expensive (about
$90). This months QST has a 20 or 80 meter SSB QRP article - you can
purchase board, parts or a complete kit.

Type "QRP" in the search engines and you'll get lots of data.

3395. What is a C1429/1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Simon Robinson <pls5i50e@pop.plasma.co.uk>
Message-ID: <3337BA0A.1E2D@pop.plasma.co.uk>
Source record: 95708

I have just found an English Electric PA valve with the number C1429/1.

Does anyone know what it is ???

Thanks

Simon

3396. 1W CW transceiver for 27MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: tero.ranta@icenet.fi
Message-ID: <3336f512.3458606@news.ttl.fi>
Source record: 95709

Does anyone have schematic for a simple (max. 30-40 components)10m CW transceiver which could be adapted to 27MHz citizen-band use?

Thanks in advance,

Tero Ranta.

3397. Re: GaAsFETs: Where to buy them?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <3338D77A.5526@mwt.net>
Source record: 95710

RJohn Stephen Patrick wrote:
>
> I'm designing a preamp (with RF sensing) for 10m, 2m, 70cm, and whatever
> other bands I need one for. I have designed one for each with standard
> N-channel MOSFETs. Now, I see that all the preamps sold advertise GaAs
> (Gallium Arsenide) FETs. I've looked in my Digikey, Mouser, etc.
> catalogs, but cannot find a GaAsFET. Where can I buy one? if you can
> help me out, I'd really appreciate it. If everything goes well, I may
> try to publish the designs in some Ham-related magazine. The way I've
> designed the ones so far, to choose which band you want, you just change
> the values of parts in the design. All the preamps have the same
> template (sorta).
>
> Thanks,
> John
> --
> John Patrick (jpatrick@ou.edu) - KC5VEI
> Electrical/Computer Engineering Grad @ The University of Oklahoma
> * John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *

RF Parts Company (CA) has GaAsFETS...619-744-0750.
73, Scott,N0EDV

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

3398. Toroids for Pi-Net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <3338848A.1732@erols.com>
Source record: 95711

I've seen some amplfiers using a toroid for part of the output pi-network inductance (I'm guessing for 160, 80 and maybe 40 meters, I never got a close look). I'd like to do something similar in a project I'm working on. I'm looking for info on recommneded wire size (for legal limit) type and size of the ferrite toroid and any other pertinent design info.

3399. Re: 2SC2221 ---> NTE322??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5ha6hb$faa@mtinsc03.worldnet.att.net>
Source record: 95712

I don't have a spec on the 2SC221, but I did check my NTE book. I does
cross to a NTE322. BUT!!! Unless their specs are wrong, the cross
reference is no good. First the case should be the same. In addition
to that, it lists the ft (where gain is only x1) as 100 Mhz. A long way
from 2M. Might make a good attenuator unless they really underspeced
the device!

Woody

Jeffrey Herman wrote:
>
> Hi folks - I melted the 2SC2221 transistor in the final amp of my
> Tempo S1 HT. Honolulu Electronics says that a replacement for the
> 2221 is an ECG322, and a replacement for that is an NTE322 (which
> is what they sold me).
>
> Two things bother me:
> 1. The 2SC2221's case was similar to a TO-39 (round, metal); the
> case was soldered to the circuit board ground (for heat dissipation
> I suppose). The NTE322's case is similar to a TO-220 and is plastic.
> Should the NTE322's metal stub be soldered to ground?
> (i.e., are the 2221 and 322 electrically identical? I'd hate
> to ground the case if its not meant to be.)
>
> 2. The small amount of data that came on the 322 package says:
> "NPN - Si, RF Pwr Amp, CB, Po 3.5W Min, 27 MHz"
>
> This 2m HT (with the original 2SC2221 PA) was rated at 1.5W output.
> Can I exppect the NTE322 "CB PA" to have a similar output at 2m?
>
> Thanks in advance!
> Jeff KH2PZ

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3400. Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Robert Newland <rnewland@cyberramp.net>
Message-ID: <3338C992.713C@cyberramp.net>
Source record: 95713

http://www.cyberramp.net/~rnewland

3401. New 80 Meter SSB kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5h97cafro1@zinger.callamer.com>
Source record: 95714

Dan from Dan's Small Parts and Kits has announced a new 80 Meter SSB kit at a very nice price.

Check it out at: http://www.fix.net/dans.html

Enjoy,,,72,,,Jerry...K

3402. Re: Trap/Balun losses

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-25 00:00:00 UTC
From: Lionel Booth <lbooth@comm.net>
Message-ID: <01bc38cf$15a127c0$659dfec7@HOME>
Source record: 95715
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Just read your post and wanted to comment on the articles dealing with tuner efficiency. There have been a couple of articles written in the past few years decrying the inefficiency of certain tuners and types of tuners, particularly when baluns are involved.

I suspect that certain balun designs may dissipate a large amount of power under certain conditions of mismatch. However, having used a Heath 2040 for about six years under some really terrible situations and having not "burned up" or even warmed up significantly the internal balun causes me to question the validity of the testing that was done.

The efficiencies measured using the tuners, such as the Tucker, in an unbalanced, balunless, configuration also causes me some problems. They are now telling me that the tuners that I have traditionally used, SA2040, Johnson Matchbox, no longer work as advertised.

Is this the result of new insight or new science? Or have I been lucky?

Further the proof is in whether you can: 1. use the tuner to provide an acceptable load to the transmitter output circuit. 2. transfer enough power to the antenna using the resulting configuration to enable communications.

My experience in both cases is that my tuners meet these objectives.

Another consideration in the vein of the "big picture" is that even if the tuner/balun efficiency is somewhat lower than thought, the use of low loss balanced feeders may still be more efficient than the use of standard grade RG213 under similar conditions of mismatch as seen by the balanced feeders. The Matchbox, being inherently a balanced device, would seem like the best way to couple to a balanced feed system sans balun, and should be far more efficient than other designs.

Roger A. McCarty <rmccarty@deltanet.com> wrote in article
<3330B264.4D7D@deltanet.com>...
> Perhaps someone would like to comment on this. I have read what seems to
> be, two conflicting reports regarding trap and/or balun losses. To wit;
>
> From the ARRL Antenna Handbook, 1994. Page 11-28, paragraph 3;
>
> "If 1500 watts of transmitter power is going into an antenna, a loss of
> 0.5db amounts to 163 watts. This would create a significant amount of
>
> Roger KD6CC
>

3403. Mailing List Reflector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <3339B31F.4FBE@primenet.com>
Source record: 95599
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

```
BitBucket is a mailing list (reflector) devoted to
specialized amateur radio communication techniques.

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-Packet, Pactor, GTOR, Clover, RTTY
-R/C, Telemetry, Balloons, Rockets, Robotics
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email service by the byte you may want to consider carefully
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```

3404. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5hcf0u$hlo@mtinsc04.worldnet.att.net>
Source record: 95600

Silicon diodes typically have a higher conduction voltage than Ge.
But, how 'bout a "hot carrier" diode?

Woody

hynde@flash.net wrote:
>
> commquart@aol.com wrote:
> >
> > In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde <hynde@flash.net> writes:
> > >Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
> > >Tim, ka8ddz
> >
> > You can try it, but it won't work. You need a germanium diode, not
> > silicon. Try a 1N34A.
> >
> > Pete
> >
> > Peter Bertini K1ZJH
> > Senior Technical Editor, Communications Quarterly Magazine
> > "The Radio Connection," Popular Communications Magazine
> > -- proud members of the CQ family --
>
> Hmmm... I should have the two I made examined, Im getting all kinds of
> music and sports information comming out of the earphone.
>
> Granted the germanium diode is a better choice, but a 1n914 definatly
> does work.
> Why wouldn't it?
>
> Tim, ka8ddz

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3405. FS: Kenwood YK-455C-1 500Hz Filter , Lower priced.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <333996a8.487267@news.interbusiness.it>
Source record: 95601
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 70 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

3406. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: -=Tony=- <anthonys@pacbell.net>
Message-ID: <3339E988.7262@pacbell.net>
Source record: 95602
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

Robert M. Bratcher Jr. wrote:
>
> Another odd thing I noticed. That listserver wanted a confermation (by
> replying to a message it sent) to complete the subscription process.
> Seems to be low traffic at the moment (99 members) but that may
> change...
>
> Robert M. Bratcher Jr.

Ahemmm ... this mail list has more than 700 members by my
last reading! Most are paid subscribers and others are there during
the generous free trial period.

-=Tony=- W6ANV

3407. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: -=Tony=- <anthonys@pacbell.net>
Message-ID: <3339F1CF.287@pacbell.net>
Source record: 95603

Lou or Annette Hinshaw wrote:
>
> I BELIEVE HE OR SHE WANTED TO MAKE THEIR OWN PARTS
> FROM AROUND THE HOUSE.
>
> That being the case, buying anything would be a faux pas.
>
> Try, instead, a piece of copper ANYTHING, like the copper bottom
> of a cookpan, and a drop of vinegar, and a little metal tab to lay on
> it after the vinegar dries. I think we did something like that when I
> was in grade school, but after that they discovered dirt and kids lost
> interest in mere science.
>
> It wasn't THAT long ago, but i have a hazy memory that was how we did
> it.
>
> Hope it helps.
>
> WB0NRU

Here is another approach garnered from "deeper memory". ;-)

1. Make a small container of fresh molten lead, say 1/2" diam
and 1/4" deep.

2. While hot, sprinkle a very small amount of sulphur ...more
like specks ...on the fresh surface. Then allow to cool thoroughly.

3. For "catswhisker", make a small coil of piano wire with
sharply pointed end. Good electrical connections to the base of the
"ingot" and catswhisker are essential.

4. Apply pointed whisker experimentally on the surface of the lead ingot
for loudest signal.

Please don't ask me about the chemistry of this! It did
work (late 30's) but I succumbed to a 25 cent galena from some
mail order outfit. <VBG>

-=T=- W6ANV

3408. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: mc@shore.net
Message-ID: <5hcujo$kta@northshore.shore.net>
Source record: 95604
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

In article <3339E988.7262@pacbell.net>, -=Tony=- <anthonys@pacbell.net> wrote:
>Robert M. Bratcher Jr. wrote:
>>
>> Another odd thing I noticed. That listserver wanted a confermation (by
>> replying to a message it sent) to complete the subscription process.
>> Seems to be low traffic at the moment (99 members) but that may
>> change...
>>
>> Robert M. Bratcher Jr.
>
> Ahemmm ... this mail list has more than 700 members by my
>last reading! Most are paid subscribers and others are there during
>the generous free trial period.
>
> -=Tony=- W6ANV
>

I get the impression that this is another, new list with the same
name.....

Anyone seen any posts?

73,

Michael, W1RC
mc@shore.net

3409. Wanted: Motorola HT800 Software (Ian Alexander)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: ianwa@senet.com.au
Message-ID: <5hb9b7$d8q@highlander.senet.com.au>
Source record: 95605

I am looking for a copy of PC software to set frequencies in Motorola
HANDIE-TALKIE HT 800 eight channel FM radio.

Ian Alexander
ianwa@senet.com.au

3410. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: Grant Youngman <nq5t@gte.net>
Message-ID: <333A40D2.BA4@gte.net>
Source record: 95606
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

> I get the impression that this is another, new list with the same
> name.....
>

It is -- put together by someone who feels they have a cross to burn ...

or who wants to be seen as a hero of some sort amongst the faction who spent their only available $12.00 on a couple of six packs. The whole idea is ill advised and just dilutes the level of support and knowledge that would be available in one list with focused expertise and experience. Of course, there are people subscribing by the bezillions, but people would subscribe to lists on bologna and cheese sandwiches at an even higher rate. The possession of an internet ID and mail account is no guarantee of IQ .... Franky, having to subscirbe to 40 lists, each with the same basic members, but each focusing on narrow discussions of one manufacturer or whatever to get the breatdth of BA discussion is useless. Maybe I should start a list devoted to Hammarlund equipment manufactured between 8:02am and 9:22am on March 22, 1956 ?
Its all an ego trip of major proportions ...

;-)

Grant

3411. Re: NEED HELP IDENTIFYING HP TRANSFORMER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: dunnt@cco.caltech.edu
Message-ID: <dunnt-2603970906060001@tom-dunn.caltech.edu>
Source record: 95607

In article <5h99op$1pf$1@ncar.ucar.edu>, owens@stout.atd.ucar.edu (Chip Owens) wrote:

> Can anyone help in identifying an audio transformer with a
> Hewlett-Packard part number: 9120-0026?
>
> I believe this is a low-frequency audio transformer from a
> HP audio generator similar to the 200CD. In the HP 200CD,
> the low-frequency transformer is part number: 9120-0016.
>
> I'd like to find any/all specs available on this transformer
> and would appreciate any help.
>
> Thanks!, Chip Owens

The 9120-0026 is not listed in the !973-74 replacement parts catalog. The numbers 0016,0018,0022,0028, are listed, but no 0026. They are all refered to as AF transformers. That's all I could find. 73 Tom WB6IQD dunnt@cco.caltech.edu

3412. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Mar26.185435.28009@ke4zv.atl.ga.us>
Source record: 95608

In article <5h4b46$8lo@news.Hawaii.Edu> jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:
>Tom Rauch <W8JItom@worldnet.att.net> wrote:
>>John, If you look at the 95 Handbook, they return filament transformer
>>and other leads to the chassis in some PA designs, that is a bad idea
>>and against wiring standards.
>
>My Heath transmitters are wired that way. If a filament was above
>ground potential couldn't that adversely effect the operation of the
>tube? Electrons boiled off the cathode might flow towards the
>filament instead of the plate.
>
>Jeff KH2PZ / KH6

Don't misunderstand what Tom is saying. He's talking about grounding
a filament transformer *primary* winding to chassis. Of course there
can be good reason to tie one side of the transformer *secondary* to
chassis.

The same circuit (if it is the one I think it is) also ties 220 VAC
neutral to chassis. That's a violation of standard wiring practices
and can defeat GFI protection circuits.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

3413. Re: 1W CW transceiver for 27MHz

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5h9see$cu8@news.Hawaii.Edu>
Source record: 95609

Tero Ranta <tero.ranta@icenet.fi> wrote:
>Does anyone have schematic for a simple (max. 30-40 components)10m CW
>transceiver which could be adapted to 27MHz citizen-band use?

If you were in the US, I'd tell you no, since A1 transmissions are
not allowed in our CB radio service (pity).

Why not just use a CB transceiver? Try keying the B+ into the final
stage (press the PTT with one hand and use a keyer to key the B+ with
your other hand). You'll have to add a BFO to the receiver, but that's
easy to do.

Jeff KH2PZ

3414. Where To Buy Parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: "J. Andy Thompson" <jat@wolfenet.com>
Message-ID: <333956C7.1694@wolfenet.com>
Source record: 95610

Where does a person go to buy parts anymore? I am looking for a tank coil for a linear, a socket for a 4-1000, and a 7.5 volt 21 amp xfmr, and other miscellaneous parts.

It seems like the ham radio stores only sell boxes and antennas for them.

Andy - W7CXA
jat@wolfenet.com

3415. YAESU 901D GWO OFFERS PLEASE UK.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: Paul Shuffell <paul.shuffell@zetnet.co.uk>
Message-ID: <01bc3979$5cab7da0$c628f7c2@zetnet.co.uk>
Source record: 95716
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi all selling all my hf gear just a ft901 left good working order any
sensible offers or trade?
regards paul..
paul.shuffell@zetnet.co.uk

3416. Re: WEBPAGE UPDATES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: drx1001@ibm.net
Message-ID: <5h9pfm$1lpo$2@news-s01.ny.us.ibm.net>
Source record: 95717

Good site ditch the cookies

In article <33361909.9464779@news.primenet.com>, kb7ub@dxer.com (R. Dale
Piedfort) wrote:
>Check out the new indexes at
>
>"http://www.dxer.com"
>
>"Amateur Television Index"
>
>"New Product Index"
>
>"Used Equipment Index:
>
>"Additions to Ham Club, CW, Satellite
>and VHF/UHF indexes"
>
>Begining May 1st, 1997 Comet Antennas will be
>having a monthly drawing for Comet Shirts, and
>other selected items.. Details will be posted
>at "http://www.dxer.com"

3417. Re: WEBPAGE UPDATES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: drx1001@ibm.net
Message-ID: <5h9p80$1lpo$1@news-s01.ny.us.ibm.net>
Source record: 95718

This site is great but I'm on a diet and all those "cookies" fatten me up!!
I'm sorry but I don't accept them
KF4FCO Tim

In article <33361909.9464779@news.primenet.com>, kb7ub@dxer.com (R. Dale
Piedfort) wrote:
>Check out the new indexes at
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>"http://www.dxer.com"
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>"Additions to Ham Club, CW, Satellite
>and VHF/UHF indexes"
>
>Begining May 1st, 1997 Comet Antennas will be
>having a monthly drawing for Comet Shirts, and
>other selected items.. Details will be posted
>at "http://www.dxer.com"

3418. Re: WEBPAGE UPDATES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: drx1001@ibm.net
Message-ID: <5h9pmt$1lpo$3@news-s01.ny.us.ibm.net>
Source record: 95719

sorry for the extra post did not think the first one got there
In article <5h9pfm$1lpo$2@news-s01.ny.us.ibm.net>, drx1001@ibm.net (tim)
wrote:
>Good site ditch the cookies
>
>In article <33361909.9464779@news.primenet.com>, kb7ub@dxer.com (R. Dale
>Piedfort) wrote:
>>Check out the new indexes at
>>
>>"http://www.dxer.com"
>>
>>"Amateur Television Index"
>>
>>"New Product Index"
>>
>>"Used Equipment Index:
>>
>>"Additions to Ham Club, CW, Satellite
>>and VHF/UHF indexes"
>>
>>Begining May 1st, 1997 Comet Antennas will be
>>having a monthly drawing for Comet Shirts, and
>>other selected items.. Details will be posted
>>at "http://www.dxer.com"

3419. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33386df4.42147781@netnews.worldnet.att.net>
Source record: 95720

On 23 Mar 1997 22:33:42 GMT, jeffreyh@Hawaii.Edu (Jeffrey Herman)
wrote:

>Tom Rauch <W8JItom@worldnet.att.net> wrote:
>>John, If you look at the 95 Handbook, they return filament transformer
>>and other leads to the chassis in some PA designs, that is a bad idea
>>and against wiring standards.
>
>My Heath transmitters are wired that way. If a filament was above
>ground potential couldn't that adversely effect the operation of the
>tube? Electrons boiled off the cathode might flow towards the
>filament instead of the plate.

Primary leads Jeff, we are talking about the power line wiring.

My last sentence....

>>If the neutral and ground lead should ever break or become
>>disconnected, the chassis would be hot with 120 VAC.

73 Tom

3420. Re: Forgot!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <333894b1.113868959@news.flash.net>
Source record: 95721

On Sun, 23 Mar 1997 22:55:06 +0100, Thor Harald Johansen
<thorhajo@arcticnet.no> wrote:

>In my message 'Does this sound good???' i forgot to mention the URL to
>the WEB-page i got it from: http://www.fix.net/~jparker/Norcal40A.html
>
Thor,
I built one last spring and LOVE it! I only spent about 6 hours
building it, some guys take 15, but my 6 hrs was also mostly in front
of the TV... I've worked a lot of guys on it and used it for FD last
year. The only problem for FD is that when the sun gets real hot (I'm
in Texas) the rig drifts a little bit with the temperature change. I
don't consider it a problem, it was fine with a bit of shade. The
case is dark blue, and it probably got up to 130 or 150 degrees F.

Go for it, you won't be sorry. The kit is good quality, and has
excellent instructions. It's not the "part A in slot B" like
Heathkit, but if you know a capacitor from a resistor, you can do it.
You have to wind a few toroids,but they are all small except the 60 or
so turns for the VFO.

Have fun,
Kerry Miller
WD5ABC

3421. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9703252023585117@atdbbs.com>
Source record: 95722

>>The guys who complain are either -
>>Living in Russia and pay for their access by the kilobyte (yes this
>>is true!!)

I wouldn't compare my living in Southern California anything like
living in Russia.

Brian - learn what the basic rules of the Internet are. One of 'em is
you post MESSAGES in Messagegroups. Period. No pictures - no matter how
pertinent one might feel they are.

3422. Re: Homemade crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970326052500.AAA10782@ladder01.news.aol.com>
Source record: 95723

References: <1997Mar25.155547.21926@ke4zv.atl.ga.us>

In article <1997Mar25.155547.21926@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us
(Gary Coffman) writes:

>
>??? Of course it will work, you'll just need signals which are a bit
>stronger. The 1N34A has a barrier potential of about 0.2 V while the
>1N914 will have a barrier potential of about 0.6 V. That'll require
>signals about 9.5 db stronger to overcome the threshold. In practice,
>that won't be a problem. Any signal strong enough to drive your
headphones
>to a comfortable level will be strong enough to overcome the silicon
diode
>potential barrier.

Hi Gary!

I will admit that 1N914s or 1N4148s will work after a fashion,
but stand by my statement that they are the worst possible choice
for a crystal set.

I have over 30 vintage crystal sets, including some rare English
models from the 1920s and a few commercial loose couplers.
I have several modern homemade cyrstal sets designed for AMBCB dxing.
They even include S-meters -- 20-uA meters in series with the
headphones to measure the detector current to assist with tuning..
I use early Baldwins with mica diaphrams since those 1920s headsets
are the most sensitive ones I have been able to find. (Run of the mill
Brandes are a close second, however!) I use a good ground
and toploaded (radial) 60 foot vertical for an antenna.

My more elaborate homebrew sets have three stages of tuning, with
variable coupling, and were made for AMBCB dxing. To get any selectivity
much above 1000 kc requires light coupling, and you can't afford to
throw away 9.5 dB and expect to hear anything except for the strongest
local signals. My sets are good enough to seperate stations within 30 kc
of each other in the 800-kc region, and I can easily receive stations on
1030 kc
and ll30 kc with WTIC some 30 miles away running 50kW on 1080.
I have over 100 dx stations logged to date on one of these sets.
I would kill for another 10dB of signal!!!!

I have never much luck using a 1N914 diode, and I have tried
various biasing schemes to improve their performance as detectors.
I have used everything from razor blade detectors and some of my vintage

carborundums with better results. The 1N914 is a waste of time for anyone who is SERIOUS about building crystal sets. Unfortunately, when someone mentions crystal sets, most folks think of toys.

73

Peter

>>>>>>> END OF OFFLINE POST >>>>>>>

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

3423. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703260549.VAA23399@mailbox1.ucsd.edu>
Source record: 95724

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 37580.wrk; Wed, 26 Mar 1997 06:58:50 -1
Received: from [195.120.135.127] by infocomm.it id 37510.wrk; Wed, 26 Mar 1997 06:58:36 -1
Received: from [195.120.135.127] by infocomm.it id 374a0.wrk; Wed, 26 Mar 1997 06:58:22 -1
Received: from [195.120.135.127] by infocomm.it id 37410.wrk; Wed, 26 Mar 1997 06:58:04 -1
Received: from [195.120.135.127] by infocomm.it id 37380.wrk; Wed, 26 Mar 1997 06:57:50 -1
Received: from [195.120.135.127] by infocomm.it id 37310.wrk; Wed, 26 Mar 1997 06:57:34 -1
Received: from [195.120.135.127] by infocomm.it id 372a0.wrk; Wed, 26 Mar 1997 06:57:20 -1
Received: from [195.120.135.127] by infocomm.it id 371d0.wrk; Wed, 26 Mar 1997 06:57:00 -1
Received: from [195.120.135.127] by infocomm.it id 37130.wrk; Wed, 26 Mar 1997 06:56:40 -1
Received: from [195.120.135.127] by infocomm.it id 370b0.wrk; Wed, 26 Mar 1997 06:56:22 -1
Received: from [195.120.135.127] by infocomm.it id 37030.wrk; Wed, 26 Mar 1997 06:56:06 -1
Received: from [195.120.135.127] by infocomm.it id 36fa0.wrk; Wed, 26 Mar 1997 06:55:52 -1
Received: from [195.120.135.127] by infocomm.it id 36f30.wrk; Wed, 26 Mar 1997 06:55:40 -1
Received: from [195.120.135.127] by infocomm.it id 36ec0.wrk; Wed, 26 Mar 1997 06:55:24 -1
Received: from [195.120.135.127] by infocomm.it id 36e30.wrk; Wed, 26 Mar 1997 06:55:08 -1
Received: from [195.120.135.127] by infocomm.it id 36da0.wrk; Wed, 26 Mar 1997 06:54:54 -1
Received: from [132.239.1.54] by infocomm.it id 36d40.wrk; Wed, 26 Mar 1997 06:54:42 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id UAA19790 for <ham-homebrew-list@mailbox.ucsd.edu>; Tue, 25 Mar
1997 20:52:05 -0800 (PST)
Received: by noc.ucsd.edu; id TAA04948
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 19:40:23 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id TAA04913
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 19:40:16 -0800 (PST)
Message-Id: <199703260340.TAA04913@noc.ucsd.edu>
Date: Tue, 25 Mar 97 19:40:14 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #214
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Tue, 25 Mar 97 Volume 97 : Issue 214

Today's Topics:
2SC2221 ---> NTE322??
Cryptic coil description
CW transceiver made easy? (2 msgs)
FS:rg-178 mini coax
FS: Teflon Wire #18,22,24,26
HELP! MAXIM MAX2450 /51/52
Home made crystal(?) radio (2 msgs)
new radio concept
NOAA WX Warning Alarm Tone
Question: Charger for the HTX202
Schematics and plans online
Soft-start circuits (3 msgs)
UHF PA-Module
Writers needed

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 23 Mar 1997 04:10:29 GMT
From: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Subject: 2SC2221 ---> NTE322??

Hi folks - I melted the 2SC2221 transistor in the final amp of my
Tempo S1 HT. Honolulu Electronics says that a replacement for the
2221 is an ECG322, and a replacement for that is an NTE322 (which
is what they sold me).

Two things bother me:
1. The 2SC2221's case was similar to a TO-39 (round, metal); the
case was soldered to the circuit board ground (for heat dissipation
I suppose). The NTE322's case is similar to a TO-220 and is plastic.
Should the NTE322's metal stub be soldered to ground?
(i.e., are the 2221 and 322 electrically identical? I'd hate
to ground the case if its not meant to be.)

2. The small amount of data that came on the 322 package says:
"NPN - Si, RF Pwr Amp, CB, Po 3.5W Min, 27 MHz"

This 2m HT (with the original 2SC2221 PA) was rated at 1.5W output.
Can I exppect the NTE322 "CB PA" to have a similar output at 2m?

Thanks in advance!
Jeff KH2PZ

Date: Sun, 23 Mar 1997 17:46:24 GMT
From: aruder@pipeline.com (Lou or Annette Hinshaw)
Subject: Cryptic coil description

CBS5LD@leeds.ac.uk (L. DE BRUIJN) wrote:

>Is it possible to just use enamelled copper wire for all coils (provided the
>insulation is scraped away if a tap has to be made)? Or is there some good
>reason for using bare/tinned copper wire (RF signal handling etc.)? TIA

> 73 de Laurens

The tinning handles RF slightly, but has offsetting problems when the
surface begins to passivate.

Generally, the only reason I use tinned wire for a big RF coil is to
make it easier to solder a tap in place when the coil is already
installed. Scraping can be a **** then.

For real fine tuning of a coil of that sort, you often want it in
circuit, surrounded by all its chums before final placement of taps.

Hope this helps.

73

WB0NRU

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

Date: Tue, 25 Mar 1997 15:15:24 GMT
From: charles1@netcom.com (charles copeland)
Subject: CW transceiver made easy?

In article <33379D7F.7BA3@arcticnet.no>,
Thor Harald Johansen <thorhajo@arcticnet.no> wrote:
>How do i build my own affordable CW transceiver quick and easy? I want a
>CW capable of receiving and transmitting in frequently used bands. Is it
^^^^^
>possible for less than $100 (650 NKR)? If someone has cirquit-diagrams
>for such a CW, please reply and send them to me.

There are 6 or 12 kits you can buy for $50-$100 that cover
part of one band. Multiple bands costs 2-3 times that figure.

The Norcal40a kit costs $129 and is the best.
KB0WOB

Date: Tue, 25 Mar 1997 10:40:15 +0100
From: Thor Harald Johansen <thorhajo@arcticnet.no>
Subject: CW transceiver made easy?

How do i build my own affordable CW transceiver quick and easy? I want a CW capable of receiving and transmitting in frequently used bands. Is it possible for less than $100 (650 NKR)? If someone has cirquit-diagrams for such a CW, please reply and send them to me.

..Thor Harald..

Date: Mon, 24 Mar 1997 20:16:27 -0800
From: DENNYV <DENNYV@clarityconnect.com>
Subject: FS:rg-178 mini coax

I have a quantity of RG-174 minature 50 ohm coax for sale as follows: 25ft for $6 ppd. 50ft for $11 ppd and 100ft for $20 ppd. It is in new condition but has been in storage for several years.

I have a somewhat limited supply so please E mail me First
ADDR is
Dennis Voorhees
712 North Elmer Ave
Sayre,PA 18840-1804

Date: Tue, 25 Mar 97 19:36:59 GMT
From: dallen@melpar.esys.com (Dale Allen)
Subject: FS: Teflon Wire #18,22,24,26

I have teflon wire available in several colors in the listed sizes.
Thank you,
Dale

Date: Tue, 25 Mar 1997 17:12:13 GMT
From: maroof@triton.kaifnet.com (Maroof H. Choudhury)
Subject: HELP! MAXIM MAX2450 /51/52

Hi,

Can anybody give me any contact address of MAXIM for technical/designer's support?
I'm trying to design a Weaver method SSB Xciever using MAX2450 (51/52) quadrature modulator/demodulators. The built in LO is designed to work at 70MHz~160MHz. I need to make my radio work in the HF band. So is it possible to

inject carrier into the Qmodulators from external oscilators? Has anyone tried this? Also will the Qmodulators/demodulators work properly (with external injection) at <30MHz & if possible as low as 1KHz? It took a long 2 months for my samples to arrive, so I don't want take any risks. Please help.

Thanks for reading.

Maroof
<maroof@triton.kaifnet.com>

Date: 25 Mar 1997 04:59:57 GMT
From: tm_crw4d@srv.net (tom crawford)
Subject: Home made crystal(?) radio

I remember reading about making a detector using a penny (or other piece of metal) and touching a thin wire to it (the cat wisker). It appears that any corrosion on the surface will give the non-linear contact. I've never tried it, but I remember reading about it - maybe 20 years ago. Good luck.

Tom Crawford
KI7HC

Date: Tue, 25 Mar 1997 15:55:47 GMT
From: gary@ke4zv.atl.ga.us (Gary Coffman)
Subject: Home made crystal(?) radio

In article <19970323234501.SAA25900@ladder01.news.aol.com> commquart@aol.com writes:
>In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde <hynde@flash.net> writes:
>>Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
>>
>>Tim, ka8ddz
>
>You can try it, but it won't work. You need a germanium diode, not
>silicon. Try a 1N34A.
>
>Pete
>
>Peter Bertini K1ZJH
>Senior Technical Editor, Communications Quarterly Magazine
>"The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

??? Of course it will work, you'll just need signals which are a bit stronger. The 1N34A has a barrier potential of about 0.2 V while the 1N914 will have a barrier potential of about 0.6 V. That'll require signals about 9.5 db stronger to overcome the threshold. In practice, that won't be a problem. Any signal strong enough to drive your headphones to a comfortable level will be strong enough to overcome the silicon diode potential barrier. You will miss some weak signals, of course. The best

diode to use would be a point contact type like the IN21B used for years in radar receivers. Its barrier potential is slightly lower than either of the other types.

Now you *can* bias the diode to improve weak signal detection. That does require a battery (you can use a homemade "potato" battery), and a bias circuit. This will allow you to set the threshold arbitrarily close to conduction, and thus allow you to detect arbitrarily weak signals (radar receivers worked essentially this way before low noise SHF active devices became available). Of course the signals will be too weak to hear in the headphones without amplification. (In a receiver with very poor front end selectivity, such as the classic crystal set circuit, biasing the diode may bring on more troubles than it is worth since the selectivity will now be inadequate to avoid receiving virtually every signal on the band at once.)

Now if you allow a battery, then you could add an audio amplifier to boost the weaker signals so that they are audible in the headphones. But if you allow a battery and an active device, then you might want to go ahead and build a regenerative receiver. That's pretty simple too, and will normally perform better than a simple diode detector if the active device has adequate performance at the reception frequency. (With a CK722, you'd stick with the biased diode and use the transistor as an audio amp at frequencies above about 2 MHz. With a more modern transistor (almost any small signal type), you'd do better to use the transistor in the regenerative detector circuit up through at least 60 MHz, and for most types, higher than that.)

Note that it is not impossible to make transistors at home, at least on the level of the CK722. There was a series of articles in the Amateur Scientist column of Scientific American in the early 1960s describing how to do it. (The hard part is refining the pure germanium or silicon wafer. The series showed how to build a zone melting refiner to do that.) It'd be easier to master glassblowing and make your own tubes, however. This definitely falls outside the competence of the typical crystal set builder, but might be of interest to someone looking for a *real* homebrew challenge.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

Date: Sun, 23 Mar 1997 17:46:20 GMT
From: aruder@pipeline.com (Lou or Annette Hinshaw)
Subject: new radio concept

aruder@pipeline.com (Lou or Annette Hinshaw) wrote:

>Are there any investors that can talk to an inventor
>without trying to grab the goodies free?

>I haven't seen any.

>I, BTW, am WB0NRU, and my QTH is domewhat
>displaced. I live in Tulsa, 5-land. My call became
>a zero area in '75 or so, and I was five years or more
>learning not to give my old 4-call.

>So, When I moved to 5 country, I kept the zero call.

>Nothing wrong, of course, with my
> brain
> brai
> bra
> br

> but I do
>lose track.

>For this reason, I like most other prolific inventors,
>cannot sell or manage a business, wherewith
>leaving myself in the cold.

>I have discovered a way to xmit music over a
>bandspread of =< 100 Hz. Note that is Hertz
>not KiloHertz.

>I cannot talk well in a face-off, so I blow it every time.
>Any suggestions?

>I have already heard the one about find a salesman.

>My prob is that I must first sell that person on the idea.
>If I COULD sell them, I wouldn't need them.

>Catch 22

>Hope to hear from someone soon.

>Thanx

>Prolific inventor,
>Lousy Salesman,
>Incompetent businessman.
>(Typical)

Since posting the above, I have received 37 replies telling me it
can't be done.

To most of those I did not replly.

Several said it caint be done, but if it looks interesting, send it to
me, and I MAY get interested.

to all but one of those, I said "the world is full of people who got no idea what is going on, but who know why it won't work.

I wish to call to everyone's attention that Lee DeForest was sued by the then scientific authorities to keep him from putting a triode on the market ! ! !

I believe everyone knows that almost every home in the USA and most other industrial countries has at least one LARGE triode or bigger tube in their TV.

Semmelweiss, and Pasteur, and God alone knows how many others have seen this from the sharp end, and repeatedly proven that if you don't know, you don't know. BUT the "wisdoms" of theland, still can tell us

why whatever it is don't work, even though they've never seen one.

Ain't it a wonderful world?

To top it off, I recently read a book by Georgetta Heyer (The definitive hi

3424. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703260549.VAA23401@mailbox1.ucsd.edu>
Source record: 95725

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 375b0.wrk; Wed, 26 Mar 1997 06:58:56 -1
Received: from [195.120.135.127] by infocomm.it id 37530.wrk; Wed, 26 Mar 1997 06:58:40 -1
Received: from [195.120.135.127] by infocomm.it id 374b0.wrk; Wed, 26 Mar 1997 06:58:24 -1
Received: from [195.120.135.127] by infocomm.it id 37440.wrk; Wed, 26 Mar 1997 06:58:10 -1
Received: from [195.120.135.127] by infocomm.it id 373a0.wrk; Wed, 26 Mar 1997 06:57:54 -1
Received: from [195.120.135.127] by infocomm.it id 37330.wrk; Wed, 26 Mar 1997 06:57:40 -1
Received: from [195.120.135.127] by infocomm.it id 372b0.wrk; Wed, 26 Mar 1997 06:57:24 -1
Received: from [195.120.135.127] by infocomm.it id 37230.wrk; Wed, 26 Mar 1997 06:57:08 -1
Received: from [195.120.135.127] by infocomm.it id 37170.wrk; Wed, 26 Mar 1997 06:56:48 -1
Received: from [195.120.135.127] by infocomm.it id 370e0.wrk; Wed, 26 Mar 1997 06:56:32 -1
Received: from [195.120.135.127] by infocomm.it id 37060.wrk; Wed, 26 Mar 1997 06:56:12 -1
Received: from [195.120.135.127] by infocomm.it id 36fd0.wrk; Wed, 26 Mar 1997 06:56:00 -1
Received: from [195.120.135.127] by infocomm.it id 36f50.wrk; Wed, 26 Mar 1997 06:55:44 -1
Received: from [195.120.135.127] by infocomm.it id 36ed0.wrk; Wed, 26 Mar 1997 06:55:30 -1
Received: from [195.120.135.127] by infocomm.it id 36e60.wrk; Wed, 26 Mar 1997 06:55:14 -1
Received: from [195.120.135.127] by infocomm.it id 36dc0.wrk; Wed, 26 Mar 1997 06:55:00 -1
Received: from [132.239.1.54] by infocomm.it id 36d40.wrk; Wed, 26 Mar 1997 06:54:42 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id UAA19790 for <ham-homebrew-list@mailbox.ucsd.edu>; Tue, 25 Mar
1997 20:52:05 -0800 (PST)
Received: by noc.ucsd.edu; id TAA04948
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 19:40:23 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id TAA04913
sendmail 8.8.5/UCSD8.3
Tue, 25 Mar 1997 19:40:16 -0800 (PST)
Message-Id: <199703260340.TAA04913@noc.ucsd.edu>
Date: Tue, 25 Mar 97 19:40:14 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #214
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

Shack, Maxon, and Midland plan to make and market these radios for the foreseeable future.

Many models of Citizen's Band (CB) receivers on the market now have a WAT feature built into the unit. You can be monitoring any CB channel and if the WAT is detected on the weather radio channel you have set on the unit, the unit will activate a weak tone and switch the unit to the weather radio.

Hopefully you have seen the writeup I did on the reasoning for placement of the WAT in the coding sequence. If not, let me know and I'll forward a copy. In the SAME environment, the WAT will continue to have a function if for no other reason than as an attention signal to the listener.

Subject: Re[2]: 1050HZ Warning Alarm Tone

The transmitter operates in the narrow band of FM (25 KHz channels). Modulation in this band is confined to +/- 5 KHz of the primary frequency leaving a 7.5 KHz guard on either side of the max. deviations. The audio level from the program console is supposed to deviate the transmitter at a minimum of 4.25 to a max. of 5.0.

We are finding that all over the country, many of our systems are not operating to that standard. We are not really sure how wide spread the problem is but we are taking steps to correct it. If you find the deviation below these stated levels, do not hesitate to call the NWS office and let them know.

Unlike the broadcast industry that uses some very high quality lines or RF Studio to Transmitter Links (STL), we use mostly voice grade telephone lines and the attenuation on these lines can vary. I will pass you comments and concerns on to the appropriate people there in the NWS.

Subject: Re[2]: 1050HZ Warning Alarm Tone

Please do let us know if you observe a problem with a system. We are in the final stages of developing a remote monitoring system but it is still a few months away so the eyes and ears of users such as yourself are appreciated.

Date: Tue, 25 Mar 97 03:04:58 GMT
From: unregistered.dns@nowhere.com (Another bob)
Subject: Question: Charger for the HTX202

In article <33364684.2305894@news.pacbell.net>,
maynards@pacbell.net (Sam) wrote:
>I've misplaced the wallcharger for my HTX202 battery pack. The
>charger is 12vdc, 200ma. I have a couple of other wall plugs that
>are:
>
>9vdc, 1A
>12vdc, 1A
>
>As long as I have the polarity correct on these plugs, could I charge
>from these and not hurt the nicads?
>
>73,
>
>Sam

Radio Shack says NO WAY.

With that said, I charge mine from the car's DC power jack (aka cigarette
lighter socket) wit regularity, but no ill effects. Polarity is tip positive.
The 9 Volt unit may work.

7 3 de Matt KE6ALM
--

#####################################
The things we do # Reply to:
to avoid spam. # ke6alm
die.evil.spambot.#.@loop.com
#####################################

Date: Sun, 23 Mar 1997 11:00:01 -0800
From: Randy Jones <rjones@plix.com>
Subject: Schematics and plans online

Matthew Ballance wrote:
>
> Does anoyone know of a site on the web where you can download schematics,
> plans, or other information on homebrew TX/RX equipment?
>
> Matthew Ballance
> KF4BGQ Greensboro, NC

Matthew,

When you find one, make sure to post it's location on this news group.
Thanks.

Radio Randy

Date: Tue, 25 Mar 1997 13:07:27 GMT
From: W8JItom@worldnet.att.net (Tom Rauch)
Subject: Soft-start circuits

On 24 Mar 1997 21:25:05 GMT, jstroppe@uhl.uiowa.edu (John Stroppel)
wrote:

>eeg.uiowa.edu> <3336c59f.5653894@netnews.worldnet.att.net>
>Distribution:
>
>Tom:
>
> He (designer) has put the chassis off from ground. If this chassis is in
>another enclosure (cabinet) and the cabinet is ground has this violated the
>code?

Transformers and other line operated devices connect to the chassis. A
chassis line connection (even a "ground" connection) requires the
chassis be isolated from any possible contact by the operator.

That's tough to do, especially since the connectors and relay control
jack are grounded to the chassis. That means the PA has to be a box
inside a box, with full low frequency ac and dc isolation.

The correct solution is simple. Don't connect power line operated
transformer primaries and such to the chassis. If 120 volts is needed,
use an isolated neutral lead from the outlet to the PA.

> How many analog/digital systems are around that have two or three
>levels of ground?

Plenty, but you won't find any UL/CSA/CE devices that have 120 vac
return through the case or any chassis to cabinet path where 120 volts
could harm the operator from a simple broken wire.

>Once inside the enclosure which is "grounded" can you run
>another rail?

That would be the way to do it, and keep the rail isolated from the
chassis. The rail could connect to a neutral lead that is isolated
from the chassis.

That way, if the neutral opens, the op won't get fried.

73 Tom

Date: 25 Mar 1997 13:35:56 GMT
From: jstroppe@uhl.uiowa.edu (John Stroppel)
Subject: Soft-start circuits

Tom:

Isn't the amp in a box in a box. The author has a chassis in a cabinet.
He has isolated the chassis and cabinet. Keeping the neutral and ground

separate. The chassis is bonded to the neutral and the cabinet to the ground.
He could have called the chassis a neutral rail and the cabinet ground rail.
I can see that the input/output jacks cause a problem with operator
contact.
With isolation transformer are you going to bond either side of the
secondary to the neutral or chassis, or just float the secondary?
The filament transformer could have had a 220vac primary. That would
have solved that.

WA0VYZ
john

--
John Stroppel | Internet: jstroppe@uhl.uiowa.edu
The University of Iowa - Hygienic Lab | Amateur Radio: WA0VYZ
Oakdale Research Campus, OH-M7A | Voice: (319) 335-4500
Iowa City, IA 52242 | Fax: (319) 335-4555

Date: Wed, 26 Mar 1997 02:38:24 GMT
From: W8JItom@worldnet.att.net (Tom Rauch)
Subject: Soft-start circuits

On 23 Mar 1997 22:33:42 GMT, jeffreyh@Hawaii.Edu (Jeffrey Herman)
wrote:

>Tom Rauch <W8JItom@worldnet.att.net> wrote:
>>John, If you look at the 95 Handbook, they return filament transformer
>>and other leads to the chassis in some PA designs, that is a bad idea
>>and against wiring standards.
>
>My Heath transmitters are wired that way. If a filament was above
>ground potential couldn't that adversely effect the operation of the
>tube? Electrons boiled off the cathode might flow towards the
>filament instead of the plate.

Primary leads Jeff, we are talking about the power line wiring.

My last sentence....

>>If the neutral and ground lead should ever break or become
>>disconnected, the chassis would be hot with 120 VAC.

73 Tom

Date: 24 Mar 1997 16:21:03 GMT
From: "DC6SN" <DC6SN@aol.com>
Subject: UHF PA-Module

UHF Power Amplifier Modules

The MITSUBISHI M67729H2 has been developed and produced in large
quantities
for UHF cellular telephone applications.

Technical Data:
Output Power = 20 W
Gain = 21 dB
Harmonics = -40 db
Spurious Outputs = -70 dB
50 Ohm in/out

This module is also excellent suited for class C Amateur Radio PA's in the
70 cm-Band.
The low output of a UHF handheld may be amplified to about 20 W output! The
use of these modules is the easiest way to build a PA. There are various
discriptions in the ham literature.

I am now able to offer you this excellent module with a more than 10 dB!
price
reduction:

1 ea for DM 35,--
10 ea for DM 300,--

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DC6SN FAX: (+49) 2405-84623
Im Groetchen 38 Email: dc6sn@aol.com
D-52146 W&#65533;rselen
GERMANY

Date: 23 Mar 1997 17:53:25 GMT
From: David Hamilton <bdx@magi.com>
Subject: Writers needed

We need fresh, new, and fun ham radio articles and stories for a new
publication to be launched this fall. No boring stuff allowed! Our
audience comprises many beginners to all modes of operation, so use your
imagination. We pay $$ upon publication.
Interested? Great! Send your story/article ideas - or better yet, the
entire manuscript - to me. Let's discuss.

David Hamilton, VA3UE
BDX Radio
17 Equestrian Drive
Kanata, Ontario K2M 1B8
Canada

http://www.bushdog.com

End of Ham-Homebrew Digest V97 #214
****

3425. BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: bry@mns.net
Message-ID: <5hajv8$ehb@news1.mnsinc.com>
Source record: 95726
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

There is a new LISTSERV e-mail list for BOATANCHORS enthusiasts that I
just discovered! The best part is that it is FREE!!
To subscribe, send an e-mail message to:

LISTSERV@LISTSERV.TEMPE.GOV

with no subject, and the text:

subscribe boatanchors <Your Full Name>

The only odd thing is that it wants you to send you name with a middle
initial otherwise it rejects the subscription.

For example, I had to send:

subscribe boatanchors Brian J. Carling

See you there!

3426. Re: Question: Charger for the HTX202

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: no.spamming.allowed@null.com
Message-ID: <5hankn$1bq@usenet88.supernews.com>
Source record: 95727
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <01bc3915$47e1ad40$7c60b6cd@cbx-nt>,
"Christopher Cox" <cobox@netexp.net> wrote:
>Hi Guys. The trick with "feeding" NiCads is to limit their intake while
>charging, even from a car. You can use a Voltage regulator like a 7805 or
>7812 for this by putting the regulator in series following the Input from
>the supply side and output to the battery with the ground post attached via
>a resistor to the output pin. The feed rate is calculated by I=Vr/R where
>I=current, Vr=VoltageRatingOfTheRegulator R=resistor so a 7805 with a 33
>Ohm resistor in place feeds at a .151 Amp or 151ma. I do not know what the
>feed rate should be for those NiCads, but I am sure it is mentioned
>somewhere.
>
>
>Regards
>
>Christopher Cox
>KC8FRJ
>TRA#4901

Just FYI, it's a 600 ma battery pack, so C/10 charge rate is 60 ma.

To further qualify my response from yesterday:

I charge my battery packs with regularity from the car. BEFORE I did this for the very first time, I did some investigation. LOOK AT THE SCHEMATIC. There is a voltage and current limiting circuit BUILT INTO THE BATTERY PACK. I took mr. ammeter out to the car to verify. Yep, drawing a mighty 57 MILLIAMPS when powered from the lighter socket. The circuit works as expected. All is well in the world.

Of course, RS will tell you not to do this.

So, back to which adapter - go with the 12 Volt unit. And don't listen to anyone that tells you that much current will blow your pack. Just because a DC adapter is CAPABLE of providing 1 Amp does not mean that it will FORCE 1 Amp through the circuit. It just means that you: a) Have an adapter that will run cool while charging the battery. b) Have an adapter that can, theoretically, recharge 15 packs at once.

Good luck, 7 3, YMMV, etc.
Matt Mendenhall
KE6ALM
--

```
#######################################
# The things we do # Reply to: #
# to avoid spam. # ke6alm #
# die.evil.spambot.#.@loop.com #
#######################################
```

3427. Homebrew articles on-line - NEW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hart7$hdc@news1.mnsinc.com>
Source record: 95728
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hey guys - I wanted to let you all know that I have found a really
great web site for homebrew articles and projects on-line
that I think many of us do not know about!

It is a branch of the G3YCC QRP page in England that has
SM0VPO's projects:

http://www.gqrpclub.demon.co.uk/sm0vpo_1.html

Give it a try. There are numerous tube and transistor transmitters
and receivers shown there. Really great!

I hope you find it interesting as I did!

73 - AF4K / QRP

3428. WTB: NOS Audio Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: BlueStrat <bluestat@erols.com>
Message-ID: <3339136D.46FC@erols.com>
Source record: 95729
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.equipment

I'm looking for the following:
6V6Gt's
6L6GC's
12AX7's
EL34/6CA7's
EL84's
7951
7581A
5U4G(B)
Thanks,
Mike

3429. Re: Question: Charger for the HTX202

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: flanders@groupz.net
Message-ID: <5h9uf9$kkm1@duke.groupz.net>
Source record: 95730
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

maynards@pacbell.net (Sam) wrote:

>I've misplaced the wallcharger for my HTX202 battery pack. The
>charger is 12vdc, 200ma. I have a couple of other wall plugs that
>are:

>9vdc, 1A
>12vdc, 1A

>As long as I have the polarity correct on these plugs, could I charge
>from these and not hurt the nicads?

>73,

>Sam
==========
You would need to set up a metering circuit for tests. One fail-safe
way to charge NiCads is to charge them for 15 hours at a rate of
one-tenth the design capacity.

If the charge rate you observe is in this 10% ballpark, just calculate
how long it will take to put in 150% of its rated capacity, and go
with that when the cells are fully discharged.

NOTE: The ratings on your charger do not indicate that it somehow
"forces" that much current into the load - it merely indicates the
rating beyond which you can expect it to fail internally. The amount
of current which flows in the circuit depends on the circuit, not the
"rating" of the charger. This is why you must actually set up and
measure it. Got a meter? Get one. Got a callsign? Use it with your
posts.

Jerry W4UK

3430. 1296 xverter wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: doug johnson <iix@pop.interaccess.com>
Message-ID: <333924CD.BF7@pop.interaccess.com>
Source record: 95731

still looking for used 1296 xverter, anyone? e-mail iix@interaccess.com

3431. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: lblockhart@aol.com
Message-ID: <19970326155000.KAA21181@ladder01.news.aol.com>
Source record: 95732

In article <333935ca.2542358@news.capital.net>, orion**@capital.net writes:

>ROB - GREAT - ignore the garbage.

Garbage? You mean ignore the rules dont you Carling? Are you a "newbie" too?
I don't live in Russia and I have a 486 computer with 28.8 modem connection that works quite well. There are thousands of us that use offline news group readers that automatically download the news group articles.

Dont you understand that if the practice of posting MASSIVE binaries here on this TEXT ONLY DISCUSSION group proliferated that the burden on the servers and readers would impede the exchange of meaningful info? There are mechanisms in place to exchange the pictures and schematics that you and Rob desire to do. Do it there and both of you keep your flawed logic and pictures to yourselves!!! Geeez...

L. B. Lockhart KC5NVY Houston, Tx. USA
Northwest Amatuer Radio Society 146.660 (-)
OMIK - Electronic Communications Association, Inc.
ARRL

3432. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: hynde@flash.net
Message-ID: <33397996.775F@flash.net>
Source record: 95733

commquart@aol.com wrote:
>
> In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde <hynde@flash.net> writes:
> >Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
> >Tim, ka8ddz
>
> You can try it, but it won't work. You need a germanium diode, not
> silicon. Try a 1N34A.
>
> Pete
>
> Peter Bertini K1ZJH
> Senior Technical Editor, Communications Quarterly Magazine
> "The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

Hmmm... I should have the two I made examined, Im getting all kinds of
music and sports information comming out of the earphone.

Granted the germanium diode is a better choice, but a 1n914 definatly
does work.
Why wouldn't it?

Tim, ka8ddz

3433. Re: WTB: 3-500 CHIMNEY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: dickrb@lsid.hp.com
Message-ID: <5hbhmu$sb7@hpcvsnz.cv.hp.com>
Source record: 95734

Hi

I have used a so-called "Farmans" pickle-jar as a VERY effective chimney for my 3-500 50MHz amp. The bottom of the jar has to be cut away with a glass cutter and the necked portion of the jar fits the contour of the 3-500 beautifully.

Be sure to CAREFULLY sand the bottom of the cut portion to eliminate the sharp edges. Check out the jars at your local grocery store!

73 de w7wkr - dick

3434. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703261634.IAA13935@mailbox1.ucsd.edu>
Source record: 95735

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 8d840.wrk; Wed, 26 Mar 1997 17:44:10 -1
Received: from [195.120.135.127] by infocomm.it id 8d800.wrk; Wed, 26 Mar 1997 17:44:00 -1
Received: from [195.120.135.127] by infocomm.it id 8d780.wrk; Wed, 26 Mar 1997 17:43:50 -1
Received: from [195.120.135.127] by infocomm.it id 8d730.wrk; Wed, 26 Mar 1997 17:43:40 -1
Received: from [195.120.135.127] by infocomm.it id 8d6e0.wrk; Wed, 26 Mar 1997 17:43:30 -1
Received: from [195.120.135.127] by infocomm.it id 8d690.wrk; Wed, 26 Mar 1997 17:43:18 -1
Received: from [195.120.135.127] by infocomm.it id 8d640.wrk; Wed, 26 Mar 1997 17:43:08 -1
Received: from [195.120.135.127] by infocomm.it id 8d5b0.wrk; Wed, 26 Mar 1997 17:42:54 -1
Received: from [195.120.135.127] by infocomm.it id 8d560.wrk; Wed, 26 Mar 1997 17:42:46 -1
Received: from [195.120.135.127] by infocomm.it id 8d510.wrk; Wed, 26 Mar 1997 17:42:34 -1
Received: from [195.120.135.127] by infocomm.it id 8d4c0.wrk; Wed, 26 Mar 1997 17:42:24 -1
Received: from [195.120.135.127] by infocomm.it id 8d460.wrk; Wed, 26 Mar 1997 17:42:14 -1
Received: from [195.120.135.127] by infocomm.it id 8d420.wrk; Wed, 26 Mar 1997 17:42:04 -1
Received: from [195.120.135.127] by infocomm.it id 8d3a0.wrk; Wed, 26 Mar 1997 17:41:54 -1
Received: from [195.120.135.127] by infocomm.it id 8d300.wrk; Wed, 26 Mar 1997 17:41:34 -1
Received: from [195.120.135.127] by infocomm.it id 8d200.wrk; Wed, 26 Mar 1997 17:41:04 -1
Received: from [132.239.1.54] by infocomm.it id 8d0b0.wrk; Wed, 26 Mar 1997 17:40:26 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA03919 for <ham-homebrew-list@mailbox.ucsd.edu>; Wed, 26 Mar
1997 04:52:10 -0800 (PST)
Received: by noc.ucsd.edu; id EAA05346
sendmail 8.8.5/UCSD8.3
Wed, 26 Mar 1997 04:31:00 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA05329
sendmail 8.8.5/UCSD8.3
Wed, 26 Mar 1997 04:30:57 -0800 (PST)
Message-Id: <199703261230.EAA05329@noc.ucsd.edu>
Date: Wed, 26 Mar 97 04:30:56 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #216
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Wed, 26 Mar 97 Volume 97 : Issue 216

Today's Topics:
2SC2221 ---> NTE322??
Converting GE comercial radios
Cordless telephone as a remote for HF radio?
Cryptic coil description
Forgot!
Help wanted for the Pixie-2 Transceiver
Homebrew articles on-line - NEW
non-erotic, non-sexual, but possibly tantalizing linear pics
Question: Charger for the HTX202
Soft-start circuits
Toroids for Pi-Net
WEBPAGE UPDATES (2 msgs)

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 25 Mar 1997 22:54:25 -0500
From: Woody White <"eMail "@my.www.page.Mailto>
Subject: 2SC2221 ---> NTE322??

I don't have a spec on the 2SC221, but I did check my NTE book. I does
cross to a NTE322. BUT!!! Unless their specs are wrong, the cross
reference is no good. First the case should be the same. In addition
to that, it lists the ft (where gain is only x1) as 100 Mhz. A long way
from 2M. Might make a good attenuator unless they really underspeced
the device!

Woody

Jeffrey Herman wrote:
>
> Hi folks - I melted the 2SC2221 transistor in the final amp of my
> Tempo S1 HT. Honolulu Electronics says that a replacement for the
> 2221 is an ECG322, and a replacement for that is an NTE322 (which
> is what they sold me).
>
> Two things bother me:
> 1. The 2SC2221's case was similar to a TO-39 (round, metal); the

> case was soldered to the circuit board ground (for heat dissipation
> I suppose). The NTE322's case is similar to a TO-220 and is plastic.
> Should the NTE322's metal stub be soldered to ground?
> (i.e., are the 2221 and 322 electrically identical? I'd hate
> to ground the case if its not meant to be.)
>
> 2. The small amount of data that came on the 322 package says:
> "NPN - Si, RF Pwr Amp, CB, Po 3.5W Min, 27 MHz"
>
> This 2m HT (with the original 2SC2221 PA) was rated at 1.5W output.
> Can I exppect the NTE322 "CB PA" to have a similar output at 2m?
>
> Thanks in advance!
> Jeff KH2PZ

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

Date: Sat, 22 Mar 1997 08:15:27 -0500
From: jmello@lynx.dac.neu.edu (Jim Mello)
Subject: Converting GE comercial radios

Can any one tell me if early 70s GE Pheonix comercial mobile radios set at
158 megahertz can be converted for amature aplications.
Also is there any market for a 1945 -1950 vintage Motorola stand up
basetation with the same frequencey

THANKS
N1YRM
Jim Mello

Date: Thu, 13 Mar 1997 07:01:03 -0500
From: david hand <dhand@gdi.net>
Subject: Cordless telephone as a remote for HF radio?

The thought occures to me that it shhould be possible to use a cordless
phone as the basis to buiild a remote system for my FT990.

The audio goes both ways and the TT pad could be decoded to tune the
radio. Has it been done? How well did it work?

Dave Hand WB4HYP
dhand@microdes.com

Date: 17 Mar 1997 13:06:07 GMT
From: ajass@tabaqui.informatik.rwth-aachen.de (Andreas Junklewitz)
Subject: Cryptic coil description

Hallo,

in one of the ARRL-Microwave handbooks, there are coil description
which are absolut cryptic to me.

What means: 4t, 28 swg e.c.w. ?
or 2.5t, 28 swg t.c.w. ?

I guess the t stands for the number of turns. But what is the rest?
Any hints are appreciated.

With best regards
Andreas

Date: Wed, 26 Mar 1997 03:19:03 GMT
From: kmiller@flash.net (Kerry Miller)
Subject: Forgot!

On Sun, 23 Mar 1997 22:55:06 +0100, Thor Harald Johansen
<thorhajo@arcticnet.no> wrote:

>In my message 'Does this sound good???' i forgot to mention the URL to
>the WEB-page i got it from: http://www.fix.net/~jparker/Norcal40A.html
>
Thor,
I built one last spring and LOVE it! I only spent about 6 hours
building it, some guys take 15, but my 6 hrs was also mostly in front
of the TV... I've worked a lot of guys on it and used it for FD last
year. The only problem for FD is that when the sun gets real hot (I'm
in Texas) the rig drifts a little bit with the temperature change. I
don't consider it a problem, it was fine with a bit of shade. The
case is dark blue, and it probably got up to 130 or 150 degrees F.

Go for it, you won't be sorry. The kit is good quality, and has
excellent instructions. It's not the "part A in slot B" like
Heathkit, but if you know a capacitor from a resistor, you can do it.
You have to wind a few toroids,but they are all small except the 60 or
so turns for the VFO.

Have fun,
Kerry Miller
WD5ABC

Date: Thu, 13 Mar 1997 10:33:00 -0800
From: Ed Loranger <loranger@sr.hp.com>
Subject: Help wanted for the Pixie-2 Transceiver

Hey! That's great your building this rig. I've
found very little information on similar, simple
projects for QRP. I've been all over the net
and most everyone wants you to BUY!

I would go ahead and put it in. This inductor
will most likely improve response in the 80 M. band.

If you wish, use a small low frequency torroid
and wind 6-10 turns of 22 AWG wire on it and see
what you get. It worked fine for me with 6 turns.

As a direct conversion receiver/xmtr, you'll notice
the oscillator beat on a nearby receiver. Also you
will probably get a nearby AM Radio Station if you dont
change the output capacitor to 100 pf. You absolutely
must use a resonant wire with this one. I found that
a 66 ft end fed or a dipole with 33 ft. legs works great.
If you play around with a short antenna you'll think
there's something wrong -- the local AM broadcast station
will be overpowering! Don't do any troubleshooting
until you've got it hooked up right.

One more thing, the keying wire is in series with
the output/mixer transistor and the DC resistance of
a long connection to the key will adversely affect
output power. Keep it short or start looking for
a switching transistor to bypass the 10 K ohm idling
resistor (it is used for receive mixing).

If you need any more information I can email
you the original circuits and a 700 Hz RIT/XIT mod
I found on the web. Unfortunately the mod forces
a +/- supply, requiring another battery.

72 de WE6W QRP .3 Watts QSX 7040 KHz.

--
mailto:loranger@sr.hp.com

Date: Wed, 26 Mar 1997 09:58:59 GMT
From: bry@mnsinc.com (Brian Carling G3XLQ / AF4K)
Subject: Homebrew articles on-line - NEW

Hey guys - I wanted to let you all know that I have found a really
great web site for homebrew articles and projects on-line
that I think many of us do not know about!

It is a branch of the G3YCC QRP page in England that has
SM0VPO's projects:

http://www.gqrpclub.demon.co.uk/sm0vpo_1.html

Give it a try. There are numerous tube and transistor transmitters
and receivers shown there. Really great!

I hope you find it interesting as I did!

73 - AF4K / QRP

Date: Tue, 25 Mar 1997 20:37:30 GMT
From: orion**@capital.net
Subject: non-erotic, non-sexual, but possibly tantalizing linear pics

On Tue, 25 Mar 1997 14:24:50 GMT, bry@mns.net (Brian Carling G3XLQ /
AF4K) wrote:

>ROB - GREAT - ignore the garbage. THANK YOU for posting those
>pictures.
>I LIKE To see hams' pictures and schematics. THIS is the kind of thing
>the Internet does very well at.
>
>The guys who complain are either -
>
>1) Living in Russia and pay for their access by the kilobyte (yes this
>is true!!)
>
>or
>
>2) Using a 286 that doesn't load stuff very fast!
>
>Heck they can always push DELETE or IGNORE the articles, sheesh!

What the Hell is wrong with you, Carling, encouraging this guy to post
these huge binaries on this newsgroup? This is a DISCUSSION group.
Text Only. You should know better. There are proper places for
binaries to be posted, and this group aint one of 'em.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

Date: Wed, 26 Mar 97 05:29:15 GMT
From: no.spamming.allowed@null.com (King Kamehameha)
Subject: Question: Charger for the HTX202

In article <01bc3915$47e1ad40$7c60b6cd@cbx-nt>,
"Christopher Cox" <cobox@netexp.net> wrote:
>Hi Guys. The trick with "feeding" NiCads is to limit their intake while
>charging, even from a car. You can use a Voltage regulator like a 7805 or
>7812 for this by putting the regulator in series following the Input from

>the supply side and output to the battery with the ground post attached via
>a resistor to the output pin. The feed rate is calculated by I=Vr/R where
>I=current, Vr=VoltageRatingOfTheRegulator R=resistor so a 7805 with a 33
>Ohm resistor in place feeds at a .151 Amp or 151ma. I do not know what the
>feed rate should be for those NiCads, but I am sure it is mentioned
>somewhere.
>
>
>Regards
>
>Christopher Cox
>KC8FRJ
>TRA#4901

Just FYI, it's a 600 ma battery pack, so C/10 charge rate is 60 ma.

To further qualify my response from yesterday:

I charge my battery packs with regularity from the car. BEFORE I did this for the very first time, I did some investigation. LOOK AT THE SCHEMATIC. There is a voltage and current limiting circuit BUILT INTO THE BATTERY PACK. I took mr. ammeter out to the car to verify. Yep, drawing a mighty 57 MILLIAMPS when powered from the lighter socket. The circuit works as expected. All is well in the world.

Of course, RS will tell you not to do this.

So, back to which adapter - go with the 12 Volt unit. And don't listen to anyone that tells you that much current will blow your pack. Just because a DC adapter is CAPABLE of providing 1 Amp does not mean that it will FORCE 1 Amp through the circuit. It just means that you: a) Have an adapter that will run cool while charging the battery. b) Have an adapter that can, theoretically, recharge 15 packs at once.

Good luck, 7 3, YMMV, etc.
Matt Mendenhall
KE6ALM
--

##
The things we do # Reply to:
to avoid spam. # ke6alm
die.evil.spambot.#.@loop.com
##

Date: 23 Mar 1997 22:33:42 GMT
From: jeffreyh@Hawaii.Edu (Jeffrey Herman)
Subject: Soft-start circuits

Tom Rauch <W8JItom@worldnet.att.net> wrote:
>John, If you look at the 95 Handbook, they return filament transformer

>and other leads to the chassis in some PA designs, that is a bad idea
>and against wiring standards.

My Heath transmitters are wired that way. If a filament was above
ground potential couldn't that adversely effect the operation of the
tube? Electrons boiled off the cathode might flow towards the
filament instead of the plate.

Jeff KH2PZ / KH6

Date: Tue, 25 Mar 1997 21:06:02 -0500
From: Steve <thebizlk@erols.com>
Subject: Toroids for Pi-Net

I've seen some amplfiers using a toroid for part of the output pi-network
inductance (I'm guessing for 160, 80 and maybe 40 meters, I never got a
close look). I'd like to do something similar in a project I'm working
on. I'm looking for info on recommneded wire size (for legal limit) type
and size of the ferrite toroid and any other pertinent design info.

Date: Wed, 26 Mar 97 00:04:42 GMT
From: drx1001@ibm.net (tim)
Subject: WEBPAGE UPDATES

This site is great but I'm on a diet and all those "cookies" fatten me up!!
I'm sorry but I don't accept them
KF4FCO Tim

I

3435. Ramsey FX-146

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: wb5seg@aol.com
Message-ID: <19970326163700.LAA23469@ladder01.news.aol.com>
Source record: 95736

Hi name is Barry/WB5SEG

Looking for any projects for the FX-146. Like tone device for repeaters, more channels. Just put it together and Iam already looking for extra stuff for it.

3436. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: nospam@mail.net
Message-ID: <33415206.229044911@NETNEWS.WORLDNET.ATT.NET>
Source record: 95737
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

On Wed, 26 Mar 1997 07:43:31 GMT, bry@mns.net (Brian Carling G3XLQ / AF4K) wrote:

>There is a new LISTSERV e-mail list for BOATANCHORS enthusiasts that I
>just discovered! The best part is that it is FREE!!
>To subscribe, send an e-mail message to:
>
>LISTSERV@LISTSERV.TEMPE.GOV
>
>with no subject, and the text:
>
>subscribe boatanchors <Your Full Name>
>
>The only odd thing is that it wants you to send you name with a middle
>initial otherwise it rejects the subscription.
>
>For example, I had to send:
>
>subscribe boatanchors Brian J. Carling
>
>See you there!

Another odd thing I noticed. That listserver wanted a confermation (by replying to a message it sent) to complete the subscription process. Seems to be low traffic at the moment (99 members) but that may change...

Robert M. Bratcher Jr.
E-mail to:
bratcher@worldnet.att.net
Record collector, 8mm, super 8, 16 and 35mm Film collector.
I like old radio's too.
Collins, Hallicrafters, National & Hammurland are my Favorites!

3437. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: lblockhart@aol.com
Message-ID: <19970326171700.MAA26132@ladder01.news.aol.com>
Source record: 95738

In article <333935ca.2542358@news.capital.net>, orion**@capital.net writes:

>ROB - GREAT - ignore the garbage.

Garbage? You mean ignore the rules dont you Carling? Are you a "newbie" too?
I don't live in Russia and I have a 486 computer with 28.8 modem connection that works quite well. There are thousands of us that use offline news group readers that automatically download the news group articles.

Dont you understand that if the practice of posting MASSIVE binaries here on this TEXT ONLY DISCUSSION group proliferated that the burden on the servers and readers would impede the exchange of meaningful info? There are mechanisms in place to exchange the pictures and schematics that you and Rob desire to do. Do it there and both of you keep your flawed logic and pictures to yourselves!!! Geeez...

L. B. Lockhart KC5NVY Houston, Tx. USA
Northwest Amatuer Radio Society 146.660 (-)
OMIK - Electronic Communications Association, Inc.
ARRL

3438. looking for a schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: Suleyman Yalcinkaya <suleyman@netas.com.tr>
Message-ID: <333954A4.7563@netas.com.tr>
Source record: 95739

Hi all,

I'm looking for a schematics for 2m (144-146 Mhz) receiver which has
PLL device.

Thanks in advance,

regards,

3439. Oscilloscope for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: cwonders4@aol.com
Message-ID: <19970326195301.OAA06054@ladder01.news.aol.com>
Source record: 95740

Got two SS5702 Jiwatsu,
Dual Trace,
DC-20MHz,
4" X 3" blue display,
Backlit graticule,
10 V to 1mV settings,
with calibrate settings,
bought used, works fine,
nice.

Would like to get $200.00 for one of them.

If you would like to make a reasonable offer
reply via email only, stiwari@cwonders.com

Tnx
KF6HST
Sameer

3440. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: orion**@capital.net
Message-ID: <333a8d45.16838921@news.capital.net>
Source record: 95741

On 26 Mar 1997 15:50:45 GMT, lblockhart@aol.com wrote:

>In article <333935ca.2542358@news.capital.net>, orion**@capital.net writes:
>
>>ROB - GREAT - ignore the garbage.
>

Hmm. This seems to be a quote by me. It is not. It is a quote from
Brian Carling who was foolishly advocating posting huge binary files
on this newsgroup.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

3441. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: FRANCISCO JOSE JIMENEZ MEGIA <ec4aaf@jet.es>
Message-ID: <3339916D.4CBC@jet.es>
Source record: 95742
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Thor Harald Johansen wrote:
>
> How do i build my own affordable CW transceiver quick and easy? I want a
> CW capable of receiving and transmitting in frequently used bands. Is it
> possible for less than $100 (650 NKR)? If someone has cirquit-diagrams
> for such a CW, please reply and send them to me.
>
> ..Thor Harald..

3442. Re: 2SC2221 ---> NTE322??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: tbaca@boi.hp.com
Message-ID: <5hbic3$e6h6@hpbs1500.boi.hp.com>
Source record: 95743

Jeffrey Herman (jeffreyh@Hawaii.Edu) wrote:
: Hi folks - I melted the 2SC2221 transistor in the final amp of my
: Tempo S1 HT. Honolulu Electronics says that a replacement for the
: 2221 is an ECG322, and a replacement for that is an NTE322 (which
: is what they sold me).

: Thanks in advance!
: Jeff KH2PZ

Jeff,
Call MCM Electronics (800-543-4330) the have the 2sc2221 for about $9.00.
Not sure if they still have a $25.00 min order.

_____
/ony Baca Hewlett Packard Co. Boise, Idaho tbaca@boi.hp.com

3443. Re: looking for a schematics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: Mark Sandford <sandford@tridsys.com>
Message-ID: <33399E93.41C6@tridsys.com>
Source record: 95744

Suleyman Yalcinkaya wrote:
>
> Hi all,
>
> I'm looking for a schematics for 2m (144-146 Mhz) receiver which has
> PLL device.
>
> Thanks in advance,
>
> regards,
JDR has a two meter trancevier kit that is PLL synthesized
for $100-150 if I remember correctily

3444. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5hc1m2$tkn@camel1.mindspring.com>
Source record: 95745

commquart@aol.com wrote:

>In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde <hynde@flash.net> writes:

>>
>>Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
>>
>>Tim, ka8ddz
>>
>>

>You can try it, but it won't work. You need a germanium diode, not
>silicon. Try a 1N34A.

>Pete

>Peter Bertini K1ZJH
>Senior Technical Editor, Communications Quarterly Magazine
>"The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

I BELIEVE HE OR SHE WANTED TO MAKE THEIR OWN PARTS
FROM AROUND THE HOUSE.

That being the case, buying anything would be a faux pas.

Try, instead, a piece of copper ANYTHING, like the copper bottom
of a cookpan, and a drop of vinegar, and a little metal tab to lay on
it after the vinegar dries. I think we did something like that when I
was in grade school, but after that they discovered dirt and kids lost

interest in mere science.

It wasn't THAT long ago, but i have a hazy memory that was how we did
it.

Hope it helps.

WB0NRU

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

3445. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: John Szalay <john.szalay@postoffice.worldnet.att.net>
Message-ID: <3339C5E6.105@postoffice.worldnet.att.net>
Source record: 95746
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

Robert M. Bratcher Jr. wrote:
>
> On Wed, 26 Mar 1997 07:43:31 GMT, bry@mns.net (Brian Carling G3XLQ /
> AF4K) wrote:
>
> >There is a new LISTSERV e-mail list for BOATANCHORS enthusiasts that I
> >just discovered! The best part is that it is FREE!!
> >To subscribe, send an e-mail message to:
> >
> >LISTSERV@LISTSERV.TEMPE.GOV
> >
> >with no subject, and the text:
> >
> >subscribe boatanchors <Your Full Name>
> >
> >The only odd thing is that it wants you to send you name with a middle
> >initial otherwise it rejects the subscription.
> >
> >For example, I had to send:
> >
> >subscribe boatanchors Brian J. Carling
> >
> >See you there!
>
> Another odd thing I noticed. That listserver wanted a confermation (by
> replying to a message it sent) to complete the subscription process.
> Seems to be low traffic at the moment (99 members) but that may
> change...
>
> Robert M. Bratcher Jr.
>
Not really odd, about half of the mailing lists I have seen, have the
confirmation
response turned on. Just a method used to insure that you are the person
subscribing
and not someone else subsscribing in your name.

John Szalay
(happy boatanchor
user R-390A/URR)

3446. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-26 00:00:00 UTC
From: "Tony T. Hwang" <oolong@netcom.ca>
Message-ID: <5hccqc$4ue@tor-nn1-hb0.netcom.ca>
Source record: 95747

In article <5h232k$18b$1@excalibur.flash.net>,
Tim Hynde <hynde@flash.net> wrote:

>Rolf Mathson <rmathiso@ix.netcom.com> writes: > AC6V wrote:
>> >
>> > Claudio Fornaro wrote:
>> > >
>> > > Hi all,
>> > > I'd want to build a "home made" radio receiver for AM (or even SW...)
>> <snip>
>> > > usually
>> > > has no galena crystal at home...
>> <snip>
>> > Hi Claudio -- an admirable project. For the crystal detector -- try a
>> > small whisker wire on a razor blade. It works -- I remember doing this
>> > as a boy experimenting with xtal radios.
>>
>> The "gotcha" on using a razor blade for the detector is it had to be a
>> "Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
>> with a material that would behave as a rectifier. The connection could
>> be made via a wire wraped around a sharpened pencil lead. They probably
>> don't make these blades any longer :(
>>
>> Regards,
>> Rolf
>
>
>Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
>
>Tim, ka8ddz

Or carborandum mineral rock pieces.
Tony
VE6CGX

3447. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5hcria$asd@news.Hawaii.Edu>
Source record: 95499
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

-=Tony=- <anthonys@pacbell.net> wrote:
>Robert M. Bratcher Jr. wrote:

>> Another odd thing I noticed. That listserver wanted a confermation (by
>> replying to a message it sent) to complete the subscription process.
>> Seems to be low traffic at the moment (99 members) but that may
>> change...

> Ahemmm ... this mail list has more than 700 members by my
>last reading! Most are paid subscribers and others are there during
>the generous free trial period.

Ahemmm ... There are now two BA email lists - one free and one pay-to-
read. This thread is about the free one. It resides at:
listserv@listserv.tempe.gov; that site also contains the Heath list
and Collins list.

7.3W,
Jeff KH2PZ / KH6

3448. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970327001000.TAA23716@ladder01.news.aol.com>
Source record: 95611

In article <33397996.775F@flash.net>, hynde@flash.net writes:

>> -- proud members of the CQ family --
>
>Hmmm... I should have the two I made examined, Im getting all kinds of
>music and sports information comming out of the earphone.
>
>Granted the germanium diode is a better choice, but a 1n914 definatly
>does work.
>Why wouldn't it?
>
>Tim, ka8ddz
>
>

Hi Tim

My crystal sets are more made for dxing, and have a bit of inherent loss.
The 1N914/1N4148 silicon WILL work, but weak signal detection will
suffer because of the higher barrier voltages.

Pete

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

3449. Tubes for Sale (Repost to correct earlier post)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: "John F. Haase" <TheHossMan@worldnet.att.net>
Message-ID: <5hcg93$o21@mtinsc04.worldnet.att.net>
Source record: 95612

I have a number of tubes for sale, some new in boxes, some new w/o boxes, and some used but perfectly ok. Attached is the list. For more info, please e-mail me.

TheHossMan@worldnet.att.net

Qty Boxed Price Qty Min Price Qty 8-Pin, etc. Price
1 1G3/1B3 $4 1 2AD6 $3 5 1G3GT/1B3GT $3
1 2AS2 $4 1 2D21 $3 1 1K3 $3
2 3A3/3B2 $4 1 3HQ5 $3 1 5Y3GT $3
1 5U4BG $4 1 4DT6A $3 2 6AS7G $3
1 5Y3GT $4 1 4HM6 $3 1 6BK4 $3
1 6AG5 $4 2 4JC6 $3 2 6BQ6/6CU6 $3
1 6AH6 $4 1 4JD6 $3 3 6D6 $3
2 6AK5 $4 1 4KT6 $3 2 6V6 $3
1 6AK6 $4 1 5AQ5 $3 1 6Z10 $3
2 6AN5 $4 1 6AF4 $3 1 12AY3 $3
1 6AU4GTA $4 1 6AH6 $3 1 12D4 $3
1 6AU6GTA $4 1 6AL5 $3 1 12DQ6B $3
1 6AV6 $4 1 6AN5 $3 4 12SN7GT $3
1 6AX8 $4 4 6AQ5 $3 1 12SQ7 $3
1 6AY3 $4 1 6AS5 $3 1 12V6GT $3
2 6BA6 $4 1 6AW8 $3 1 17BE3 $3
2 6BC5 $4 1 6BA6 $3 1 17BF11 $3
2 6BF5 $4 1 6BH6 $3 2 17JZ8 $3
2 *6BH6 $4 2 6BQ7 $3 1 21JZ6 $3
2 6BK7B $4 1 6BZ6 $3 1 25L6GT $3
1 6BN6 $4 1 6C4 $3 1 38HE7 $3
1 6BQ7 $4 1 6CG7 $3 2 50L6 $3
3 6CB6A/6CF6 $4 1 6CL8 $3 1 OD3 $3
4 6CL6 $4 2 6CQ8 $3 1 6528 $3
2 6CL8A $4 1 6CZ5 $3 1 75 $5
2 6CW4 $4 1 6DE6 $3 2 829B $8
1 6CZ5 $4 1 6EA5 $3
1 6D4 $4 2 6EB8 $3
2 6EA5 $4 1 6ER5 $3 Qty Metal
8 6EB8 $4 1 6GH8 $3 1 6AC7 $3
1 6EH7 $4 1 6GM6 $3 3 6AG7 $3
1 6FQ7 $4 1 6HB7 $3 1 6C5 $3
1 6FV8 $4 1 6J6 $3 1 6J5 $3
1 6GF7A $4 2 6KE8 $3 1 6L7 $3
1 6GH8A $4 1 6T8 $3
1 6GM6 $4 2 6X4 $3
3 6J4 $4 3 8FQ7/8CG7 $3

1 6J6 $4 1 8JV8 $3
2 6JE6A $4 1 10LZ8 $3
3 6K7 $4 1 12FX5 $3
1 6KE8 $4 3 OA5 $3
3 6SJ7 $4 2 OB2 $3
1 6W4GT $4 2 5654 $3
1 7F8 $4 1 5696 $3
1 8EM5 $4 1 5726 $3
1 12AL5 $4 2 5749 $3
1 12BH7A $4 1 5750 $3
1 12DT5 $4 3 5814 $3
1 35L6GT $4 1 6136 $3
2 OB2WA $4 1 6189 $3
1 OC2 $4 1 6197 $3
1 OG3 $4 1 6201 $3
2 5651WA $4 1 747 $3
1 5749 $4
4 5763 $4
1 6112 $4
1 6977 $4
1 S-5018 $4
(silicon rectifier)

3450. Group Charter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: nobody@REPLAY.COM
Message-ID: <5hccql$6gs@basement.replay.com>
Source record: 95613

Could someone please post the charter of this NG. Also is there a FAQ?

Thanks.

Ed KM6KMA

3451. Re: Scanner -> Freq. Synthe?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: bspeed@cyberramp.net
Message-ID: <5hcnks$l4i$2@newshost.cyberramp.net>
Source record: 95614

Thomas Mahanna <tmahanna@ziplink.net> wrote:

>Is there anyway to modify my inexpensive scanner for use as a digital
>frequency synthesizer? I was hoping it was possible to tap the L.O. and
>get a 50 ohm output of a few uWatts. Is it possible?

I have artwork, schematics, etc. for a PLL/VCO board which you might
find usefull...

download them at http://www.cyberramp.net/~bspeed

3452. DDS/FM Xmitr/PLL Ckts Available Free

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: bspeed@cyberramp.net
Message-ID: <5hcnos$l4i$3@newshost.cyberramp.net>
Source record: 95615

Feel free to download the artwork, schematics, etc of several RF related projects on:

http://www.cyberramp.net/~bspeed

3453. most linear transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <3339EA0F.4E00@tri.net>
Source record: 95616

Am rebuilding my homebrew RX and wondered if anyone has a comment on the most linear transistor available for use in the post-mixer amplifier. I'm currently using a VMP-4 FET with 28 v. and biased at 100 ma. and have no real indication that I should change, but after 15 years...

The Motorola TPV590 looks good, but the thought of using a 900 MHz device at 9 MHz or 455 KHz seems a bit of a stretch. The class A dissipation would be the same as the VMP-4 in my application.

N0UU

3454. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: nospam@mail.net
Message-ID: <3342f4cc.8836758@NETNEWS.WORLDNET.ATT.NET>
Source record: 95617
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

On Wed, 26 Mar 1997 19:29:12 -0800, -=Tony=- <anthonys@pacbell.net>
wrote:

>Robert M. Bratcher Jr. wrote:
>>
>> Another odd thing I noticed. That listserver wanted a confermation (by
>> replying to a message it sent) to complete the subscription process.
>> Seems to be low traffic at the moment (99 members) but that may
>> change...
>>
>> Robert M. Bratcher Jr.
>
> Ahemmm ... this mail list has more than 700 members by my
>last reading! Most are paid subscribers and others are there during
>the generous free trial period.
>
> -=Tony=- W6ANV
>

I was talking about the new totally free BA E-mail group at
boatanchors@listserv.tempe.gov
Not boatanchors@sco.theporch.com

By the way, those are posting adresses...

Robert M. Bratcher Jr.
E-mail to:
bratcher@worldnet.att.net
Record collector, 8mm, super 8, 16 and 35mm Film collector.
I like old radio's too.
Collins, Hallicrafters, National & Hammurland are my Favorites!

3455. 6 Meter Cavity. Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: MICHAEL FAWBUSH <mfawbush@usit.net>
Message-ID: <01bc3a43$330337c0$473a01c7@mfawbush.usit.net>
Source record: 95618

Does anyone have any documents on how to build a 6 Meter Cavity. 73

KF4JOZ
Mike Fawbush
mfawbush@usit.net
Morristown, TN

3456. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: "Christoper W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <333A1BB1.45A6@earthlink.net>
Source record: 95619

Doug Smith wrote:
>
> Chris Nicholson <csnichol@mail.delcoelect.com> wrote:
> >Dana Myers wrote:
> >>> >> What if you keyed a repeater with your transmitter that was legal below the
> >> >> maximum field strength and you are not licensed)? Things can get harry
>
> So far, Part 15 unlicensed devices are not allowed in the ham bands.
> Any intentional unlicensed transmission in our bands, regardless of
> power, is illegal. (the FCC had considered lifting that ban, but I
> think that threat has been staved off)

Ahh you dont operate much above 2 mtrs do you??? Part 15 devices are used
in the 902-928 bands a lot...and also I think there may be some 420-450
usage...
>
> >> Hmmmm... then what would you say about 2m <-> 10m FM links?
> >> You know, a 2m box coupled to a 10m box. A Tech can then cause
> >> the 10m box to transmit without being licensed to transmit
> >> in that band.
>
> This used to be illegal. Seems to me it was 5-6 years ago they made a
> change with the specific intent of allowing this situation.

Has been legal since the late 70s when crossband rptrs were made legal..
I operated a crossband 220-10mtr FM box in 1978 ....WR5AOK was my rptr
callsign at the time (just before it expired)...
BUT the 10 mtr side MUST be within the 29.5-29.7 rptr subband AND the
callsign of IT must be general or above....YEs Novices on 220 can be
crossbanded to 2 and 10 mtr FM rptrs!

Chris
WB5ITT

3457. ICOM IC-2000 MARS MODIFICATION???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: danybowmn@aol.com
Message-ID: <19970327115601.GAA29893@ladder01.news.aol.com>
Source record: 95620

ANYONE KNOW THE MOD. FOR THE ICOM IC-2000 2M MARS MODIFICATION OR KNOW
WHERE I CAN FIND OUT??? ANY HELP WOULD BE APPRECIATED
THANKS
Danny Bowman
DANYBOWMN@AOL.COM

3458. Re: 900 MHz power question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.113.00156331@phoenix.net>
Source record: 95621

In article <01bc326d$f99ef6e0$ac1e92d0@lcarlson.northernnet.com> "Les"
<lcarlson@northernnet.comX> writes:
>From: "Les" <lcarlson@northernnet.comX>
>Subject: 900 MHz power question.
>Date: 17 Mar 1997 00:51:37 GMT
>
>Hillary commenting on the release of subpoenaed documents:
> "I'm not going to have some reporters
> pawing through our papers.
> We are the president."
>--
Get um Hill. Hillary for pres.

3459. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703271332.FAA21085@mailbox1.ucsd.edu>
Source record: 95622

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 751d0.wrk; Thu, 27 Mar 1997 14:41:00 -1
Received: from [195.120.135.127] by infocomm.it id 75190.wrk; Thu, 27 Mar 1997 14:40:50 -1
Received: from [195.120.135.127] by infocomm.it id 75140.wrk; Thu, 27 Mar 1997 14:40:42 -1
Received: from [195.120.135.127] by infocomm.it id 75110.wrk; Thu, 27 Mar 1997 14:40:36 -1
Received: from [195.120.135.127] by infocomm.it id 750c0.wrk; Thu, 27 Mar 1997 14:40:26 -1
Received: from [195.120.135.127] by infocomm.it id 75070.wrk; Thu, 27 Mar 1997 14:40:16 -1
Received: from [195.120.135.127] by infocomm.it id 75020.wrk; Thu, 27 Mar 1997 14:40:06 -1
Received: from [195.120.135.127] by infocomm.it id 74fc0.wrk; Thu, 27 Mar 1997 14:39:56 -1
Received: from [195.120.135.127] by infocomm.it id 74f90.wrk; Thu, 27 Mar 1997 14:39:50 -1
Received: from [195.120.135.127] by infocomm.it id 74f40.wrk; Thu, 27 Mar 1997 14:39:40 -1
Received: from [195.120.135.127] by infocomm.it id 74ec0.wrk; Thu, 27 Mar 1997 14:39:26 -1
Received: from [195.120.135.127] by infocomm.it id 74e70.wrk; Thu, 27 Mar 1997 14:39:14 -1
Received: from [195.120.135.127] by infocomm.it id 74e31.wrk; Thu, 27 Mar 1997 14:39:06 -1
Received: from [195.120.135.127] by infocomm.it id 74db0.wrk; Thu, 27 Mar 1997 14:38:54 -1
Received: from [195.120.135.127] by infocomm.it id 74d60.wrk; Thu, 27 Mar 1997 14:38:46 -1
Received: from [195.120.135.127] by infocomm.it id 74d20.wrk; Thu, 27 Mar 1997 14:38:40 -1
Received: from [132.239.1.53] by infocomm.it id 74a90.wrk; Thu, 27 Mar 1997 14:37:24 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA19996 for <ham-homebrew-list@mailbox.ucsd.edu>; Thu, 27 Mar
1997 04:52:06 -0800 (PST)
Received: by noc.ucsd.edu; id EAA18121
sendmail 8.8.5/UCSD8.3
Thu, 27 Mar 1997 04:30:58 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA18105
sendmail 8.8.5/UCSD8.3
Thu, 27 Mar 1997 04:30:56 -0800 (PST)
Message-Id: <199703271230.EAA18105@noc.ucsd.edu>
Date: Thu, 27 Mar 97 04:30:55 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #219
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Thu, 27 Mar 97 Volume 97 : Issue 219

Today's Topics:
Home made crystal(?) radio

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 26 Mar 1997 20:04:31 -0800
From: -=Tony=- <anthonys@pacbell.net>
Subject: Home made crystal(?) radio

Lou or Annette Hinshaw wrote:
>
> I BELIEVE HE OR SHE WANTED TO MAKE THEIR OWN PARTS
> FROM AROUND THE HOUSE.
>
> That being the case, buying anything would be a faux pas.
>
> Try, instead, a piece of copper ANYTHING, like the copper bottom
> of a cookpan, and a drop of vinegar, and a little metal tab to lay on
> it after the vinegar dries. I think we did something like that when I
> was in grade school, but after that they discovered dirt and kids lost
> interest in mere science.
>
> It wasn't THAT long ago, but i have a hazy memory that was how we did
> it.
>
> Hope it helps.
>
> WB0NRU

Here is another approach garnered from "deeper memory". ;-)

1. Make a small container of fresh molten lead, say 1/2" diam
and 1/4" deep.

2. While hot, sprinkle a very small amount of sulphur ...more
like specks ...on the fresh surface. Then allow to cool thoroughly.

3. For "catswhisker", make a small coil of piano wire with
sharply pointed end. Good electrical connections to the base of the

"ingot" and catswhisker are essential.

4. Apply pointed whisker experimentally on the surface of the lead ingot
for loudest signal.

Please don't ask me about the chemistry of this! It did
work (late 30's) but I succumbed to a 25 cent galena from some
mail order outfit. <VBG>

-=T=- W6ANV

End of Ham-Homebrew Digest V97 #219
****

3460. Re: Screen supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: msix@Rt66.com
Message-ID: <5hcor6iks1@mack.rt66.com>
Source record: 95623

yes om - this is the gated screen linear configuration first
described by G2DAF/ZL1AAX/W6EED etal in early sixties. Amp hr with
two 4cx250B's has been running fb for over thirty years. A few
other old hams i know still run this type of amp with no problems.

Neet circuit but takes tinkering to get the griddrive/Vsg ratio
correct for a particular type of tube. Benefits are no bias or
screen supply needed, and requires very little drive. Hr 20-40
watts drives it to 1kw input easy. Plate efficieny hr is about 75%.
Also, there is no chance tubes can run away. Downside is swamping
excess exciter power out, if you can't set it lower than the
ubiqitous 100 watts.
This is not for the kit-builder or follow-the-other-guy's-circuit
exactly! Many hams tried this early on with dismal results.
But - If you have a pretty solid tech background and want to mess
with it, let me know.
73 - john W7ZFB

3461. Re: Screen supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <333a6eae.2838545@netnews.worldnet.att.net>
Source record: 95624

On Thu, 27 Mar 97 03:15:45 GMT, msix@Rt66.com (w7zfb) wrote:

>yes om - this is the gated screen linear configuration first
>described by G2DAF/ZL1AAX/W6EED etal in early sixties. Amp hr with
>two 4cx250B's has been running fb for over thirty years. A few
>other old hams i know still run this type of amp with no problems.

>73 - john W7ZFB

Hi John,

If you are happy with that PA, I suggest you never put it on a two tone test system and measure IMD at varying power levels.

The real rub with this design is that all the energy is extracted at the crest of the sine wave, and the peak current is very high. That means the exciter sees a very low load impedance at peaks, and a much higher impedance as RF voltage is less than peak. This effect results in envelope distortion by uneven exciter loading.

The very reason class AB2 PA's use heavy negative feedback or swamping resistors is to eliminate this peak load chage, yet the G2DAF system makes it worse!!!

As a second thought, it is much better to run the screen off its' own supply. Screen regulation is critical for good dynamic IMD performance (although a fixed level two tone test can be made to look good even in a "ratty" class C amplifier at one power level), and the G2DAF circuit operates with screen voltage that varies at a syllabic rate.

Any phase lag between the screen voltage and RF envelope level will always result in distortion of the output envelope. That is because the peak screen voltage lags the peak RF input envelope by the charging time, and the declining envelope slope has screen voltage above the level of the increasing envelope slope.

The reson for the envelope shape distortion is the self-rectified system charges the screen capacitors through the source impedance of the exciter, and it discharges the capcitors through the screen current, so there is always phase lag in the screen voltage system.

When that is coupled with the peak loading of the drive signal, the result is a potpourri of IMD producing effects in the G2DAF system.

A person without a rack of test equipment and experience at measuring IMD is better off to avoid circuits that have many variables potentially causing poor IMD performance.

When I measured several PA's using the G2DAF system at the request of a manufacturer, the result was totally unacceptable IMD performance. I'm sure that is why the circuit never became accepted commercially.

73 Tom

3462. Re: ICOM IC-2000 MARS MODIFICATION???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <333a7a36.2085058@news.cmc.net>
Source record: 95625

On 27 Mar 1997 11:56:38 GMT, danybowmn@aol.com (DANYBOWMN) wrote:

>ANYONE KNOW THE MOD. FOR THE ICOM IC-2000 2M MARS MODIFICATION OR KNOW
>WHERE I CAN FIND OUT??? ANY HELP WOULD BE APPRECIATED
> THANKS
> Danny Bowman
> DANYBOWMN@AOL.COM

Your radio dealer can assist here, the book titled " Radio / Tech Modifications " is accurate and avaliable at 818-843-4080. ICOM can assist, but ICOM REQUIRES a copy of your MARS or CAP license before they will give out the information. ICOM prefers you approach the Dealer or MARS information officer for this information. Some of the newer ICOMs are coming already able to transmit from 140 to 150 Mhz so a MARS modification is no longer needed as the radio will operate MARS / CAP right from the box.

Gary
I do not speak for my employer.

3463. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703271405.GAA21912@mailbox1.ucsd.edu>
Source record: 95626

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 79c00.wrk; Thu, 27 Mar 1997 15:14:02 -1
Received: from [195.120.135.127] by infocomm.it id 79b70.wrk; Thu, 27 Mar 1997 15:13:48 -1
Received: from [195.120.135.127] by infocomm.it id 79af0.wrk; Thu, 27 Mar 1997 15:13:32 -1
Received: from [195.120.135.127] by infocomm.it id 79a81.wrk; Thu, 27 Mar 1997 15:13:18 -1
Received: from [195.120.135.127] by infocomm.it id 79a01.wrk; Thu, 27 Mar 1997 15:13:02 -1
Received: from [195.120.135.127] by infocomm.it id 79970.wrk; Thu, 27 Mar 1997 15:12:46 -1
Received: from [195.120.135.127] by infocomm.it id 798f0.wrk; Thu, 27 Mar 1997 15:12:30 -1
Received: from [195.120.135.127] by infocomm.it id 79881.wrk; Thu, 27 Mar 1997 15:12:16 -1
Received: from [195.120.135.127] by infocomm.it id 79800.wrk; Thu, 27 Mar 1997 15:12:00 -1
Received: from [195.120.135.127] by infocomm.it id 79760.wrk; Thu, 27 Mar 1997 15:11:46 -1
Received: from [195.120.135.127] by infocomm.it id 796e0.wrk; Thu, 27 Mar 1997 15:11:30 -1
Received: from [195.120.135.127] by infocomm.it id 79670.wrk; Thu, 27 Mar 1997 15:11:16 -1
Received: from [195.120.135.127] by infocomm.it id 795c0.wrk; Thu, 27 Mar 1997 15:10:58 -1
Received: from [195.120.135.127] by infocomm.it id 79510.wrk; Thu, 27 Mar 1997 15:10:40 -1
Received: from [195.120.135.127] by infocomm.it id 79480.wrk; Thu, 27 Mar 1997 15:10:18 -1
Received: from [195.120.135.127] by infocomm.it id 79410.wrk; Thu, 27 Mar 1997 15:10:04 -1
Received: from [132.239.1.54] by infocomm.it id 78f60.wrk; Thu, 27 Mar 1997 15:08:04 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA09076 for <ham-homebrew-list@mailbox.ucsd.edu>; Thu, 27 Mar
1997 04:22:06 -0800 (PST)
Received: by noc.ucsd.edu; id EAA15512
sendmail 8.8.5/UCSD8.3
Thu, 27 Mar 1997 04:04:24 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA15496
sendmail 8.8.5/UCSD8.3
Thu, 27 Mar 1997 04:04:22 -0800 (PST)
Message-Id: <199703271204.EAA15496@noc.ucsd.edu>
Date: Thu, 27 Mar 97 04:04:21 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #218
To: Ham-Homebrew@ucsd.edu

<<< Questo messaggio è la parte 2 di un precedente messaggio >>>

Looking for any projects for the FX-146. Like tone device for
repeaters, more channels. Just put it together and Iam already looking
for extra stuff for it.

Date: 27 Mar 1997 00:50:43 GMT
From: "John F. Haase" <TheHossMan@worldnet.att.net>
Subject: Tubes for Sale (Repost to correct earlier post)

I have a number of tubes for sale, some new in boxes, some new w/o boxes,
and some used but perfectly ok. Attached is the list. For more info,
please e-mail me.

TheHossMan@worldnet.att.net

Qty Boxed Price Qty Min Price Qty 8-Pin, etc.
Price
1 1G3/1B3 $4 1 2AD6 $3 5 1G3GT/1B3GT $3
1 2AS2 $4 1 2D21 $3 1 1K3 $3
2 3A3/3B2 $4 1 3HQ5 $3 1 5Y3GT $3
1 5U4BG $4 1 4DT6A $3 2 6AS7G $3
1 5Y3GT $4 1 4HM6 $3 1 6BK4 $3
1 6AG5 $4 2 4JC6 $3 2 6BQ6/6CU6 $3
1 6AH6 $4 1 4JD6 $3 3 6D6 $3
2 6AK5 $4 1 4KT6 $3 2 6V6 $3
1 6AK6 $4 1 5AQ5 $3 1 6Z10 $3
2 6AN5 $4 1 6AF4 $3 1 12AY3 $3
1 6AU4GTA $4 1 6AH6 $3 1 12D4 $3
1 6AU6GTA $4 1 6AL5 $3 1 12DQ6B $3
1 6AV6 $4 1 6AN5 $3 4 12SN7GT $3
1 6AX8 $4 4 6AQ5 $3 1 12SQ7 $3
1 6AY3 $4 1 6AS5 $3 1 12V6GT $3
2 6BA6 $4 1 6AW8 $3 1 17BE3 $3
2 6BC5 $4 1 6BA6 $3 1 17BF11 $3
2 6BF5 $4 1 6BH6 $3 2 17JZ8 $3
2 *6BH6 $4 2 6BQ7 $3 1 21JZ6 $3
2 6BK7B $4 1 6BZ6 $3 1 25L6GT $3
1 6BN6 $4 1 6C4 $3 1 38HE7 $3
1 6BQ7 $4 1 6CG7 $3 2 50L6 $3
3 6CB6A/6CF6 $4 1 6CL8 $3 1 OD3 $3
4 6CL6 $4 2 6CQ8 $3 1 6528 $3
2 6CL8A $4 1 6CZ5 $3 1 75 $5
2 6CW4 $4 1 6DE6 $3 2 829B $8
1 6CZ5 $4 1 6EA5 $3
1 6D4 $4 2 6EB8 $3
2 6EA5 $4 1 6ER5 $3 Qty Metal

8 6EB8 $4 1 6GH8 $3 1 6AC7 $3
1 6EH7 $4 1 6GM6 $3 3 6AG7 $3
1 6FQ7 $4 1 6HB7 $3 1 6C5 $3
1 6FV8 $4 1 6J6 $3 1 6J5 $3
1 6GF7A $4 2 6KE8 $3 1 6L7 $3
1 6GH8A $4 1 6T8 $3
1 6GM6 $4 2 6X4 $3
3 6J4 $4 3 8FQ7/8CG7 $3
1 6J6 $4 1 8JV8 $3
2 6JE6A $4 1 10LZ8 $3
3 6K7 $4 1 12FX5 $3
1 6KE8 $4 3 OA5 $3
3 6SJ7 $4 2 OB2 $3
1 6W4GT $4 2 5654 $3
1 7F8 $4 1 5696 $3
1 8EM5 $4 1 5726 $3
1 12AL5 $4 2 5749 $3
1 12BH7A $4 1 5750 $3
1 12DT5 $4 3 5814 $3
1 35L6GT $4 1 6136 $3
2 OB2WA $4 1 6189 $3
1 OC2 $4 1 6197 $3
1 OG3 $4 1 6201 $3
2 5651WA $4 1 747 $3
1 5749 $4
4 5763 $4
1 6112 $4
1 6977 $4
1 S-5018 $4
(silicon rectifier)

Date: Wed, 26 Mar 1997 14:46:29 GMT
From: ianwa@senet.com.au (Ian)
Subject: Wanted: Motorola HT800 Software (Ian Alexander)

I am looking for a copy of PC software to set frequencies in Motorola
HANDIE-TALKIE HT 800 eight channel FM radio.

Ian Alexander
ianwa@senet.com.au

Date: 27 Mar 97 06:26:49 GMT
From: Peter Parker <parkerp@pcug.org.au>
Subject: WEBPAGE UPDATES

drx1001@ibm.net (tim) wrote:
>This site is great but I'm on a diet and all those "cookies" fatten me up!!
>I'm sorry but I don't accept them

> KF4FCO Tim

I know it's a bit off-topic, but what's a cookie? My own home page seems
to do quite OK without them.

--

73,

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

Date: Tue, 25 Mar 1997 23:00:34 -0800
From: Robert Newland <rnewland@cyberramp.net>
Subject: Web Site

http://www.cyberramp.net/~rnewland

Date: Sun, 23 Mar 1997 12:53:29 -0800
From: measures@mail.vcnet.com (R. L. Measures)
Subject: Writers needed

In article <5h3qml$pds@news.istar.ca>, 17, Equestrian, Drive, KANATA, ON,
K2M, 1B8, CANADA wrote:

> We need fresh, new, and fun ham radio articles and stories for a new
> publication to be launched this fall. No boring stuff allowed!

'Tis a good thing, David. The boring stuff market seems to be pretty well
sewed-up on this side of the border.

--
--Rich-- ag6k, 805-386-3734

Date: 26 Mar 1997 16:09:02 GMT
From: dickrb@lsid.hp.com (Dick Bingham)
Subject: WTB: 3-500 CHIMNEY

Hi

I have used a so-called "Farmans" pickle-jar as a VERY effective chimney
for my 3-500 50MHz amp. The bottom of the jar has to be cut away with
a glass cutter and the necked portion of the jar fits the contour of the

3-500 beautifully.

Be sure to CAREFULLY sand the bottom of the cut portion to eliminate the sharp edges. Check out the jars at your local grocery store!

73 de w7wkr - dick

End of Ham-Homebrew Digest V97 #218
****

3464. SMTP Delivery Error

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: MAILER-DAEMON@infocomm.IT
Message-ID: <199703271405.GAA21913@mailbox1.ucsd.edu>
Source record: 95627

Si verificato un errore recapitando questo messaggio.
L'errore indicato di seguito:

554 Transazione fallita; troppi hops 21 su massimo 20

Indicazione del messaggio originale:

Per: ik1wvq@ab.infocomm.it

Received: from [195.120.135.127] by infocomm.it id 79b71.wrk; Thu, 27 Mar 1997 15:13:48 -1
Received: from [195.120.135.127] by infocomm.it id 79b01.wrk; Thu, 27 Mar 1997 15:13:32 -1
Received: from [195.120.135.127] by infocomm.it id 79a80.wrk; Thu, 27 Mar 1997 15:13:18 -1
Received: from [195.120.135.127] by infocomm.it id 79a00.wrk; Thu, 27 Mar 1997 15:13:02 -1
Received: from [195.120.135.127] by infocomm.it id 79960.wrk; Thu, 27 Mar 1997 15:12:46 -1
Received: from [195.120.135.127] by infocomm.it id 798f1.wrk; Thu, 27 Mar 1997 15:12:30 -1
Received: from [195.120.135.127] by infocomm.it id 79870.wrk; Thu, 27 Mar 1997 15:12:16 -1
Received: from [195.120.135.127] by infocomm.it id 79801.wrk; Thu, 27 Mar 1997 15:12:00 -1
Received: from [195.120.135.127] by infocomm.it id 79761.wrk; Thu, 27 Mar 1997 15:11:46 -1
Received: from [195.120.135.127] by infocomm.it id 796f0.wrk; Thu, 27 Mar 1997 15:11:30 -1
Received: from [195.120.135.127] by infocomm.it id 79671.wrk; Thu, 27 Mar 1997 15:11:16 -1
Received: from [195.120.135.127] by infocomm.it id 79600.wrk; Thu, 27 Mar 1997 15:11:02 -1
Received: from [195.120.135.127] by infocomm.it id 79580.wrk; Thu, 27 Mar 1997 15:10:50 -1
Received: from [195.120.135.127] by infocomm.it id 794e0.wrk; Thu, 27 Mar 1997 15:10:30 -1
Received: from [195.120.135.127] by infocomm.it id 79430.wrk; Thu, 27 Mar 1997 15:10:08 -1
Received: from [195.120.135.127] by infocomm.it id 793b0.wrk; Thu, 27 Mar 1997 15:09:54 -1
Received: from [132.239.1.54] by infocomm.it id 78f60.wrk; Thu, 27 Mar 1997 15:08:04 -1
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA09076 for <ham-homebrew-list@mailbox.ucsd.edu>; Thu, 27 Mar
1997 04:22:06 -0800 (PST)
Received: by noc.ucsd.edu; id EAA15512
sendmail 8.8.5/UCSD8.3
Thu, 27 Mar 1997 04:04:24 -0800 (PST)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA15496
sendmail 8.8.5/UCSD8.3
Thu, 27 Mar 1997 04:04:22 -0800 (PST)
Message-Id: <199703271204.EAA15496@noc.ucsd.edu>
Date: Thu, 27 Mar 97 04:04:21 PST
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List

Subject: Ham-Homebrew Digest V97 #218
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest Thu, 27 Mar 97 Volume 97 : Issue 218

Today's Topics:
1296 xverter wanted
2SC2221 ---> NTE322??
6 Meter Cavity. Help! (2 msgs)
900 MHz power question.
DDS/FM Xmitr/PLL Ckts Available Free
Group Charter
HELP! MAXIM MAX2450 /51/52
Home made crystal(?) radio (4 msgs)
ICOM IC-R7100 commands?
Lintz Wire
most linear transistor?
non-erotic, non-sexual, but possibly tantalizing linear pics (2 msgs)
Ramsey FX-146
Tubes for Sale (Repost to correct earlier post)
Wanted: Motorola HT800 Software (Ian Alexander)
WEBPAGE UPDATES
Web Site
Writers needed
WTB: 3-500 CHIMNEY

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from ftp.UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 26 Mar 1997 07:29:49 -0600
From: doug johnson <iix@neuman.interaccess.com>
Subject: 1296 xverter wanted

still looking for used 1296 xverter, anyone? e-mail iix@interaccess.com

---

Date: 26 Mar 1997 16:20:19 GMT
From: tbaca@boi.hp.com (Tony Baca (?))
Subject: 2SC2221 ---> NTE322??

Jeffrey Herman (jeffreyh@Hawaii.Edu) wrote:
: Hi folks - I melted the 2SC2221 transistor in the final amp of my
: Tempo S1 HT. Honolulu Electronics says that a replacement for the

: 2221 is an ECG322, and a replacement for that is an NTE322 (which
: is what they sold me).

: Thanks in advance!
: Jeff KH2PZ

Jeff,
Call MCM Electronics (800-543-4330) the have the 2sc2221 for about $9.00.
Not sure if they still have a $25.00 min order.

_____
/ony Baca Hewlett Packard Co. Boise, Idaho tbaca@boi.hp.com

Date: 27 Mar 1997 00:07:37 GMT
From: "MICHAEL FAWBUSH" <mfawbush@usit.net>
Subject: 6 Meter Cavity. Help!

Does anyone have any documents on how to build a 6 Meter Cavity. 73

KF4JOZ
Mike Fawbush
mfawbush@usit.net
Morristown, TN

Date: 26 Mar 1997 23:16:06 -0700
From: Bob Doyle <doyle@primenet.com.DELETE-FOR-EMAIL>
Subject: 6 Meter Cavity. Help!

MICHAEL FAWBUSH wrote:
>
> Does anyone have any documents on how to build a 6 Meter Cavity. 73
>
> KF4JOZ
> Mike Fawbush
> mfawbush@usit.net
> Morristown, TN

How about:

http://www.dallas.net/~jvpoll/dup6m/dup6m.html

Seems like some good ideas to me...

Bob
WA3TGF

Date: Thu, 27 Mar 1997 05:57:38 CST
From: jedent@phoenix.net (Joel E. Davis)
Subject: 900 MHz power question.

In article <01bc326d$f99ef6e0$ac1e92d0@lcarlson.northernnet.com> "Les"
<lcarlson@northernnet.comX> writes:
>From: "Les" <lcarlson@northernnet.comX>
>Subject: 900 MHz power question.
>Date: 17 Mar 1997 00:51:37 GMT
>
>Hillary commenting on the release of subpoenaed documents:
> "I'm not going to have some reporters
> pawing through our papers.
> We are the president."
>--
Get um Hill. Hillary for pres.

Date: Thu, 27 Mar 1997 04:55:55 GMT
From: bspeed@cyberramp.net ()
Subject: DDS/FM Xmitr/PLL Ckts Available Free

Feel free to download the artwork, schematics, etc of several RF
related projects on:

http://www.cyberramp.net/~bspeed

Date: 27 Mar 1997 00:51:49 +0100
From: nobody@REPLAY.COM (Anonymous)
Subject: Group Charter

Could someone please post the charter of this NG. Also is there a FAQ?

Thanks.

Ed KM6KMA

Date: 26 Mar 1997 21:32:36 GMT
From: Jim <jstrohm@.texas.net>
Subject: HELP! MAXIM MAX2450 /51/52

Maxim Integrated Products
120 San Gabriel Dr.
Sunnyvale CA 94086-9892

Literature
1-800-998-8800
1-408-737-7194 fax 24 hrs

Applications Assistance
1-408-737-7600 x4000

Disti thru Allied, Arrow, Digi-Key, Hamilton Hallmark, Nu Horizons, Zeus

That's about it, unless you want me to solder the parts for ya....

Date: 26 Mar 1997 05:25:07 GMT
From: commquart@aol.com (CommQuart)
Subject: Homemade crystal(?) radio

References: <1997Mar25.155547.21926@ke4zv.atl.ga.us>

In article <1997Mar25.155547.21926@ke4zv.atl.ga.us>, gary@ke4zv.atl.ga.us
(Gary Coffman) writes:

>
>??? Of course it will work, you'll just need signals which are a bit
>stronger. The 1N34A has a barrier potential of about 0.2 V while the
>1N914 will have a barrier potential of about 0.6 V. That'll require
>signals about 9.5 db stronger to overcome the threshold. In practice,
>that won't be a problem. Any signal strong enough to drive your
headphones
>to a comfortable level will be strong enough to overcome the silicon
diode
>potential barrier.

Hi Gary!

I will admit that 1N914s or 1N4148s will work after a fashion,
but stand by my statement that they are the worst possible choice
for a crystal set.

I have over 30 vintage crystal sets, including some rare English
models from the 1920s and a few commercial loose couplers.
I have several modern homemade cyrstal sets designed for AMBCB dxing.
They even include S-meters -- 20-uA meters in series with the
headphones to measure the detector current to assist with tuning..
I use early Baldwins with mica diaphrams since those 1920s headsets
are the most sensitive ones I have been able to find. (Run of the mill
Brandes are a close second, however!) I use a good ground
and toploaded (radial) 60 foot vertical for an antenna.

My more elaborate homebrew sets have three stages of tuning, with
variable coupling, and were made for AMBCB dxing. To get any selectivity
much above 1000 kc requires light coupling, and you can't afford to
throw away 9.5 dB and expect to hear anything except for the strongest
local signals. My sets are good enough to seperate stations within 30 kc
of each other in the 800-kc region, and I can easily receive stations on
1030 kc
and ll30 kc with WTIC some 30 miles away running 50kW on 1080.
I have over 100 dx stations logged to date on one of these sets.
I would kill for another 10dB of signal!!!!

I have never much luck using a 1N914 diode, and I have tried
various biasing schemes to improve their performance as detectors.
I have used everything from razor blade detectors and some of my vintage
carborundums with better results. The 1N914 is a waste of time for anyone
who is SERIOUS about building crystal sets. Unfortunately, when someone

mentions crystal sets, most folks think of toys.

73

Peter

>>>>>>> END OF OFFLINE POST >>>>>>>

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

Date: Wed, 26 Mar 1997 23:51:34 GMT
From: "Tony T. Hwang" <oolong@netcom.ca>
Subject: Home made crystal(?) radio

In article <5h232k$18b$1@excalibur.flash.net>,
Tim Hynde <hynde@flash.net> wrote:

>Rolf Mathson <rmathiso@ix.netcom.com> writes: > AC6V wrote:
>> >
>> > Claudio Fornaro wrote:
>> > >
>> > > Hi all,
>> > > I'd want to build a "home made" radio receiver for AM (or even SW...)
>> <snip>
>> > > usually
>> > > has no galena crystal at home...
>> <snip>
>> > Hi Claudio -- an admirable project. For the crystal detector -- try a
>> > small whisker wire on a razor blade. It works -- I remember doing this
>> > as a boy experimenting with xtal radios.
>>
>> The "gotcha" on using a razor blade for the detector is it had to be a
>> "Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
>> with a material that would behave as a rectifier. The connection could
>> be made via a wire wraped around a sharpened pencil lead. They probably
>> don't make these blades any longer :(
>>
>> Regards,
>> Rolf
>
>
>Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
>
>Tim, ka8ddz

Or carborandum mineral rock pieces.
Tony
VE6CGX

Date: Wed, 26 Mar 1997 19:31:32 -0500
From: Woody White <"eMail "@my.www.page.Mailto>
Subject: Home made crystal(?) radio

Silicon diodes typically have a higher conduction voltage than Ge.
But, how 'bout a "hot carrier" diode?

Woody

hynde@flash.net wrote:
>
> commquart@aol.com wrote:
> >
> > In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde <hynde@flash.net> writes:
> > >Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
> > >Tim, ka8ddz
> >
> > You can try it, but it won't work. You need a germanium diode, not
> > silicon. Try a 1N34A.
> >
> > Pete
> >
> > Peter Bertini K1ZJH
> > Senior Technical Editor, Communications Quarterly Magazine
> > "The Radio Connection," Popular Communications Magazine
> > -- proud members of the CQ family --
>
> Hmmm... I should have the two I made examined, Im getting all kinds of
> music and sports information comming out of the earphone.
>
> Granted the germanium diode is a better choice, but a 1n914 definatly
> does work.
> Why wouldn't it?
>
> Tim, ka8ddz

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

Date: 27 Mar 1997 00:10:21 GMT
From: commquart@aol.com
Subject: Home made crystal(?) radio

In article <33397996.775F@flash.net>, hynde@flash.net writes:

>> -- proud members of the CQ family --
>
>Hmmm... I should have the two I made examined, Im getting all kinds of
>music and sports information comming out of the earphone.
>
>Granted the germanium diode is a better choice, but a 1n914 definatly
>does work.
>Why wouldn't it?
>
>Tim, ka8ddz
>
>

Hi Tim

My crystal sets are more made for dxing, and have a bit of inherent loss.
The 1N914/1N4148 silicon WILL work, but weak signal detection will
suffer because of the higher barrier voltages.

Pete

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

Date: Thu, 13 Mar 1997 16:36:43 -0600
From: Dave VanHorn <dvanhorn@cedar.net>
Subject: ICOM IC-R7100 commands?

> >After waiting another day for fedex, finally I have the right data in
> >hand. What a mess!
> >
> >It's a nice rig, but as usual, the manuals bite.
> No the commands are correct except for one and that addendum should
> have been included with your radio, if not contact ICOM for it. Many
> software companies are not haveing troubles with wrong commands in the
> R-8500.
>
> Gary

It's more than one. I don't have either the rig or manual at this
location yet, they are with the programmer, but I'll detail what
was different as soon as I can.

Maybe I'm picky, but I called ICOM to verify the manuals, and
specifically
asked for addendums or changes, and was told there were none.
Much hair pulling later, they remembered this tech manual with
what they called "the old codes" and claimed the manual
documented the "new codes".

All I know at this point is the programmer is running just fine now,
and I expect a beta version probably next week.

Date: Wed, 26 Mar 1997 20:14:00 -1000
From: "Lawrence M. Koga" <crshi@aloha.net>
Subject: Lintz Wire

Hi All, Does any know where I can purchase "Lintz wire"?

Thanks in advance, Lawrence

Date: 27 Mar 97 03:31:27 GMT
From: stoskopf@tri.NET (Lawrence Stoskopf)
Subject: most linear transistor?

Am rebuilding my homebrew RX and wondered if anyone has a comment on the
most linear transistor available for use in the post-mixer amplifier.
I'm currently using a VMP-4 FET with 28 v. and biased at 100 ma. and
have no real indication that I should change, but aft

3465. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Steven Mann <Steven_Mann@UNCG.EDU>
Message-ID: <333A7DD0.A87@UNCG.EDU>
Source record: 95628

commquart@aol.com wrote:
>
> In article <33397996.775F@flash.net>, hynde@flash.net writes:
>
> >> -- proud members of the CQ family --
> > >
> > >Hmmm... I should have the two I made examined, Im getting all kinds of
> > >music and sports information comming out of the earphone.
> > >
> > >Granted the germanium diode is a better choice, but a 1n914 definatly
> > >does work.
> > >Why wouldn't it?
> > >
> > >Tim, ka8ddz
> > >
> > >
>
> Hi Tim
>
> My crystal sets are more made for dxing, and have a bit of inherent loss.
> The 1N914/1N4148 silicon WILL work, but weak signal detection will
> suffer because of the higher barrier voltages.
>
> Pete
>
> Peter Bertini K1ZJH
> Senior Technical Editor, Communications Quarterly Magazine
> "The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

Just another note:
About 20 years ago I was converting a WW II receiver to solid state and initially replaced the tube diode detector with a Si diode (1N914 I think). I thought something had broken! Although the solid state diode was more efficient overall (no filament or plate voltage needed) it had much less output than the tube. When I switched to a Ge diode (1N270) the signal came up dramatically! I was loosing over half of my signal in the Si diode! I decided to stay with the Ge unit for simple AM detectors.

The Si diode has a faster switching rate than the Ge unit and theoritically works better at higher frequencies (I've never tested this myself but everything I've ever seen written supports this.) so it's a better choice when making a balanced mixer, product detector, etc. There are other diodes (hot carrier, etc.) that are even better choices in more

modern equipment.

If you follow the diode detector with an audio amp with sufficient gain you can compensate for using a Si diode rather than a Ge diode detector to a great extent. I've built several direct conversion receivers using an oscillator feeding a balanced ring mixer (made from 1N914 Si diodes) and followed by sufficient audio amplification. These have worked very well for me.

However, I'd expect you'd still loose the weaker signals in an AM detector reciever. My experience agrees with what K1ZJH said.

There are many kinds of materials that will provide rectification/detection of an AM signal. Consider rusty rain gutter connections that can generate TVI. These work well in moderately strong fields but don't do well on signals from across the pond. My point is that some materials are better choices than others even when all will work to some extent.

Steve N4EY

3466. Re: Heath DX20 Plate Transformer Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: tgm@netcom.com
Message-ID: <tgmE7plut.8J@netcom.com>
Source record: 95629

Rye Gewalt (ryeg@vais.net) wrote:
: Anybody got a plate xfmr for a DX 20 laying around that they want
: to get rid of (sell). Getting my old novice rig running from the
: 60s and the dammed transformer is arcing over.

Why not try rewinding it? Separate the plates, and unwind the burned wire. Measure the lengths of the windings which you have removed and rewind with the same length and gauge magnet wire. Coat the plates with shellac when reassembling and bolt together tightly. It is pretty straight forward (albeit a bit boring).

3467. FS: RF components, tubes, etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Gerald Cluff <cluffg@sisna.com>
Message-ID: <01bc37fc$99aa6aa0$839f62cf@cluffg>
Source record: 95630

see page for details

--
W7CKW
GERALD CLUFF
7946 W. OREGON AVE
GLENDALE, AZ 85303
H: (602)872-8888 W: (602)436-6276
http://www.sisna.com/users/cluffg/ham.htm
email: j142@doitnow.com

3468. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: "Christoper W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <333A1C68.3F7F@earthlink.net>
Source record: 95631

Samuel A. Falvo II wrote:
> >This used to be illegal. Seems to me it was 5-6 years ago they made a
> >change with the specific intent of allowing this situation.
>
> IF you are a tech no code, THIS IS STILL ILLEGAL. Only those with
> suitable license class can use such an HV/VHF cross-band repeater.
> Got news for YOU...it IS legal!!! Has been since the late 70s...
ANY class of license may be REPEATED by a RPTR (only) into any legal RPTR subband.....(on 10 that is 29.5-29.7 ONLY)....and as long as the call of the rptr/crossband system is legal for that band, ANYONE legal on the input can be crossbanded...

Chris
WB5ITT
Advanced since 1974 and
EX WR5AOK from Prose Walker days and Docket 20282 that made WR calls mandatory...Oh you dont know about that? You dont know FM/Rptr history then

3469. Need Info: Cushman 301 O'scope P/I

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Marty Gulseth <marty_gulseth@hp.com>
Message-ID: <333AA898.7FBF@hp.com>
Source record: 95632

Hi All,

Anyone have a schematic of the Cushman # 301 O'scope plug-in for the old
CE
series service monitors? Got one I'm trying to rig as a standalone RTTY
tuning
scope/general purpose shack monitor, need info.

Thanks!
Marty - W7LEJ (Spokane, WA)

3470. schematic for 2m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Suleyman Yalcinkaya <suleyman@netas.com.tr>
Message-ID: <333A9312.13BE@netas.com.tr>
Source record: 95633

Hi all,

I'm looking for a schematic for 2m (144-146 Mhz) receiver which has
PLL device.

Thanks in advance,

regards,

3471. Re: ICOM IC-2000 MARS MODIFICATION???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <333AC6A0.7679@rollanet.org>
Source record: 95634

>
> ANYONE KNOW THE MOD. FOR THE ICOM IC-2000 2M MARS MODIFICATION OR KNOW
> WHERE I CAN FIND OUT??? ANY HELP WOULD BE APPRECIATED
>
locate control board
locate and cut diode D8
reset radio
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3472. Re: Soft-start circuits

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5het1i$rj8@hpcvsnz.cv.hp.com>
Source record: 95635

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

: The same circuit (if it is the one I think it is) also ties 220 VAC
: neutral to chassis. That's a violation of standard wiring practices
: and can defeat GFI protection circuits.

Defeat GFCI's? All the ones I've measured would be tripped immediately
by a neutral that's grounded past the GFCI; they try to excite a ground
loop (and trip if they succeed to the tune of 10mA or so). But...how
many hams run their rigs on GFCI-protected circuits??

--
Cheers,
Tom
tomb@lsid.hp.com

3473. Re: RG58 - was: Cable Television Coax (Is it good for anything)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: mcdonarj@mcmaster.ca
Message-ID: <5het9h$8rl@informer1.cis.McMaster.CA>
Source record: 95636
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

But do remember that RG58 has higher signal attenuation than RG8.

Rob

>Thinnet uses RG-58, 50ohm coax.... Yes it can be used in Ham Radio
>Applications, since most Ham Radios/Antennas are 50 ohms
>> Does anybody know the characteristics of IEEE 802.3 thin ethernet cable?
>> Is this useful for ham applications?

3474. FI 2100B`

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: w5zdw@aol.com
Message-ID: <19970327224000.RAA07272@ladder01.news.aol.com>
Source record: 95637

Can anyone supply me with a service manual for Yeasu FL 2100B or tell me how to neutralize new chinese made finals in it... In-put coils tuded but no output!! Thanks I am W5ZDW@aol.com

3475. High performance homebrew receivers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: John Miles <jmiles@digitalanvil.NoSpamHere.com>
Message-ID: <333B0B5E.2C36@digitalanvil.NoSpamHere.com>
Source record: 95638

To dig up an old thread, are you (Roland) still around here? Found your message on DejaNews and was wondering what device/supplier you used for your LCD panel. I've got a 770-1290 MHz DDS/PLL synthesizer working on the bench for a general-coverage VHF/UHF receiver project, and will soon need to tackle the frequency-display part of the problem. The receiver will basically be "run" by a dedicated PC-compatible motherboard, so I'd like to be able to connect the display panel directly to a serial or parallel port.

Anyone else have any good sources for high-legibility LCD panels that can be updated directly from a PC serial (actually, parallel would be better) port? I don't need color, dot addressability, etc., but at least 4-5 lines by 64 characters would be good. The main thing I want is ultra-high quality readability and backlighting -- similar to what you'd see in a good-quality test instrument.

-- jm

Subject: High performance homebrew receivers
From: CORDESSES Roland <cordesse@opgc.univ-bpclermont.fr>
Date: 1996/06/03
Message-Id: <31B2DD98.48E6@opgc.univ-bpclermont.fr>
Newsgroups: rec.radio.amateur.homebrew
[More Headers]

Hi Rob

Enjoyed your message about high performance homebuild receiver.
I'm working on such a project since many months (years??).Here are some comments and questions on the subject :

1.Preselector . What about insertion loss and selectivity of your circuit (especially on the upper ham bands).
I merely build band pass filters centered on each ham band (present status is 14 MHz only!!) so I'm interested in any ideas and comments about good front end selectivity .

2. Front End . No comments .I'm using Makhinson ideas .

3. IF Filters and amplifiers . Your approach seems very smart but what about Q degradation by the varactors and AGC stability problems related to this structure .
Here I use home made ladder filters (12 poles for main and 4 poles for noise) I designed with the Hayward and Makhinson methods.
The band pass is around 2300Hz and shape factor in the order of 1.6 (6/80dB).I have also build a 1700Hz unit and designed a 400Hz one).

I agree with you that narrow filters build around common (and cheap) crystals are associated with high insertion losses .
The present amplifiers are MC1350 chips but I recently ordered AD600 and AD603 in order to experiment the Carver and Analog Devices schematics . I hope to improve the AGC behaviour through the use of the "linear in dB" gain control characteristic .

4. Local oscillator . For the first tests I use a classical Colpits VFO but I'm working on a DDS/PLL synthesizer (according to Rhode works). The DDS build around an AD7008 controlled by a 80C552 microcontroller is now operational:tuning is made by an HP optical coder and frequency is displayed on an LCD panel .
The PLL part has to be build : I am interested in any comments or advices you could made about the Rhode paper.

5. Product detector and Audio amp. The product detector is a classical diode DBM . I made tests with the sample and hold technique proposed by Rhode (QST Nov92) but the detector dynamic range improvement of this circuit was not as high as expected . Any comments about this method would be appreciated.
My audio amplifier is an ugly one and I suspect that great improvement in A.F quality could be obtained !!!

This receiver forum is really fascinating !!!

73's de Roland / F2DC

Note: My E-mail address has been altered to avoid spam

3476. Re: 6 Meter Cavity. Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <333AFBDF.3B2D@onramp.net>
Source record: 95639

Bob Doyle wrote:
>
> MICHAEL FAWBUSH wrote:
> >
> > Does anyone have any documents on how to build a 6 Meter Cavity. 73
> >
> > KF4JOZ
> > Mike Fawbush
> > mfawbush@usit.net
> > Morristown, TN
>
> How about:
>
> http://www.dallas.net/~jvpoll/dup6m/dup6m.html
>
> Seems like some good ideas to me...
>
> Bob
> WA3TGF

You start with a collection of 55 gal drums...

Clif

3477. Re: Homemade crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Mar27.142932.1519@ke4zv.atl.ga.us>
Source record: 95640

In article <19970326052500.AAA10782@ladder01.news.aol.com> commquart@aol.com (CommQuart) writes:
>
> I have never much luck using a 1N914 diode, and I have tried
>various biasing schemes to improve their performance as detectors.

The bias network has to present a *very* high impedance load to the circuit in order to work. But it will work.

Gary

--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

3478. Re: WANTED: plug-in coil forms and sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <333B391A.3D0E@erols.com>
Source record: 95641
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Dean Hemphill K5DH wrote:
>
> I need at least two each of the old plug-in coil forms and sockets for
> a CW transmitter project I'm working on (a 6V6 oscillator driving an
> 807 PA). Either 4-pin or 5-pin types would be fine, about 1-1/4" in
> diameter or close to that.
>
> I could also use a couple of Millen ceramic plug-bars and jack-bars for
> my parts stock (future projects, y'know?).
>
> ALSO... I need some B & W 3011 and 3015 coils (unused only, please) for
> transmitter projects.
>
> 73 de K5DH! :)
>
> --
> Dean W. Hemphill Email: k5dh@dlep1.itg.ti.com
> 211 Addison Place
> PO Box 328 Home: (817) 497-5365
> Lake Dallas, Texas 75065-0328 Work: (972) 462-2033
> . . . . . .
> Amateur radio operator K5DH, avid QRPer, CW op, VE (ARRL and W5YI)
> Ford Mustang enthusiast ('66 coupe, '69 GT-350, '72 conv, '95 GT conv)
> Die-cast model car collector (mainly Ford products, in all scales)
> Plastic model car builder (mainly Ford products, 1:24 / 1:25 scale)
> Glass insulator collector (specializing in "oddball" pieces)
> . . . . . .
Try Ocean State Electronics for the B&W stock
and, Antique Electronics Sales (AES) for 5 Pin coil forms.

73 Dave K7HMP

3479. TS-440 Transvertor Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: "j.valdes" <jvaldes@whoi.edu>
Message-ID: <333B2A9C.C2@whoi.edu>
Source record: 95642

Does anyone have any information for using the TS-440 as the IF for a VHF transverter? Is there a way to lower power when utilizing a transverter? The Icom 735 looks to be a better way to go but I have the 440.
Thanks, Jim WA1GPO

3480. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc3b30$e345c240$6d60b6cd@cbx-nt>
Source record: 95643

<<<<SNIP>>>>>
>
> A rptr yes...a remote base, NO....it is different...
> (and yes a rptr MAY be simplex in out on 10 FM PROVIDED it falls between
> 29.5-29.7..anything BELOW 29.5 is a remote base OR as Part 97 calls it, a
remotely
> controlled station...

Gosh, so my use of the RS-10 & RS-15 Satellites if forbidden, NOT!!

I must be missing something in the translation here. :-)

Christopher Cox
KC8FRJ
TRA#4901

3481. Re: New 6 metre web site!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Ed Loranger <USE_MY@Sig.Address.pse>
Message-ID: <333AF242.4452@Sig.Address.pse>
Source record: 95644
Cross-posted to: alt.ham-radio.vhf-uhf,rec.ham-radio,rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

Looks like you are doing the "Work the Web"
phrase justice. I too am trying to provide
substance to my web page. Look for me
on www.qsl.net too! (See below).

Note:: Anti-Spam address used above.
--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee
mailto:we6w@qsl.net
http://www.qsl.net/we6w

3482. Re: Question: Charger for the HTX202

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Ray Brown <r_brown@getonthe.net>
Message-ID: <01bc3a6d$63351240$8eaf32cf@r_brown.getonthe.net>
Source record: 95645
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Another bob <unregistered.dns@nowhere.com> wrote in article
<5h7qd3$a13@usenet88.supernews.com>...
> In article <33364684.2305894@news.pacbell.net>,
> maynards@pacbell.net (Sam) wrote:
> >I've misplaced the wallcharger for my HTX202 battery pack. The
> >charger is 12vdc, 200ma. I have a couple of other wall plugs that
> >are:
> >
> >9vdc, 1A
> >12vdc, 1A
> >
> >As long as I have the polarity correct on these plugs, could I charge
> >from these and not hurt the nicads?
>
> Radio Shack says NO WAY.

ROFL! :-)

> With that said, I charge mine from the car's DC power jack (aka cigarette

> lighter socket) wit regularity, but no ill effects. Polarity is tip
positive.
> The 9 Volt unit may work.
>
> 7 3 de Matt KE6ALM

The 9 should work just fine. The trick is, the battery pack has its' own
built-in voltage regulator for the 6 AA-sized ni-cad cells. Yeah, if you
can feed it 9.5v, it'll work. And I have also plugged the car's DC straight
in. As long as the LED glows, it'll work.

Ray KB0STN

3483. Re: 6 Meter Cavity. Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <333B5346.2033@icss.net>
Source record: 95646

Mike, check out Jim's web site. It includes plans for building 6M duplexors out of hardline. Go to: http://www.dallas.net/~jvpoll/

73, Brian/N0iMD

MICHAEL FAWBUSH wrote:
>
> Does anyone have any documents on how to build a 6 Meter Cavity. 73
>
> KF4JOZ
> Mike Fawbush
> mfawbush@usit.net
> Morristown, TN

3484. Re: non-erotic, non-sexual, but possibly tantalizing linear pics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-27 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5hcpb5$9lg@news.Hawaii.Edu>
Source record: 95647

Clint Bradford <clint.bradford@atdbbs.com> wrote:
>>Brian wrote:

>>>The guys who complain are either -
>>>Living in Russia and pay for their access by the kilobyte (yes this
>>>is true!!)

>I wouldn't compare my living in Southern California anything like
>living in Russia.
>Brian - learn what the basic rules of the Internet are. One of 'em is
>you post MESSAGES in Messagegroups. Period. No pictures - no matter how
>pertinent one might feel they are.

Some newsgroup-to-emailreflector is still choking on his binaries
and spitting them back into this NG.
KH2PZ

3485. Log Antenna for 80M or 40M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5hf4t5$7k4$1@news3.microserve.net>
Source record: 95500

Hello,

I was thinking about building both the 80M and 40M 4 element
Log Periodic antennas described in the ARRL antenna book.

Has anyone out there built one of these per the direction in
the ARRL book? If so how did the project go and how does it
rate to your other antennas for 80 & 40? Looking forward to
hearing any info on these types of antennas for the low bands.

Please post here or e-mail...

73

Steve N3FTI
skerns@mail.talon.net

3486. Re: Lintz Wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: jonz@rainbow.rmii.com
Message-ID: <5hf71f$74k$1@news1.rmi.net>
Source record: 95501

Lawrence M. Koga (crshi@aloha.net) wrote:
: Hi All, Does any know where I can purchase "Lintz wire"?

Change your search to "litz" and you may have more success...

Jonesy W3DHJ

3487. Re: 6 Meter Cavity. Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: MICHAEL FAWBUSH <mfawbush@usit.net>
Message-ID: <01bc3b2a$8e792320$223a01c7@mfawbush.usit.net>
Source record: 95502

Thanks a Million ya'll.

3488. Subscribing to the new FREE Glowbugs List!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hffed$kt5@news1.mnsinc.com>
Source record: 95503
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew,uk.radio.amateur

What is a GLOWBUG???
Well, Glowbugs is a mailing list for folks that like to meddle with
firebottles, also known as valves or tubes!

If you like building transmitters, receivers etc. with tubes or you
would like to learn how, THIS is a great group to join.

Drop an e-mail to Conard at the address below and he will get you
signed right up!
==========
FORWARDED:

From: Conard Murray <ws4s@infoave.net>

Hi all, Everything is going well
with the new free glowbugs listserver. We have a few users already
logged on testing the system and it is working quite well. We should
be ready for everyone on Friday. If you want to be included as a user
without going through the subscription process just drop me a note
with your name and e-mail address in lower case.

Thanks, Conard WS4S

.-. . Conard Murray WS4S
Glowbugs listowner . . 217 Dyer Avenue ws4s@infoave.net . .
Cookeville, TN 38501 615-526-4093 . .
<>< Wise men still seek Him ><> . . Member Arizona ScQRPions
QRP-L # 993 . . NAVMARCORPS MARS NNN0UTN .

3489. Squelch Pop Suppression on Motorola

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: thompson@pdnt.com
Message-ID: <5hfitm$855$2@sol.pdnt.net>
Source record: 95504

I have two Radio Shack PRS-102 UHF tranceivers which I believe
are the same/similar to the Motorola Sport 10x, except they
broadcast on GMRS frequencies 462.xxxx MHz.

Anyway, the problem I have is that I'm trying to hook up my own
speaker any microphone to them. When one of the tranceivers picks
up a transmission and activates the speakers, it's proceeded with a
'pop' sound. This isn't a problem unless one puts a speaker or ear
bud near ones ear. Next to one's ear this pop can become painful
quickly. I'm wondering if there is some way to absorb this initial
pop... Is there some simple circuit I can stick in here? Any leads
would be most appreciated.

Also, this tranceiver has a 1/8" and a 3/32" plug. The 1/8" is appears
to be the speaker out and the 3/32" is the mic in. I'm under the
impression that it is possible to get the tranceiver to turn on
transmission through these two jacks, however I don't know how it's
done.... that is remotely pressing the transmit button. I've tried
various combinations of shorting, with no luck. any ideas?

Thanks for any info you can send my way,

Dave Thompson
thompson@pdnt.com

3490. MJ11012 Pins

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <859516841@infoway.com>
Source record: 95505

I am designing a screen supply for my old SB-102 pair of 6146B.
I am raising the screen voltage from 150 to 200.
I have a 1 watt 200 volt zener, a 50,000 ohm droping resistor,
and a MJ11012 darlington NPN rated at 400 volts 15 amps,
175 watts. I am series regulating 300 volts down to 200 with
just the screens as a load.

1. Please someone tell me the pins on the TO 3 case.

2. I calculate the circuit as follows.
Max screen pissipation is 3 watts, or 6 watts for a pair.
At 200 volts, that is 0.030 amps. The gain of the parlington
pair is minimum 100, maybe 2K. So very little currant is needed
in the base for the load.

3. My 1 watt 200 volt zener can pass 1/200 or .005 amps.

4. Using a 50,000 ohm droping resistor from 300 volts to the zener
to ground provides a drop of 100 volts at 100/50,000 or .002 amps.

5. Now I connect the collector to 300 volts (the case?) the
200 volts to the base (which pin?) and get a stiff 200 volts at the
emitter (which pin?).

6. I am hoping to get about 190 watts per pair with the screen
increased from 150 to 200. I now get about 110 to 130 watts out.

I've heard I should have a blower over the finals sucking air up and out.
Any other suggestions?

73, Don N6MCE

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

3491. PiNet Toroid

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <333B9813.6AB0@erols.com>
Source record: 95506

Looking for info on using a toroid based coil as part of the output pi-net of an amplifier. Anyone??

3492. Digital VFO for R2/T2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: Donal Leader <donalmie@iol.ie>
Message-ID: <5hg9f2$7i$1@nuacht.iol.ie>
Source record: 95507

I am beginning a project based on the use of the Rick Cambpell R2/T2 modules. I am looking for information on an appropriate digital VFO to use with this kind of set-up. I am considering using the S. and S. Engineering digital VFO. Has anyone used this? What about phase noise? I would appreciate any info that is available on this topic.

3493. Re: 6 Meter Cavity. Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.114.000FE436@phoenix.net>
Source record: 95508

In article <333AFBDF.3B2D@onramp.net> Clif <avvid@onramp.net> writes:
>From: Clif <avvid@onramp.net>
>Subject: Re: 6 Meter Cavity. Help!
>Date: Thu, 27 Mar 1997 16:59:43 -0600

>Bob Doyle wrote:
>>
>> MICHAEL FAWBUSH wrote:
>> >
>> > Does anyone have any documents on how to build a 6 Meter Cavity. 73
>> >
>> > KF4JOZ
>> > Mike Fawbush
>> > mfawbush@usit.net
>> > Morristown, TN
>>
>> How about:
>>
>> http://www.dallas.net/~jvpoll/dup6m/dup6m.html
>>
>> Seems like some good ideas to me...
>>
>> Bob
>> WA3TGF

>You start with a collection of 55 gal drums...

>Clif
And a weldering machine. (you'd be better off building a bbq pit.)(no bull)

3494. Re: Lintz Wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <333BD0FA.227A@crpl.cedar-rapids.lib.ia.us>
Source record: 95509

Bea and Marvin Jones wrote:
>
> Lawrence M. Koga (crshi@aloha.net) wrote:
> : Hi All, Does any know where I can purchase "Lintz wire"?
>
> Change your search to "litz" and you may have more success...
>

Litz wire can be purchased from :

Amidon Associates
3122 Alpine Drive
PO Box 25867
Santa Ana CA 92799
(714) 850-4660

There are different types and sizes of Litz wire, which their catalog describes. The catalog is available by phone.

Bill W0IYH

3495. How to link two repeaters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: mac@cis.ksu.edu
Message-ID: <mac.859567412@zaurak.cis.ksu.edu.cis.ksu.edu>
Source record: 95510
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

I've been asked by our local Emergency Preparedness office to try to
link the 146.07/67 or 146.355/955 repeater in Topeka, Kansas, with the
147.855/255 repeater in Manhattan, Kansas, (about 50 miles distant).

While I have several IDEAS how one MIGHT got about this, I don't have
the slightest KNOWLEDGE and wonder if anyone can cite publications or
give real-life examples of how to link two repeaters?

--Myron.
--
Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
PhD EE (Retired prof.) CDL (PTX) W0PBV (913) 532-7353 fax 539-4448 home
NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

3496. Re: Question: Charger for the HTX202

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <333c2c31.12937674@news.sprynet.com>
Source record: 95511
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 24 Mar 1997 09:22:18 GMT, maynards@pacbell.net (Sam) wrote:

>I've misplaced the wallcharger for my HTX202 battery pack. The
>charger is 12vdc, 200ma. I have a couple of other wall plugs that
>are:
>
>9vdc, 1A
>12vdc, 1A
>
>As long as I have the polarity correct on these plugs, could I charge
>from these and not hurt the nicads?
>
>73,
>
>Sam
please update some information for me, what is the nominal voltage of
the battery pack and do you kown how many cells are in the battery
pack?
Larry ve3fxq

3497. Re: help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <YidwKUAxq7OzEw1I@two-way.demon.co.uk>
Source record: 95512

I'm looking for a source of heavy duty compression trimmers of 5000 and
10,000pf in value (5nf & 10nf), I'm in the UK so e-mail adresses would
be best or fax No's if you have them.

Many thanks.

Phil G4ZOW/M
(The Long Range Cordless Phone Man.)

Turnpike evaluation. For information, see http://www.turnpike.com/

3498. Need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: aibes@aibes.ksu.ras.ru
Message-ID: <AABOBVY0pst@aibes.ksu.ras.ru>
Source record: 95513

I'm looking for piout for IC TA8164p.
Plese replay to aibes@aibes.ksu.ras.ru.
Thanks in advance,- Alex (UA4RO).

3499. AEA232 ROMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <NZFU0CAzhDPzEwcp@falstaf.demon.co.uk>
Source record: 95514

Dear All,
I am trying to obtain newer roms for my ancient PK232. This is a non MBX one, one of the very old ones. It has two proms labelled dec 88.

Does anybody have any newer roms, if they have the data I could burn them myself.

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

3500. Re: Tubes for Sale (Repost to correct earlier post)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: BlueStrat <bluestat@erols.com>
Message-ID: <333C20D1.71C6@erols.com>
Source record: 95515

John:
Are the 6V6's "GT's" by any chance (glass)? If so, are they NOS, with or without boxes, what brands?

Is the 5U4BG possibly the 5U4GB? Same questions as above.

Thanks!
Mike

3501. Twin-Lead J-Pole for 70cm?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: Jake Marble <bmarble@cache.net>
Message-ID: <333BA72B.7A54@cache.net>
Source record: 95516

Hey all-
I need plans for a 470 MHz Twin-Lead J-pole. I know there are plenty
of plans for 2 meters, but I'll be using the buisiness band just above
the 440 Ham band.
Thanx in advance,
-Jake Marble, KC7GQM
kc7gqm@amsat.org

3502. Re: FS: Teflon Wire #18,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: dallen@melpar.esys.com
Message-ID: <5hheuq$18a8@fcserv3.fcd.esys.com>
Source record: 95517

In article <5h997a$qk319@fcserv3.fcd.esys.com>,
dallen@melpar.esys.com (Dale Allen) wrote:
>I have teflon wire available in several colors in the listed
>sizes.
>
#18 in 2,7,9 (as in color code)

#22 in 2,3,4,7,9

#24 in 5,7

#26 in 2,6
Thank you,
Dale

3503. WTB-Radar xmtr.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: jmul@microlink.net
Message-ID: <859614481.11225@dejanews.com>
Source record: 95518
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I'm looking to buy a small 10.525 gHz transmitter, something along the lines of the Rainbow Kit "Zapper". If anyone has something similar I'd like to hear from you,thanks.

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

3504. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: JOHN BRUNK <jbrunk@earthlink.net>
Message-ID: <333CAE49.4D7A@earthlink.net>
Source record: 95519
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

Michael Crestohl wrote:
>
> In article <3339E988.7262@pacbell.net>, -=Tony=- <anthonys@pacbell.net> wrote:
> >Robert M. Bratcher Jr. wrote:
> >>
> >> Another odd thing I noticed. That listserver wanted a confermation (by
> >> replying to a message it sent) to complete the subscription process.
> >> Seems to be low traffic at the moment (99 members) but that may
> >> change...
> >>
> >> Robert M. Bratcher Jr.
> >>
> > Ahemmm ... this mail list has more than 700 members by my
> >last reading! Most are paid subscribers and others are there during
> >the generous free trial period.
> >
> > -=Tony=- W6ANV
> >
>
> I get the impression that this is another, new list with the same
> name.....
>
> Anyone seen any posts?
>
> 73,
>
> Michael, W1RC
> mc@shore.net

ARRG! HI MIKE - GNQ HERE! LONG TIME NO YACK (VE2FW as I recall!). Ah those WERE they DAYS! SUCH fun.....not like this shit we have today. If you heard 01/61 OR .435 you would crap nails! Suckaroo-City! B.O.R.E.S. all over the place.....no talent! No imagination....just BIG antennas and LITTLE brains!

GOTTA go.....will look for more from you later.....1980 or so as I recall (give or take a couple years??).

CU LATER>.....JOHN/N6GNQ

3505. Re: AEA232 ROMS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: dick@merlin.libelle.com
Message-ID: <dick-ya02408000R2803971823240001@news.zippo.com>
Source record: 95520

In article <NZFU0CAzhDPzEwcp@falstaf.demon.co.uk>, Robin Birch
<robin@falstaf.demon.co.uk> wrote:

>I am trying to obtain newer roms for my ancient PK232. This is a non
>MBX one, one of the very old ones. It has two proms labelled dec 88.
>
>Does anybody have any newer roms, if they have the data I could burn
>them myself.

Timewave has bought the non-antenna portion of AEA and plan to support the
PK-232 product line. I would suggest you give them a month to get their
act together regarding AEA products and pose your question to them.

73, Dick
--
Dick Flanagan W6OLD CFII Minden, Nevada
Visit http://wadg.greatbasin.net/siera/

3506. STOP!!! Re: Subscribing to the new FREE Glowbugs List!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5hfk6o$1n7@news.Hawaii.Edu>
Source record: 95521
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew,uk.radio.amateur

WAIT!!!! DON'T DO THIS. The *new* GlowBugs list will have an
automated subscription address; rather than flooding Conard's
mail box, wait for him to post the sub'ing instructions on here
so you can subscribe yourself. I'm sure Conard doesn't want hundreds
of emails saying "sign me up!" (Bad boy, Brian!)

Brian Carling G3XLQ / AF4K <bry@mnsinc.com> wrote:
>What is a GLOWBUG???
>Well, Glowbugs is a mailing list for folks that like to meddle with
>firebottles, also known as valves or tubes!
>
>If you like building transmitters, receivers etc. with tubes or you
>would like to learn how, THIS is a great group to join.
>
>Drop an e-mail to Conard at the address below and he will get you
>signed right up!
>==
>FORWARDED:
>
>From: Conard Murray
>
>Hi all, Everything is going well
>with the new free glowbugs listserver. We have a few users already
>logged on testing the system and it is working quite well. We should
>be ready for everyone on Friday. If you want to be included as a user
>without going through the subscription process just drop me a note
>with your name and e-mail address in lower case.
>
>Thanks, Conard WS4S

This note was *only* for the handful of folks sub'd to the old
Glowbugs list (whose host site was asking a yearly fee from each
reader); Conard will subscribe them by hand. This note wasn't meant
to be a public invitation to email him and have him do all the subs
manually.

7.3W,
Jeff KH2PZ

3507. WTB: Big Magnets .... where ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-28 00:00:00 UTC
From: daveb@buffnet.net
Message-ID: <5hgg0kle1@buffnet2.buffnet.net>
Source record: 95522

Hello All

Like to find a source for reasonably prices magnets. The kind used on mag mount antennas. Ideally the BIG ones used on HF type mobile antennas.

daveb@buffnet.net

3508. Wanted: MOSFETs Dual Gate 3N201 to 3N213

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: John in Roseville <rtwodtwo@cwnet.com>
Message-ID: <5hhrm0$2qj@news4.snfc21.pacbell.net>
Source record: 95523
Cross-posted to: rec.antiques.radio+phono,rec.radio.swap,sci.electronics.design,rec.radio.amateur.homebrew

I'm looking for some MOSFET transistors, Dual Gate 3N201 to 3N213.
I need about 10 now.

I can't seem to find them at Mouser, Digi-Key, JDR Micro, Jameco,
All Electronice, Alltronics...

Thank you for your help!

mailto:rtwodtwo@cwnet.com

John

3509. WTB RG174 connector accessories

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Steve Jackson KZ1X/4 <76216.2557@CompuServe.COM>
Message-ID: <5hhpa9mjj1@mhade.production.compuserve.com>
Source record: 95524
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I am trying to find strain relief boots for RG174 and BNC male connectors. Also SMA and SMB connectors, preferably right angle, for RG174. Have SMA males for RG58. Anyone know where to get these?
Steve KZ1X/4 sjackson@baynetworks.com or 800-343-8977 ext. 1726 24 hrs.
--
73 de Steve
KZ1X/4 Chapel Hill, NC

3510. FS: Variable Caps (VHF/UHF)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: w1ksz@juno.com
Message-ID: <5hhnq7$q1l@news-central.tiac.net>
Source record: 95525

I have a lot of variable caps used in VHF/UHF circuits. Linear, Butterfly, Differential, etc. In the 5pf - 25pf Range, Anyone interested in these?? 73, Dick, W1KSZ

3511. FS: Piston Trimmers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: w1ksz@juno.com
Message-ID: <5hhnma$q1l@news-central.tiac.net>
Source record: 95526

I have about 40 Piston Trimmers for VHF/UHF, mostly JFD. Will sell as a lot. 73, Dick, W1KSZ.

3512. NEED A 2500 VOLT TRANSFOMER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: jkanejr182@aol.com
Message-ID: <19970329052701.AAA19345@ladder01.news.aol.com>
Source record: 95527

I NEED A 2500 TO 2800 VOLT TRANS TO GET ABOUT 4000 VDC
ON A BRIGED RECT TO RUN 2 3-500Z TUBES
I HAVE A REBUILT L4B P.S. FOR SELL OR TRADE TOO
THANKS JKanejr182@aol.com

3513. WTB 75S1 cabinet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: jmul@microlink.net
Message-ID: <859614776.11414@dejanews.com>
Source record: 95528
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

I am in need of a cabinet for a Collins 75S1. Doesn't have to be pretty, just usable, no major damage. Also need 10 meter crystals. Let me know by email if you can help,thanks. John N0EE

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

3514. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: David Nye <nyeda@uwec.edu>
Message-ID: <333CD273.1E58@uwec.edu>
Source record: 95529

AC6V wrote:
>Claudio Fornaro wrote:
>> I'd want to build a "home made" radio receiver for AM (or even SW...) by
>> putting together pieces that can be found at home
>
> Hi Claudio -- an admirable project. For the crystal detector -- try a
> small whisker wire on a razor blade. It works -- I remember doing this
> as a boy experimenting with xtal radios.

I remember building a "fox hole" radio from plans in a children's science book when I was a kid. It used a broken pencil "lead" tied with thread to the end of a safety pin, with the point of the lead resting on the beveled edge of a razor blade for the crystal. The head of the pin (bent to about 120 degrees) and the razor blade were fastened to a block of wood with thumb tacks. This connected to a coil made around a toilet paper tube and then to a cheap crystal headphone. I remember having to move the pin around ever so slightly on the razorblade edge until I started picking up a signal. Only problem was it picked up all the local stations together. I'd like to find the plans again and make it again with the kids. Has anyone come across this who can direct me to the plans (or even post them here)?

David Nye KB9PSL Eau Claire, WI

3515. PC card transceiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: David Nye <nyeda@uwec.edu>
Message-ID: <333CD922.6AA2@uwec.edu>
Source record: 95530

I just got my tech ticket a couple of weeks ago with my son and we've decided we want to try building a second 2M transceiver. The ARRL Handbook describes some one-chip receiver and transmitter chips, the Motorola MC3363 and MC2831A and a similar Phillips receiver chip the NE627 that we're considering using. We're planning to build it on a PC card so we can use the PC for control, audio out through the sound card, and use the PC's power supply. Obviously we'll need to be careful about shielding the board and use an outside antenna (and wire-wrap is out).

Has anyone worked with these chips or built a transceiver on a PC card? There is a SWL radio available on a card so it must be possible to overcome the noise problem. Any words of wisdom?

David Nye KB9PSL Eau Claire, WI

3516. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: markem@primenet.com
Message-ID: <5hiet3$fff@nnrp1.news.primenet.com>
Source record: 95531
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

What a total crock of shit. It's attitudes like this that drive people away from the for-profit BA list. I guess we should feel sorry for someone who feels he has to make snide comments in public about people he doesn't even know. Get a life...

In article <333A40D2.BA4@gte.net>, nq5t@gte.net wrote:
>It is -- put together by someone who feels they have a cross to burn ...
>
>or who wants to be seen as a hero of some sort amongst the faction who
>spent their only available $12.00 on a couple of six packs. The whole
>idea is ill advised and just dilutes the level of support and knowledge
>that would be available in one list with focused expertise and
>experience. Of course, there are people subscribing by the bezillions,
>but people would subscribe to lists on bologna and cheese sandwiches at
>an even higher rate. The possession of an internet ID and mail account
>is no guarantee of IQ .... Franky, having to subscirbe to 40 lists,
>each with the same basic members, but each focusing on narrow
>discussions of one manufacturer or whatever to get the breatdth of BA
>discussion is useless. Maybe I should start a list devoted to
>Hammarlund equipment manufactured between 8:02am and 9:22am on March 22,
>1956 ?
>Its all an ego trip of major proportions ...
>
>;-)
>
>Grant

3517. RADIO BOATANCHORS Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hiotf$9bg@news1.mnsinc.com>
Source record: 95532
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

Are you interested in older radio equipment?

To join the new FREE BOATANCHORS mailing list,

Send a message to the list server at:

LISTSERV@LISTSERV.TEMPE.GOV

No subject, and then for the text:

Please specify your full name, as in

SUBSCRIBE BOATANCHORS Joe H. Smith

See you there!

3518. Re: Digital VFO for R2/T2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5his4g$9bg@news1.mnsinc.com>
Source record: 95533

Donal Leader <donalmie@iol.ie> eloquently wrote:

>I am beginning a project based on the use of the Rick Cambpell R2/T2 modules. I am looking for information on an appropriate digital VFO to use with this kind of set-up. I am considering using the S. and S. Engineering digital VFO. Has anyone used this? What about phase noise? I would appreciate any info that is available on this topic.

I am also gettign curious about that S&S VFO / DDS unit.
I think it is $139 which is a lot of $$ for a VFO, BUT it would be
nice to have if the phase noise is acceptable to the typical
homebrewer.

You could also ask the folks over on qrp-l

Anyone using one here?

3519. Help TNC 220

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: morgs@netspace.net.au
Message-ID: <5hiunmobs1@otis.netspace.net.au>
Source record: 95534

I had an accident with my TNC220 . I have blown all chips including the EPROM . Can anyone help with the Eprom image or where I can get one.
Thanks

3520. Re: WTB RG174 connector accessories

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Steve@swssec.com
Message-ID: <333cf767.140926565@news2.ibm.net>
Source record: 95535
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

Steve Jackson KZ1X/4 <76216.2557@CompuServe.COM> wrote:

> I am trying to find strain relief boots for RG174 and BNC male connectors.
> Also SMA and SMB connectors, preferably right angle, for RG174.
> Have SMA males for RG58. Anyone know where to get these?

Hello Steve,

We buy these exact items from RF Connection:

The R.F. Connection
213 N. Frederick Ave. Suite 11-W
Gaithersburg, MD 20877
USA

Tech Support (301) 840-5477
Orders (800) 783-2666
24 hour Fax (301) 869-3680
e-mail rfc@therfc.com

http://www.therfc.com

They are honest, competent and a pleasure to deal with. Ship quick and have nearly everything in stock. They have a nice rubber strain relief boot for different sizes of connectors which is available sometimes in many colors or typically black.

You also can purchase from them the glue filled heatshrink in many sizes which works well as strain relief and waterproofing for weird sized connectors.

Ask for Joel and tell him where you heard of them. Highly recommended.

Hope this helps ..... Steve

****
Steve Uhrig, SWS Security, Maryland USA
Manufacturers of electronic surveillance and commo gear
tel +1+410-879-4035 fax +1+410-836-1190
mailto:Steve@swssec.com
Celebrating our 25th anniversary in 1997!
"In God We Trust, All Others We Monitor"
****

3521. Re: RADIO BOATANCHORS Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: -=Tony=- <anthonys@pacbell.net>
Message-ID: <333D085F.3056@pacbell.net>
Source record: 95536
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

Brian Carling G3XLQ / AF4K wrote:
>
> Are you interested in older radio equipment?
>
> To join the new FREE BOATANCHORS mailing list,
>
> Send a message to the list server at:
>
> LISTSERV@LISTSERV.TEMPE.GOV
>
> No subject, and then for the text:
>
> Please specify your full name, as in
>
> SUBSCRIBE BOATANCHORS Joe H. Smith
>
> See you there!

Hi Brian,

Since this list comes from _tempe.gov_ does it mean that the
"free" is subsidized by the government? Just curious. ;-)

-=T=- W6ANV

3522. Need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: aibes@aibes.ksu.ras.ru
Message-ID: <AAd3OVY0pst@aibes.ksu.ras.ru>
Source record: 95537

I'm looking for pinout for IC TA8164p.
Please, replay to: aibes@aibes.ksu.ras.ru.
Thanks in advance,- Alex (UA4RO).

3523. Re: RADIO BOATANCHORS Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5hj5pc$sbk@sjx-ixn4.ix.netcom.com>
Source record: 95538
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

In <333D085F.3056@pacbell.net> -=Tony=- <anthonys@pacbell.net> writes:
>
>Brian Carling G3XLQ / AF4K wrote:
>>
>> Are you interested in older radio equipment?
>>
>> To join the new FREE BOATANCHORS mailing list,
>>
>> Send a message to the list server at:
>>
>> LISTSERV@LISTSERV.TEMPE.GOV
>>
>> No subject, and then for the text:
>>
>> Please specify your full name, as in
>>
>> SUBSCRIBE BOATANCHORS Joe H. Smith
>>
>> See you there!
>
>Hi Brian,
>
> Since this list comes from _tempe.gov_ does it mean that the
>"free" is subsidized by the government? Just curious. ;-)
>
> -=T=- W6ANV
>
The whole damn internet is subsidised by the government. I work
at a government facility if I sign up with a local provider I go
through the same machines and T3 lines I would go through from
work. I use a national provider because I travel so much. I don't
post from work for exactly the reason cited above.

Jerry

3524. Re: PC card transceiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc3c45$b2235040$6b60b6cd@cbx-nt>
Source record: 95539

Might I suggest 2 Kits. A MFJ 8400 2 meter receiver, which uses a MC13135, and the FM6 2 Meter FM transmitter by Ramsey. Should give you a good start on design. All you would need to do is figure out a good Phase Lock Loop circuit and you would be done. The MFJ uses a Cap tuned VFO, eeuuuch, can you sat scratchy. Let me know about the PLL stuff, I am still looking for one myself.

Regards

Christopher Cox
KC8FRJ
TRA#4901

David Nye <nyeda@uwec.edu> wrote in article <333CD922.6AA2@uwec.edu>...
> I just got my tech ticket a couple of weeks ago with my son and we've
> decided we want to try building a second 2M transceiver. The ARRL
> Handbook describes some one-chip receiver and transmitter chips, the
> Motorola MC3363 and MC2831A and a similar Phillips receiver chip the
> NE627 that we're considering using. We're planning to build it on a PC
> card so we can use the PC for control, audio out through the sound card,
> and use the PC's power supply. Obviously we'll need to be careful about
> shielding the board and use an outside antenna (and wire-wrap is out).
>
> Has anyone worked with these chips or built a transceiver on a PC card?
> There is a SWL radio available on a card so it must be possible to
> overcome the noise problem. Any words of wisdom?
>
> David Nye KB9PSL Eau Claire, WI
>

3525. Re: Toroids for Pi-Net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <333d2157.2675000@netnews.worldnet.att.net>
Source record: 95540

On Tue, 25 Mar 1997 21:06:02 -0500, Steve <thebizlk@erols.com> wrote:

>I've seen some amplfiers using a toroid for part of the output pi-network
>inductance (I'm guessing for 160, 80 and maybe 40 meters, I never got a
>close look). I'd like to do something similar in a project I'm working
>on. I'm looking for info on recommneded wire size (for legal limit) type
>and size of the ferrite toroid and any other pertinent design info.

Hi Steve,

I see no one answered you. The design of the inductor is complex.

You would be better off doing it emperically rather than learning a
process you may only use once in your life, unless you *want* to learn
how.

In any event , you need to know the circulating current through the
component and the desired impedance. What is the median impedance
value of the pi-L you are using, by that I mean the output impedawnce
of the pi- section, or input impedance of the L section? What are the
extremes in load impedance, including reactance?

73 Tom

3526. Looking for MRF151G transistors.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <333CFAFA.4403@atl.org>
Source record: 95541
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I am looking for some surplus MRF151G transistors.
Want to save soem $$ over buying new ones through distribution .
-bob

3527. >>Twin-Lead J-Pole for 70cm?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: clint.bradford@atdbbs.com
Message-ID: <9703290920225216@atdbbs.com>
Source record: 95542

ATTENTION to Details BBS is currently offering these Amateur Radio-related files via its free FTP service:

KEYWORD DESCRIPTION
==========
JPOLECALC A small program that calculates JPole measurements for any frequency you input! 28K/ZIP

MAC-HAM List of 75+ Amateur Radio-related files for the Mac available on ATD BBS. 10K/TEXT

NECUTILS Those infamous, difficult-to-locate NEC laptop setup utilities. 17K/ZIP

NICADS Informative article on the care and discharge/charging cycles of NiCad batteries. 14K/TEXT

RFI-TELEPHONE ARRL FAQ dealing with RFI and telephones. 22K/TEXT

WRC-97 As long as the threat to 2M and 440MHz continues, we will update this information package of texts relating to the "Little LEO / WRC 1997" issue. 29K/ZIP

HELP Returns text File with all active KeyWords. 12K/TEXT
==========

How to Use the FTP Server at ATTENTION to Details BBS

The ATD BBS FTP Service is offered as a cost-effective means to obtain information and files from our Bulletin Board System (BBS) - using Internet E-Mail as the method of exchange. Using our FTP Server is as simple as addressing an Internet E-mail message to

ftp@atdbbs.com

containing one or more KeyWords. Multiple KeyWords can be combined in a single Message - but it is very important that there be only ONE KEYWORD PER LINE!

EXAMPLE: You see from the above list of KeyWords that you want a copy of our textfile on NiCad batteries and our Help file. Address your Internet E-Mail...

TO: ftp@atdbbs.com
SUBJECT: [anything here is OK]

...and write the corresponding KeyWord, NICADS, as the ONLY word in the FIRST LINE of your message. And write HELP on the SECOND LINE of your

message. That's all there is to it!

ATTENTION to Details BBS Sysop: Clint Bradford
5085 Trail Canyon Drive Internet: sysop@atdbbs.com
Mira Loma, CA 91752-1685 Office: (909) 681-6210

3528. FS: Crystals for Homebrew Projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <leOAaAA1RVPzEw5q@g3uda.demon.co.uk>
Source record: 95543

Hello All

I have an XTAL list in either .TXT or .ZIP format. They are mainly HC-18/U or HC-6/U profile but also oscillator modules. I've got to get around to adding the older style xtal holders.

Please Email me to: ken@g3uda.demon.co.uk

73 Ken

Ken Linney BSc.
Internet : ken@g3uda.demon.co.uk
Amateur Radio : G3UDA
AX25 : G3UDA@GB7PMB.#28.GBR.EU
TCP/IP : g3uda@g3uda.ampr.org [44.131.88.75]

3529. Codan Mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Barry Stevens <tstevens@gil.com.au>
Message-ID: <333C651A.551E@gil.com.au>
Source record: 95544

Looking for mod to open a 9323 TX . Only want to take one radio on up comming trip and was told this rig will go to the amateure bands.

Barry VK4JI

3530. Re: RADIO BOATANCHORS Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: rickets@earthlink.net
Message-ID: <333d3103.1870031@news.earthlink.net>
Source record: 95545
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

On 29 Mar 1997 13:34:36 GMT, kc5egg@ix.netcom.com(Gerald Schmitt)
wrote:

>> Since this list comes from _tempe.gov_ does it mean that the
>>"free" is subsidized by the government? Just curious. ;-)
That's between the taxpayers of Tempe and the administator of the
listserver, isn't it? Their city hall is an inverted pyramid; they
do things a little different there.
dr

3531. Antenna Switching Relays

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc3c7a$89742c20$ef1810d1@dale>
Source record: 95546

What's the general consensus regarding the use of relays for switching antenna feedlines?

Beyond the power level/handling requirements, are there any particular relays that are recommended more than others for use at different power levels (QRP, 100-200w, legal limit)? Over the years, I have used all kinds of relays with little regard for SWR, losses or power; they all seemed to work pretty well--little, if any, SWR change, no arc'ing problems, etc.. Generally, I use relays inclosed in plastic cases, but otherwise, that's pretty much the limits of my selection process.

What say?

--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

3532. Re: Digital VFO for R2/T2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970329202401.PAA28710@ladder01.news.aol.com>
Source record: 95547

There is practically no phase noise on a DDS. What there is, is spurious outputs. These depend on the DDS chip you're using, the frequency you're on and the "nearness" to the Nyquist frequency, (1/2 the frequency of the clock oscillator). I have measured spurious on the Analog Devices 7008, with a 50 MHz clock at an output frequency of 4 MHz, and found them to be 60-65 dB down from the carrier. This "ain't bad", but it "ain't good" either. It is irresponsible of the various magazines to put out articles on these such as the "Ultimate VFO". They're not the ultimate or anywhere near. And if you're running more than QRP with one, please don't move in next door to me, I'll be over to put a pin in your coax! For a rig like Rick's direct conversion things, you'd be much better served with limited coverage and a VCXO, and it won't cost you >$100 either if you build it. I'd consider the 7008, the minimum DDS configuration, and they run $40 a pop, not counting the shaft encoder and the other goodies required to make it play. You could use it on 160-40, but even 20 meters is getting too close to Nyquist for a good spurious semi-free output.

W4ZCB

3533. Re: Digital VFO for R2/T2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <333D9E2F.79C1@crpl.cedar-rapids.lib.ia.us>
Source record: 95548

JohnsonHE wrote:
>
> I have measured spurious on the Analog Devices 7008,
> with a 50 MHz clock at an output frequency of 4 MHz, and found them to be
> 60-65 dB down from the carrier.

Analog Device's new AD9850 claims -80 dB narrowband SFDR at 4.5 MHz
using 125 MHz clock. $10 in 10,000 quantities.

Bill W0IYH

3534. Re: WANTED: plug-in coil forms and sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <333d89a6.0@cheese.pcug.org.au>
Source record: 95549
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

3W8PE1B <willi6@erols.com> wrote:
>Dean Hemphill K5DH wrote:
>>
>> I need at least two each of the old plug-in coil forms and sockets for
>> a CW transmitter project I'm working on (a 6V6 oscillator driving an
>> 807 PA). Either 4-pin or 5-pin types would be fine, about 1-1/4" in
>> diameter or close to that.
>>

Why not make your own with 35mm photo film containers and 8 pin octal valve bases (from non-working valves)? Simply drill a hole through the bottom of the film container and remove the spigot from the valve base. Removing the spigot should reveal a hole through which you can pass a metla scre to hold the base to the film container. You'll need about 20-25 turns of thin plastic covered insualted wire for an 80m pi network, and about half that for 40 metres.

73,
--

____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

____

3535. Re: FS: Teflon Wire #18,2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <859672347@infoway.com>
Source record: 95550

Hi Dale,

I'm interested in buying some teflon wire, the
#18. What is your price for 135 feet?

73, Don N6MCE

Da> dallen@melpar.esys.com (Dale Allen) wrote:
>I have teflon wire available in several colors in the listed
>sizes.
>
Da> #18 in 2,7,9 (as in color code)

Da> #22 in 2,3,4,7,9

Da> #24 in 5,7

Da> #26 in 2,6
Da> Thank you,
Da> Dale

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

3536. FS: Variable Caps (VHF/UH

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <859672348@infoway.com>
Source record: 95551

to; w1ksz@juno.com (Richard W. Solomon)

Hi Dick,

I am interested in variable capacitors for building
144 MHz antenna tuner for balanced 450 ohm ladder line.

The common circuit calls for
1. 50 pf regular for input
2. 25 pf split stator for output
It would be nice if the two varible sections could
become separate to become in series with the output coil.

I'm not running over 100 watts. In fact only 2.5 now. :-)

Perhaps you would like to trade for something, or cash?

73, Don N6MCE

I have some components for trade, let me know what you are seeking.

W1> I have a lot of variable caps used in VHF/UHF circuits. Linear,
W1> Butterfly, Differential, etc. In the 5pf - 25pf Range, Anyone
W1> interested in these?? 73, Dick, W1KSZ

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

3537. Digital uProcessor Chips 4$ale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Brian Mork <mork@usa.net>
Message-ID: <333D9063.4931@usa.net>
Source record: 95552
Cross-posted to: rec.ham-radio.swap,alt.marketplace.funky-stuff.forsale,rec.radio.amateur.homebrew,co.cos.ads,sci.electronics.repair,sci.electronics.components

I used to do a lot of prototyping with these, but not so
much anymore. My inactivity is your gain. I'm selling
the following integrated circuits.

17cnt 2Kx8 Static memories. Desoldered, $12
(mix of MB8128-15, TMS4016-20, TMM2016P-1/2)

~80cnt Fairchild 9xxx series "uTTL" discrete logic. New, $10

8080A CPU & Support Chips. Socket Pulls, $24
7 8080A 8-bit microprocessor
10 8228/8238 System Controller and Bus Driver
6 8224 Clock Generator and Driver

Z80 Support Chips. New, $5
Z8536 Counter/Timer & Parallel I/O Unit
Z8530PS SCC Serial Communications Controller

9 8251/8251A/8251AP Program. Comm. Interface (USART). Desoldered, $10

7 8085A/AC/AH/AP CPUs. Desoldered, $13

8 8255A. Desoldered, $13

18 8212/3212 (74S412) 8-bit I/O buffers. Desoldered, $30

7 8253-5, Intel & NEC mixed. Desoldered, $10

Prices above are flexible, but do not include shipping.
I'd like to sell groups of chips, but let me know your interest.
I'm posting this in several places; please let me know where you
found the notice.

--
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available

3538. Re: Digital VFO for R2/T2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <333D99E2.5166@aeneas.net>
Source record: 95553

[snip]
> There is practically no phase noise on a DDS. What there is, is spurious
> outputs. These depend on the DDS chip you're using, the frequency you're[snip]
> next door to me, I'll be over to put a pin in your coax! For a rig like
> Rick's direct conversion things, you'd be much better served with limited
> coverage and a VCXO, and it won't cost you >$100 either if you build it.

I'm in the process of building a receiver for weak signal LF work. I looked at the DDS oscillators and was quite frankly impressed with the human interface side of the thing. You can have selectable step size while tuning, readout on a LCD, etc. The spurious output problem dictated that the use of a clean VFO with a drift correction circuit however. Sure I'll have to build a freq counter for readout on the VFO but that won't be to bad.
You will have to decide what your purpose for the R2/T2 is. If it's pulling signals buried under tons of noise out, you better go with one of the low noise VFO circuits. You can do like I and stabilize it to a hertz or two with a simple circuit also. I don't really know how sensitive a R2/T2 is but I remember something in the article saying that it's not quite up to a good superhet design in that department.
Hope this helps.

Mark

3539. Re: Digital VFO for R2/T2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hk457$9gt@news1.mnsinc.com>
Source record: 95554

But what about if you added some good band-pass filtering at the
output for each of the amateur bands?

Wouldn't that clean it up???

johnsonhe@aol.com (JohnsonHE) eloquently wrote:

>There is practically no phase noise on a DDS. What there is, is spurious
>outputs. These depend on the DDS chip you're using, the frequency you're
>on and the "nearness" to the Nyquist frequency, (1/2 the frequency of the
>clock oscillator). I have measured spurious on the Analog Devices 7008,
>with a 50 MHz clock at an output frequency of 4 MHz, and found them to be
>60-65 dB down from the carrier. This "ain't bad", but it "ain't good"
>either. It is irresponsible of the various magazines to put out articles
>on these such as the "Ultimate VFO". They're not the ultimate or anywhere
>near. And if you're running more than QRP with one, please don't move in
>next door to me, I'll be over to put a pin in your coax! For a rig like
>Rick's direct conversion things, you'd be much better served with limited
>coverage and a VCXO, and it won't cost you >$100 either if you build it.
>I'd consider the 7008, the minimum DDS configuration, and they run $40 a
>pop, not counting the shaft encoder and the other goodies required to make
>it play. You could use it on 160-40, but even 20 meters is getting too
>close to Nyquist for a good spurious semi-free output.

>W4ZCB

3540. FS: FT243 CRYSTALS at last!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hk33h$9gt@news1.mnsinc.com>
Source record: 95555
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.audio.tubes,uk.radio.amateur

Let's all support John in this effort. I know a lot of you need
FT243 crystals so here is your bg opportunity for a super deal!

>From: n0acs@juno.com (John R. Morris)
>Subject: CRYSTAL GROUP BUY
>Sender: owner-qrp-l@Lehigh.EDU
>To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
>Reply-to: n0acs@juno.com

>Hi Gang,
> Bowing to pressure from a friend of mine in Kansas City, I'm
>going to offer the QRP-L a group buy on FT-243 crystals for the month
>of April.
>
>Here's the deal: General 40 mtr. pack of 5 crystals: 7030 7035 7040
>7045 7050 Khz. @ $24.00 Postpaid.
>
> General 40 mtr. pack of 7 crystals:
> 7030
>7035 7040 7045 7050 7055 7060 Khz. @ $33.60 Postpaid.
>
> Novice/tech. 40 mtr. pack of 5
> crystals:
>7105 7110 7115 7120 7125 Khz. @ $24.00 Postpaid.
>
> Novice/tech. 40 mtr. pack of 7
> crystals:
>7105 7110 7115 7120 7125 7130 7135 @ $33.60 Postpaid.
>
>That's a 20% discount off the regular crystal price of $6.00 each
>plus $2.00 in postage.
>
>In order to offer this pricing discount I need at least 75 orders. If
>you'd like to take advantage of this special offer e-mail me at
>n0acs@juno.com
>
>Thanks, John Morris N0ACS
>
>Phoenix Crystals
>
>1714 North Ash Street
>
>Nevada, MO 64772

3541. Re: Toroids for Pi-Net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <333DA286.1319@erols.com>
Source record: 95556

Okay, here goes.

The inductor will be an addition to an already existing amplifier that appears to have been built for the 13.6 ISM band (although I'm not 100 percent sure.) Looking at the tuning cap and the existing inductor, the circuit won't work at amateur frequencies lower than 20 meters. Due to size constraints, I'd like to add a toroid inductor and an appropriate switch to obtain 80 and 40 meter operation (and 160 if I can).

The existing circuit is a straight pi. The input Z would be around 3k. The output Z will be, of course, 50 Ohms. Some amount of reactance will be encountered but nothing worse than maybe a 2:1 SWR on some of my antennas at some frequencies. I'm assuming a tank Q of around 12.

Is this enough info?

If you do calculations, could you send them to me. Yes, I do want to learn, even if it does hurt!

Tom Rauch wrote:
>
> On Tue, 25 Mar 1997 21:06:02 -0500, Steve <thebizlk@erols.com> wrote:
>
> >I've seen some amplfiers using a toroid for part of the output pi-network
> >inductance (I'm guessing for 160, 80 and maybe 40 meters, I never got a
> >close look). I'd like to do something similar in a project I'm working
> >on. I'm looking for info on recommneded wire size (for legal limit) type
> >and size of the ferrite toroid and any other pertinent design info.
>
> Hi Steve,
>
> I see no one answered you. The design of the inductor is complex.
>
> You would be better off doing it emperically rather than learning a
> process you may only use once in your life, unless you *want* to learn
> how.
>
> In any event , you need to know the circulating current through the
> component and the desired impedance. What is the median impedance
> value of the pi-L you are using, by that I mean the output impedawnce
> of the pi- section, or input impedance of the L section? What are the
> extremes in load impedance, including reactance?
>
> 73 Tom

3542. Re: How to link two repeaters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <333D9E32.925@rollanet.org>
Source record: 95557
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Myron A. Calhoun wrote:
>
> I've been asked by our local Emergency Preparedness office to try to
> link the 146.07/67 or 146.355/955 repeater in Topeka, Kansas, with the
> 147.855/255 repeater in Manhattan, Kansas, (about 50 miles distant).
>
> While I have several IDEAS how one MIGHT got about this, I don't have
> the slightest KNOWLEDGE and wonder if anyone can cite publications or
> give real-life examples of how to link two repeaters?
>
the easiest way to go would be if BOTH repeaters had controllers capable
of link input/output. this way you would put a radio at each site with
a beam type antenna pointing at each other. the radios should be on an
unused simplex frequency in accordance with the accepted bandplan
--
A.C.Curtis
KB0WLF
Missour's multi-cast repeater system - 6m, 70cm, *10m, ATV
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3543. ARD 230 Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: "George E. Benko" <gbenko03@sprynet.com>
Message-ID: <333DD886.3CCB@sprynet.com>
Source record: 95558

Hi! Thanks for reading this. I am looking for any information/modifictions for the Advanced Radio Devices 230 amplifier. I also understand a user group exists for this amplifier. Any information would be appreciated...

73, George K8BRW

3544. FS 8 Pole Crystal Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5hk8sm$1ra@news.teleplex.net>
Source record: 95559

I have approximately 20 really nice hermetically sealed 8 pole filters.

They are 50 ohms in , 50 ohms out, 2.4KHZ wide with a 10.7 Mhz center frequency. I have used them in several receiver projects with great results. A friensd at Scientific Altanta ran the responce curves for them on a network analyser and they were very nice. A 3.7 Mhz VFO results in a nice 40 meter receiver.

I would like to sell the lot, and am willing to part with them at far below their value.

Pat Bunn

3545. Re: htx-202 remote PTT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <333DAD1F.4D9E@rollanet.org>
Source record: 95560

>
> Also, this tranceiver has a 1/8" and a 3/32" plug. The 1/8" is appears
> to be the speaker out and the 3/32" is the mic in. I'm under the
> impression that it is possible to get the tranceiver to turn on
> transmission through these two jacks, however I don't know how it's
> done.... that is remotely pressing the transmit button. I've tried
> various combinations of shorting, with no luck. any ideas?
>
> Thanks for any info you can send my way,

find attached a schematic that will allow you to "key-up" the radio with
remote PTT button. that's all i can help you with. the shematic works
well in my applications.
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3546. Re: Squelch Pop Suppression on Motorola

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-29 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <333DBA02.77DB@rollanet.org>
Source record: 95561

```
This is a multi-part message in MIME format.

--------------669717392B10
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

> Also, this tranceiver has a 1/8" and a 3/32" plug. The 1/8" is appears
> to be the speaker out and the 3/32" is the mic in. I'm under the
> impression that it is possible to get the tranceiver to turn on
> transmission through these two jacks, however I don't know how it's
> done.... that is remotely pressing the transmit button. I've tried
> various combinations of shorting, with no luck. any ideas?
>
> Thanks for any info you can send my way,
>
evidently the shematic did not make it last time. here it is again
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

--------------669717392B10
Content-Type: application/octet-stream; name="schm1.pcx"
Content-Transfer-Encoding: base64
Content-Disposition: attachment; filename="schm1.pcx"

<encoded_portion_removed>
zDH////////MMUVyaWNUKAAAMACEKAAAgAE=
--------------669717392B10--
```

3547. Re: RADIO BOATANCHORS Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5hkird$seu@dfw-ixnews12.ix.netcom.com>
Source record: 95562
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

In <333d3103.1870031@news.earthlink.net> rickets@earthlink.net (David Rickmers) writes:
>
>On 29 Mar 1997 13:34:36 GMT, kc5egg@ix.netcom.com(Gerald Schmitt)
>wrote:
>
>>> Since this list comes from _tempe.gov_ does it mean that the
>>>"free" is subsidized by the government? Just curious. ;-)
>That's between the taxpayers of Tempe and the administator of the
>listserver, isn't it? Their city hall is an inverted pyramid; they
>do things a little different there.
>dr

I did NOT write the above I commented on it but the original author of the lines quoted was not me. Please attribute correctly and quote carefully. Thank you.

Jerry

3548. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: schultz@cddis.gsfc.nasa.gov
Message-ID: <schultz-3003970411130001@mor1.gsfc.nasa.gov>
Source record: 95563

In article <5h3qs3$mou@camel4.mindspring.com>, aruder@pipeline.com wrote:

> >I have discovered a way to xmit music over a
> >bandspread of =< 100 Hz. Note that is Hertz
> >not KiloHertz.
>

> Since posting the above, I have received 37 replies telling me it
> can't be done.
>
> To most of those I did not replly.
>
> Several said it caint be done, but if it looks interesting, send it to
> me, and I MAY get interested.
>
> to all but one of those, I said "the world is full of people who
> got no idea what is going on, but who know why it won't work.
>

Your claim does seem a bit extraordinary, and extraordinary claims require extraordinary evidence.

Certainly there are cases in history where the leading experts dismissed something because it was "impossible". Certain physics professors in 1905 were still writing that the Wright Brothers claim to have made a flying machine was fradulent despite the fact that they had demonstrated their machine in public in front of thousands of people. The Wright Brothers prevailed, because they showed the world that they could actually do it.

More recently, a group in Utah claimed that they could make hydrogen fusion at room temperature in a jar of water. Some scientists dismissed the whole thing at once, "knowing" that it was impossible. Others kept a more open mind and did not dismiss it immediately, but they still quite rightly wanted to see it in action. Unfortunately, none of the cold fusion groups to date have been able to show a working cold fusion cell, and those who claimed that they had had in fact made some error in their measurements.

Sometimes a person like Einstein comes along who really does rewrite the existing laws of physics, and whose work withstands repeated tests over a long period of time, but far far more often the claims of new physics turn out to be mistaken after further examination.

So show me a working demonstration, or explain clearly how your discovery works. Show me enough detail so I can figure out where you made your mistake, let me examine your apparatus in detail, and if I can't find any mistake then, and only then, I might believe that you have uncovered some new

communications principle. Until then I would not advise any investor to put his money behind your discovery, because it does claim to defy well known principles of radio communications which have been around for many years and which I will not abandon easily. Keeping an open mind is one thing, but we still need to see some convincing proof that your claims are correct and that the many experts are wrong.

Dan Schultz N8FGV
Greenbelt, MD

3549. RADIO BOATANCHORS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <859697670@infoway.com>
Source record: 95564

```
SUBSCRIBE BOATANCHORS Joe H. Smith

QUIT

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]
```

3550. coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: kharp@aol.com
Message-ID: <19970330062601.BAA05802@ladder01.news.aol.com>
Source record: 95565

```
4t 28swg e,c,w,

4t= turns
28swg= 28 standard wire gage
e,c,w,= type of insulation
have fun
doc
```

3551. Re: How to link two repeaters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <333e8f4c.5640573@news.sprynet.com>
Source record: 95566
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Sat, 29 Mar 1997 16:56:50 -0600, Demolition Man
<nospam.demoman@rollanet.org> wrote:

>Myron A. Calhoun wrote:
>>
>> I've been asked by our local Emergency Preparedness office to try to
>> link the 146.07/67 or 146.355/955 repeater in Topeka, Kansas, with the
>> 147.855/255 repeater in Manhattan, Kansas, (about 50 miles distant).
>>
>> While I have several IDEAS how one MIGHT got about this, I don't have
>> the slightest KNOWLEDGE and wonder if anyone can cite publications or
>> give real-life examples of how to link two repeaters?
>>
>the easiest way to go would be if BOTH repeaters had controllers capable
>of link input/output. this way you would put a radio at each site with
>a beam type antenna pointing at each other. the radios should be on an
>unused simplex frequency in accordance with the accepted bandplan
>--
>A.C.Curtis
>KB0WLF
>Missour's multi-cast repeater system - 6m, 70cm, *10m, ATV
>mailto:demoman@rollanet.org
>http://www.rollanet.org/~demoman/
The repeater system at ve3rpt/ve3tfm and ve3ulr has already set up an
extensive array of repeater linking in the southern ontario area. If
you would like information about it use your search engine and search
for tfmcs. If you have further problems making contact with them send
me an email and i will see what i can do. their system has been
working since the mid 70's.
Larry ve3fxq

3552. FS: Kenwood YK-455C-1 500Hz Filter , Lower priced.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <333e772f.659225@news.interbusiness.it>
Source record: 95567
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I sell it for $ 70 shipped.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

3553. Re: coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: raghavan@psych.nyu.edu
Message-ID: <raghavan-3003970910520001@mcsv29-p6.med.nyu.edu>
Source record: 95568

In article <19970330062601.BAA05802@ladder01.news.aol.com>, kharp@aol.com (KHARP) wrote:

> 4t 28swg e,c,w,
>
> 4t= turns
> 28swg= 28 standard wire gage
> e,c,w,= type of insulation
> have fun
> doc

Isnt "ecw" = enamelled copper wire?

3554. radio parts in NY city...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: raghavan@psych.nyu.edu
Message-ID: <raghavan-3003970915440001@mcsv29-p6.med.nyu.edu>
Source record: 95569

Does anyone know a good source for homebrew reciever parts in NY city?
I'm having no luck finding a place that sells variable capacitors...I'm
looking for an air variable in the 365/500 pf range.

also looking for specs on air core coils for the shorwave range 3-30 mhz...
...does someone have a handy empirical formula for calculating coil
inductance from the dimensions?

anybody?

-manoj raghavan

3555. Re: Schematics and plans online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <8$SWSDAEIkPzEwI3@g3uda.demon.co.uk>
Source record: 95570

In article <5gq2fd$j2$1@nw003.infi.net>, Matthew Ballance
<ballance@nr.infi.net> writes
>Does anoyone know of a site on the web where you can download schematics,
>plans, or other information on homebrew TX/RX equipment?
>
>Matthew Ballance
>KF4BGQ Greensboro, NC
>

Hello Matthew / others

I know there are some sample circuits at:

http://www.argonet.co.uk/users/4qd

not too sure whether there is much Amateur TX/RX might be worth a
look see. I know of an SM station maintaining a library of Ham circuits
which are availble using the REQFIL server on the AX-25 network. I will
have a look around on the shack computer and post the gen here if I find
it..
73 Ken

Ken Linney BSc.
Internet : ken@g3uda.demon.co.uk
Amateur Radio : G3UDA
AX25 : G3UDA@GB7PMB.#28.GBR.EU
TCP/IP : g3uda@g3uda.ampr.org [44.131.88.75]

3556. Re: Subscribing to the new FREE Glowbugs List!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: wstrickbbb@aol.com
Message-ID: <19970330162800.LAA26198@ladder01.news.aol.com>
Source record: 95571

Hi name is Wayne (WD9BBB)from Chicago IL and I,m still building and
repairing
Tube amplifiers that include Audio and RF Count me in. 73's

3557. Re: Schematics and plans online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <333E979F.5395@ix.netcom.com>
Source record: 95572

Ken Linney wrote:
>
> In article <5gq2fd$j2$1@nw003.infi.net>, Matthew Ballance
> <ballance@nr.infi.net> writes
> >Does anoyone know of a site on the web where you can download schematics,
> >plans, or other information on homebrew TX/RX equipment?
> >
> >Matthew Ballance
> >KF4BGQ Greensboro, NC
>
Hi Matt -- try the Tech Reference pages on the URL below. Several links
to homebrew and projects.
73
Rod
--
AC6V DX Reference Page
With Over 700 Links To DX And HAm Radio
http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

I Transceive -- Therefore I Perceive -- AC6V

3558. Re: HELP! MAXIM MAX2450 /51/52

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <333EA47C.6A6A@up.net>
Source record: 95573
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design,sci.electronics.components

Maroof H. Choudhury wrote:
>
> Hi,
>
> Can anybody give me any contact address of MAXIM for technical/designer's
> support?
> I'm trying to design a Weaver method SSB Xciever using MAX2450 (51/52)
> quadrature modulator/demodulators. The built in LO is designed to work at
> 70MHz~160MHz. I need to make my radio work in the HF band. So is it possible to
> inject carrier into the Qmodulators from external oscilators? Has anyone tried
> this? Also will the Qmodulators/demodulators work properly (with external
> injection) at <30MHz & if possible as low as 1KHz? It took a long 2 months for
> my samples to arrive, so I don't want take any risks. Please help.
>
> Thanks for reading.
>
> Maroof
> <maroof@triton.kaifnet.com>

http://www.maxim-ic.com/intro.html

3559. Help: Static kills DX-390!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <333ee1af.13264442@news.erols.com>
Source record: 95574

My Radio Shack DX-390 has been working fine for several years. Recently, I had it in the laundry room when I was separating recently dried clothing. I pulled apart a shirt and a sheet and I noticed quite a bit of static cling! Next thing I know the nearby DX-390 has lost almost all of its sensitivity. Nothing comes through on the HF bands and only the strongest Broadcast Band stations are audible. All the PLL circuitry and the audio stages seem fine. I suspect the static charge took out the front end transistor. Has anyone heard of this kind of catastrophe before?

Anyway, I want to fix it. I don't have a schematic for the receiver, but I notice that Q1 and Q2 are both discrete components. Q1 is marked 3K152 3 2E:

Any suggestions on how to fix this radio? Static cling never took out one of my old Boatanchors!!!!

73 Bill N2CQR

3560. A.G. Tannenbaum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hmce5$ae4@news1.mnsinc.com>
Source record: 95575
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Does anyone have any idea what has become of A.G. Tannenbaum / K2BN
???

The original message was received at Sun, 30 Mar 1997 05:46:43 -0500
(EST)

----- The following addresses had transient non-fatal errors -----
<k2bn@agtannenbaum.com>

----- Transcript of session follows -----
<k2bn@agtannenbaum.com>... Deferred: Connection refused by
quasar.voicenet.com. Warning: message still undelivered after 4 hours
Will keep trying until message is 5 days old

3561. Re: Wanted: MOSFETs Dual Gate 3N201 to 3N213

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: hugo@infobahnos.com
Message-ID: <333eacb8.0@news.total.net>
Source record: 95576

John in Roseville <rtwodtwo@cwnet.com> wrote:

>I'm looking for some MOSFET transistors, Dual Gate 3N201 to 3N213.
>I need about 10 now.

>I can't seem to find them at Mouser, Digi-Key, JDR Micro, Jameco,
>All Electronice, Alltronics...

John,

NTE/ECG equiv. Mouser# US$(1-99)(Jan'97)
3N201 454 526-NTE454 2.82
3N213 222 526-NTE222 3.90

>Thank you for your help!
My pleasure :)
H.C.
>mailto:rtwodtwo@cwnet.com

>John

3562. FS: Collins radio cases, NIB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: worley@ns.awanet.com
Message-ID: <859751247.3049@dejanews.com>
Source record: 95577
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I have four Collins equipment cases, still packed in factory boxes from a government sale. Each measures 9" h x 12" w x 17" d, made of 1/16" aluminum with vent holes on each side and painted gray, has Collins logo on back. Also includes a 5" boxer fan mounted in rear with 3-wire ac power cord, switch, fuse and indicator lamp. Front end is open. Mfr. p/n 790-1699-001 marked "case, dummy load". Shipping wt. 17 lbs altogether. $25 ea. Email or call 334-347-5281 (Alabama)

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

3563. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hmgvm$bih@news1.mnsinc.com>
Source record: 95578
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

There are MANY cw transmitter schematics on-line at:

http://www.mnsinc.com/bry/hamfiles.htm

tom.twist@hydro.com (Tom Twist) eloquently wrote:

>Thor Harald Johansen <thorhajo@arcticnet.no> wrote:

>>How do i build my own affordable CW transceiver quick and easy? I want a
>>CW capable of receiving and transmitting in frequently used bands. Is it
>>possible for less than $100 (650 NKR)? If someone has cirquit-diagrams
>>for such a CW, please reply and send them to me.

>>..Thor Harald..

>You can buy several kits for less than $100.

>Have a look at Dan's ~ "Small Parts" at http://www.fix.net/dans.html

ALSO, you can go to -

http://www.mnsinc.com/bry/hamfiles.htm

and click on KITS for a huge list of suppliers! Thankfully their are
many many small companies selling such kits these days!

Homebrewing seems to be very popular now!

73 - Bry, AF4K

3564. FS: Millen Dial

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: James Parsons <k5rov1@worldnet.att.net>
Message-ID: <333ED249.6824@worldnet.att.net>
Source record: 95579

I have an unused Millen dial, in the original box with panel layout paper. This dial has never been taken out of the box. I bought it new many years ago. On the box it says:

Millen 10037
No-string Panel Dial
Full vision-Illuminated
Ratio 11/1

I am pretty sure this is the same dial used in the HBR series of home brew receivers shown in old QST and handbooks. I am asking 25 dollars and you pay shipping.

--
Jim, K5ROV, USAF, Ret., ARCI-7422, NWQRP-146, QRP-L-660
E-MAIL: k5rov1@worldnet.att.net
EX: W1RLA, K5FBB, K4FEO, SV0WN (CRETE), SV0WN (RHODES),
DL4NC, DL4JP, KA2FC (JAPAN), KA2JP (JAPAN).
JOHN 3:16

3565. FS. MRF141G or MRF151G PWB/Xformer KIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: Pieter Ibelings <wave@mindspring.com>
Message-ID: <01bc3d52$9881fe80$fd1479a8@wave.mindspring.com>
Source record: 95580
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

I have a printed circuit board with copper heat spreader and both input and output transformers for a 300 Watt amplifier. This PCB is the one used in the Motorola application AR313 and AR305 using the MRF 141G or 151G transistors.
will ship for a $50 check or money order.

73's
Pieter
N4IP

Note:
Does NOT include transistor or caps or resistors. Only transformers, PCB's and heat spreader.

3566. AEA DSP-2232 HELP NEEDED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: pc_honde@jet.es
Message-ID: <5hmlmq$49k$3@diana.ibernet.es>
Source record: 95581

Dear Friends,

I have a big problem with my DSP2232.
It's not possible to use it because all the time
I receive the message ***3d: DSP software load failed
on my computer.

I tried to push on the socketed chips all of them and
to clean the contacts of the microchip 56001zl but
doesn't work anyway.

Please let me hear your kind comments.
EA2AFI-Pedro/Christian

Christian M. Hondeville Urrutibeheity

Particular de club 2 Phone: +34-4-463 0587
Las Arenas-48930 Fax: +34-4-463 0587
Spain-Espa&#65533;a E-mail: pc_honde@jet.es

3567. B&W KW PLUG-IN COILS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: Joe Hargis <joehargis@worldnet.att.net>
Message-ID: <01bc3d5b$02e1c500$1e1a93cf@dell>
Source record: 95582

I have a set of KW coils for 80 to 10 meters for $20 each or $80 for the set. For more info contact: Joe WS0E at Joe.7hc@juno.com

3568. HomeBrew Repeater Controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: MICHAEL FAWBUSH <mfawbush@usit.net>
Message-ID: <01bc3d5e$a802b0a0$2d3a01c7@mfawbush.usit.net>
Source record: 95583

Anyone got in information on a Repeater Controller that is homebreweded?

3569. lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: eyesonly@globalxs.nl
Message-ID: <5hm8g2$el8@guust.globalxs.nl>
Source record: 95584

dear all, my name is rinus nienhuis and i live inthe netherlands-does
anyone know how to build a lightning detector,one that really works
ONLYonly on lightning ,one that gives a signal when detecting
lightning
if so, is it possible to send me a schedule or a idea
thank you very much for your help

3570. Re: FS: FT243 CRYSTALS at last!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: Gruvmyster <dhaugen9@idt.netXXX>
Message-ID: <333F11F2.4A15@idt.netXXX>
Source record: 95585
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,uk.radio.amateur

```
Brian Carling G3XLQ / AF4K wrote:
>
> Let's all support John in this effort. I know a lot of you need
> FT243 crystals so here is your bg opportunity for a super deal!

How do they sound? Or were these just blindly cross-posted into
rec.audio.tubes for the hell of it?

Doug
--
"Think, think, think."-- Winnie-the-Pooh
To reply: delete "XXX" from reply-to address.
You can also use mailto:dhaugen9@idt.net
```

3571. Re: lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5hnaae$6u2@mtinsc04.worldnet.att.net>
Source record: 95586

Lightning detectors do exist. Not too long ago I saw a TV science show

about it. Was in US and (I think) France, but I can not remember what

detector was used. Maybe someone else does.

Woody

rinus nienhuis wrote:
>
> dear all, my name is rinus nienhuis and i live inthe netherlands-does
> anyone know how to build a lightning detector,one that really works
> ONLYonly on lightning ,one that gives a signal when detecting
> lightning
> if so, is it possible to send me a schedule or a idea
> thank you very much for your help

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3572. Re: lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: Bigdad <bigdad@rworld.com>
Message-ID: <333F5ED7.2E16@rworld.com>
Source record: 95587

rinus nienhuis wrote:
>
> dear all, my name is rinus nienhuis and i live inthe netherlands-does
> anyone know how to build a lightning detector,one that really works
> ONLYonly on lightning ,one that gives a signal when detecting
> lightning
> if so, is it possible to send me a schedule or a idea
> thank you very much for your help

Way back when...i used to use a oscilloscope tube and had one dipole orientated east and west connected to the horizontal deflection plates, and one orientated north and south connected to the vertical plates. With a little experimentation i could tell from what direction the storm/lightning was coming from. All ya need is a scope tube like a 3BP1 or so and the circuit to power it up and a couple of dipoles.

73 Art WB9HNJ

3573. Items for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: "Larry J. Brock" <larry666@gdi.net>
Message-ID: <333F409E.5224@gdi.net>
Source record: 95588
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Hello all,
I have a Yaesu FT-2500M for sale.
About 7 months old,low hours,great condition,alpha display,mil-spec.
construction,5-25-50 watt output,31 memories,built in tone
encoder,extended receive,mod has been done for extended transmit.

I have box,packing,bracket,wiring,manual,etc.

Asking $200 and I pay shipping.

Also have an Allmax eprom programmer.

Used 1 time.I paid $650 for it and will negotiate price.

I also have an MFJ 949E tuner for 1.5-30MhZ.

I transmitted once with it.No box or manual but it's in excellent
condition.

Asking $100 or best offer.

Also have an Astatic Night Eagle microphone,never used.I never even put
a plug on the cable.No box,have manual.A little dust but looks
beautiful.

Asking $90.

If interested in anything e-mail me at larry666@gdi.net

73,
Larry Ke4rur

3574. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: rstevens@voicenet.com
Message-ID: <5hmigsrbm1@news3.voicenet.com>
Source record: 95589
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

Grant, Grant, Grant,

You, whose opinions I have grown to respect so highly--are you now falling prey to that unique American marketing phenomenon--"charge a lot and your customers will become evangelists"? I can't tell you how many times I've seen this almost subconcious reaction to paying more money for something--it's a knee-jerk response that results in the ongoing self-justification and attempt to convince others of the wisdom of your actions.

Think of the number of Boatanchor enthusiasts outside of the small coterie of 700 that cannot offer their experiences to readers of Jack's For-Pay list. Might there not be many more than 700? Think of the often deep ruts that the party of 700 fall into--interesting to a few, I suspect, but perhaps not to the many.

I value the archived digests of the For-Pay list up on sunsite and am truly glad they are made available, but I hardly view an attempt to provide a (traditionally normal) free equivalent as an attempt to undermine it. I am not alone in my distaste for the tone of the operator of the For-Pay list, and feel that more bandwidth is wasted scolding the elder ops that are probably not as computer literate as we younger types. And I would like to know why it is the only list I'm aware of that DOES cost money, and in fact has posted a 75% increase in only its second year of For-Pay operation. What will it cost next year? $30?

To me, it's hardly the money--it's the attitude. But worse than the attitude of its "owner-operator" are the attitudes of its members when presented with an alternative--what's the name of the psychological state of mind where kidnapped people start to identify with and even like their captors--aside from the Patty Hearst effect--is it the Stockholm Syndrome? Reminds me of that. Yikes, can't we all just get along?

Change--the only thing that is constant.

Your BA friend,

Roger WA3FLE
Norristown, PA

In article <333A40D2.BA4@gte.net>, nq5t@gte.net wrote:
>> I get the impression that this is another, new list with the same
>> name.....
>>
>
>It is -- put together by someone who feels they have a cross to burn ...

>
>or who wants to be seen as a hero of some sort amongst the faction who
>spent their only available $12.00 on a couple of six packs. The whole
>idea is ill advised and just dilutes the level of support and knowledge
>that would be available in one list with focused expertise and
>experience. Of course, there are people subscribing by the bezillions,
>but people would subscribe to lists on bologna and cheese sandwiches at
>an even higher rate. The possession of an internet ID and mail account
>is no guarantee of IQ .... Franky, having to subscirbe to 40 lists,
>each with the same basic members, but each focusing on narrow
>discussions of one manufacturer or whatever to get the breatdth of BA
>discussion is useless. Maybe I should start a list devoted to
>Hammarlund equipment manufactured between 8:02am and 9:22am on March 22,
>1956 ?
>Its all an ego trip of major proportions ...
>
>;-)
>
>Grant

Roger W. Stevens (rstevens@voicenet.com)
amprnet: wa3fle@wa3fle.ampr.org [44.80.12.33]
ax25: WA3FLE@WB3JOE.#EPA.PA.USA.NA
"Be a Hero--Be a Donor!"--Mickey Mantle
Visit my homepage at http://www.voicenet.com/~rstevens

3575. Re: Help: Static kills DX-390!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierE7x455.6K8@netcom.com>
Source record: 95590

In article <333ee1af.13264442@news.erols.com>,
Bill Meara <wmeara@erols.com> wrote:
>I suspect the
>static charge took out the front end transistor. Has anyone heard of
>this kind of catastrophe before?

That was very common on some Sony shortwaves, very similar to the
Radio Shack receivers.

>Anyway, I want to fix it. I don't have a schematic for the receiver,
>but I notice that Q1 and Q2 are both discrete components. Q1 is
>marked 3K152 3 2E:
>
>Any suggestions on how to fix this radio? Static cling never took
>out one of my old Boatanchors!!!!

By the Japanese numbering system a 3K152 would be dual gate FET.

Radio Shack is quite good at manuals and spare parts. (The problem is
getting the sales clerks to understand what you want).

One channel is the special order catalog shelf at each store. One
of the sections is repair parts for their equipment. You look up
by catalog number of the original equipment and it gives the order
numbers for various special repair components for that unit. You
then fill out a form and have the clerk enter in the order.

Another channel is Tandy National Parts, a 1-800 phone operation.
They have the same sort of information by model and will take
phone credit card orders. I don't have the number handy, but I
got it by calling 800 THE-SHACK and getting it from the operator
there.

Third, the radio is probably a private labeled version of a Sangean
shortwave. Service information for their similar model should cover
yours.

Finally, there are a number of distributors that serve the electronics
repair market and one of the things they do is carry Japanese
semiconductors. Outfits like MCM, Dalbani, Premium Parts. Rather than
type in all their addresses, try the sci.electronics.repair FAQ at the
web address http://www.paranoia.com/~filipg .

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

3576. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-30 00:00:00 UTC
From: kresl@elknet.net
Message-ID: <1103_859748858@kresl.elknet.net>
Source record: 95591

commquart@aol.com wrote in article
<19970323234501.SAA25900@ladder01.news.aol.com>...
> In article <5h232k$18b$1@excalibur.flash.net>, Tim Hynde
<hynde@flash.net> writes:
> >
> >Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
> >
> >Tim, ka8ddz

> You can try it, but it won't work. You need a germanium >diode, not
> silicon. Try a 1N34A.

>Why won't it work, if you have enough signal strength?

>The Si diode only takes about 2x the voltage to conduct as the >Ge diode...

>Am I missing something?
And that 2x voltage (about 700 Millivolts) would require a lot of
RF energy to cause detection. Silicon diodes aren't very good
as low-level RF detectors, sorry.

>(Not that 1N34A's are that hard to get)
There in every radio and TV made. Take a look around any
bone-pile of gear and you should be able to come up with one.

An alternative would be a hot-carrier diode used in high
performance balanced mixer applications. These diodes
conduct at about 400mv. HP use to make a complete line
of these devices, so there may be some data sheets around.
The part numbers escape me know.

cheers,

3577. Re: Schematics and plans online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hnbl4$7s@news1.mnsinc.com>
Source record: 95399

Ken Linney <ken@g3uda.demon.co.uk> eloquently wrote:

>In article <5gq2fd$j2$1@nw003.infi.net>, Matthew Ballance
><ballance@nr.infi.net> writes
>>Does anoyone know of a site on the web where you can download schematics,
>>plans, or other information on homebrew TX/RX equipment?
>>
>>Matthew Ballance
>>KF4BGQ Greensboro, NC

Matthew I have added a ton of new schematics and articles this weekend
at:

http://www.mnsinc.com/bry/

in the ham radio resources section

ENJOY!

3578. Re: How to link two repeaters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: elspider@interl.net
Message-ID: <5hncj9$nni@Mournblade.interl.net>
Source record: 95400
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Greetings,

For the party interested in repeater linking. The southeast Iowa technical
society has quite a network of linked repeaters, using a hub repeater
approach on 70 cm.
The system contains two meter and 1.25 meter machines. For more
information on that system point your browser to

http://www.circumspect.com/seits

73.

Richard Webb,
Electric Spider Productions
Recording and sound
Amateur call kb0ruu

[The above doesn't necessarily reflect my opinions, since
by the time you read this I may have changed my mind.]

Net-Tamer V 1.08.1 - Test Drive

3579. Re: HomeBrew Repeater Controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: John in Roseville <rtwodtwo@cwnet.com>
Message-ID: <5hnhk1$ma1@news4.snfc21.pacbell.net>
Source record: 95401

"MICHAEL FAWBUSH" <mfawbush@usit.net> wrote:
>Anyone got in information on a Repeater Controller that is homebreweded?

See: http://home.cwnet.com/rtwodtwo/repeater.htm

73 John

mailto:rtwodtwo@cwnet.com

3580. Re: PC card transceiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: David Nye <nyeda@uwec.edu>
Message-ID: <333F7CB4.5906@uwec.edu>
Source record: 95402

I wrote:
>...We're planning to build it on a PC
>>card so we can use the PC for control, audio out through the sound >>card, and use the PC's power supply. Obviously we'll need to be >>careful about shielding the board and use an outside antenna (and
>>wire-wrap is out).

M Simon replied:
>Separate the reciever from the control.
>
>It takes a lot of engineering to put a sensitive reciever inside
>a 30 to 100 watt broadband noise source.

What would I need to do besides shield the card and use an outside antenna? Or are you saying the shielding itself would create problems? I'd think the problem should be solvable because you can already buy a highly-rated SWR on a PC card, the WinRadio.

David Nye KB9PSL Eau Claire, WI

3581. HELP NEEDED with Pace Landmaster

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: cocoman@clover.net
Message-ID: <333f662f.0@NEWS.CLOVER.NET>
Source record: 95403
Cross-posted to: rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'm looking for info on if and how I can convert a PACE LANDMASTER 150mhz
mobile phone to 2 meter simplex.
Manufactured by pathcom inc

fcc data 3012

says 136-174 on heat sink

Please send email
73

Jason KB8SFC

3582. Re: HomeBrew Repeater Controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: serrup@baynet.net
Message-ID: <5hnnef$cv4$3@news>
Source record: 95404

In <01bc3d5e$a802b0a0$2d3a01c7@mfawbush.usit.net>, "MICHAEL FAWBUSH" <mfawbush@usit.net> writes:
>Anyone got in information on a Repeater Controller that is homebreweded?

Try the Jan '95 issue of '73 Amateur Radio Today'..The PTT Control from Reciever Audio article....I've built several for cross-band use...They're a blast to use because of simplicity and portability.

3583. More power for IC-706 ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: k.skoupy@magnet.at
Message-ID: <5hnpnr$op3$2@sun.magnet.at>
Source record: 95405

Hello
Is there a mod to increase the power for the IC-706 ?

73, Karl

3584. Re: Where To Buy Parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <6yEKaIArr3PzEwYh@lfheller.demon.co.uk>
Source record: 95406

In article <333956C7.1694@wolfenet.com>, "J. Andy Thompson"
<jat@wolfenet.com> writes
>Where does a person go to buy parts anymore? I am looking for a tank
>coil for a linear, a socket for a 4-1000, and a 7.5 volt 21 amp xfmr,
>and other miscellaneous parts.
>
>It seems like the ham radio stores only sell boxes and antennas for
>them.

A radio rally (UK) or hamfest (US) is worth going to for this sort of
thing. They generally have a flea market section.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3585. Static Cling and DX-390

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <333fdbb4.914061@news.erols.com>
Source record: 95407

Somehow most of this message got dumped in the bit bucket: Let me try again:

Last week I was happily listeining to my Radio Shack DX-390 receiver while simultaneously performing some routine laundry tasks (sorting recently dried clothes). I noticed that while separating a couple of wool shirts, lots of static elecricity was unleashed. The receiver crackled appropriately, but I dodn't think much of it... until I later noticed that the radio's front end appears to have died in the process! Sensistivity WAY down on all bands. Only the strongest Broadcast stations get through.

My guess is that the electrostatic charge took out the front end transistors. RS didn't provide a scematic, but I see Q1 is marked 3K152 32E:

Any tips on fixing this thing? Anyone heard of similar static problems? This never happened with my Hammarlund HQ-100!!!!!!

Thanks, 73 Bill N2CQR

3586. Re: lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Rolf Mathson <rmathiso@ix.netcom.com>
Message-ID: <333FC039.7695@ix.netcom.com>
Source record: 95408

Bigdad wrote:
>
> rinus nienhuis wrote:
> >
> > dear all, my name is rinus nienhuis and i live inthe netherlands-does
> > anyone know how to build a lightning detector,one that really works
> > ONLYonly on lightning ,one that gives a signal when detecting
> > lightning
> > if so, is it possible to send me a schedule or a idea
> > thank you very much for your help
>
> Way back when...i used to use a oscilloscope tube and had one dipole
> orientated east and west connected to the horizontal deflection plates,
> and one orientated north and south connected to the vertical plates. With
> a little experimentation i could tell from what direction the
> storm/lightning was coming from. All ya need is a scope tube like a 3BP1
> or so and the circuit to power it up and a couple of dipoles.
>
> 73 Art WB9HNJ

Actually a couple of three foot diameter 50-turn loop gap antennas with
a small vertical antenna to provide a blanking signal to eliminate the
directional ambiguity (i.e. is the received signal to the north or south
of the east-west loop) will work quite well. Direction can be read from
the CRT face and relative distance can be estimated by signal strength
[sort of :)]. There is a site however, http://www.boltek.com that has
a more elegant solution. His system will interface to your PC, record
and display realtime strikes.

I'd be curious to know if there are any other methods that anyone has
tried (that don't require a line item in the national budget or half the
continent for an antenna farm !).

Regards,
Rolf

3587. Re: Screen supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R3103970555050001@news.vcnet.com>
Source record: 95409

In article <333a6eae.2838545@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net wrote:

...snip...
> Any phase lag between the screen voltage and RF envelope level will
> always result in distortion of the output envelope. That is because
> the peak screen voltage lags the peak RF input envelope by the
> charging time, and the declining envelope slope has screen voltage
> above the level of the increasing envelope slope.
>
I've been getting some e-mail lately about an official definition for the
word 'technoblather". IMO, the above paragraph is a moderately good
example.

--
--Rich-- ag6k, 805-386-3734

3588. Trade - Viewmaster camera/cutter for HF rig.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: hynde@flash.net
Message-ID: <5hoojt$sq4$1@excalibur.flash.net>
Source record: 95410

I have a Viewmaster Personal Camera and film cutter I would like
to trade for an HF rig.

The camera allows one to shoot regular slide film, and using the cutter
make their own viewmaster reels. Lots of fun for 3D pics of club events,
etc. I have a few containers of blank reels and they are available from
several 3d suppliers.

The value of the camera and film cutter is about $375. So I'm looking for
something in that range.

73, Tim, ka8ddz

3589. INFO on YEASU 5100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Tim <tim_raffety@oxy.com>
Message-ID: <333FD2AA.5A84@oxy.com>
Source record: 95411
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Can anyone here that has the 5100 tell me how you can adjust the panel light manualy? I have it set for auto and can't remember how you do that because I have lost my book. Thanks!!!

3590. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5houmd$95f$2@nadine.teleport.com>
Source record: 95412
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5hmgvm$bih@news1.mnsinc.com>,
bry@mnsinc.com (Brian Carling (Radio G3XLQ / AF4K)) wrote:

>. . .

>ALSO, you can go to -
>
>http://www.mnsinc.com/bry/hamfiles.htm
>
>and click on KITS for a huge list of suppliers! Thankfully their are
>many many small companies selling such kits these days!
>
>Homebrewing seems to be very popular now!

It also has changed somewhat. Back when people bought an HW-8, followed the step-by-step instructions, poked the components into the holes, and soldered them, they would tell you they were using a "Heath HW-8". Apparently, this would now be a "homebrew" rig.

Admittedly, this is slightly more complex than taking a rig out of a box and turning on a switch, and I'm surely in favor of kit building. But is it now "homebrew"?

Roy Lewallen, W7EL

3591. Re: PC card transceiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: n1ist@netcom.com
Message-ID: <n1istE7x0vK.6w0@netcom.com>
Source record: 95413

In article <01bc3c45$b2235040$6b60b6cd@cbx-nt> "Christopher Cox" <cobox@netexp.net>
writes:
-Might I suggest 2 Kits. A MFJ 8400 2 meter receiver, which uses a MC13135,
-and the FM6 2 Meter FM transmitter by Ramsey. Should give you a good start
-on design.

NO NO NO!!! Stay away from that FM-6. It's a basic 12MHz osc/multiplier
design with no filtering at all. It does however make a great comb generator,
putting out spurs every 12MHz up and down the band. Like with ANY Ramsey
kit, do not put it on the air without checking it first with a spectrum
analyzer and doing all the required mods to make it ligal.

/mike

--
\|/ Michael L. Ardai N1IST n1ist@netcom.com \|/
-*- === Boston Amateur Radio Club: http://www.barc.org/barc === -*-
/|\ or send "info barc-list" to listserv@majordomonetcom.com /|\

3592. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: w6uv@ccnet.com
Message-ID: <32cb5626.9989153@news.ccnet.com>
Source record: 95414
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

On Sat, 28 Dec 1996 22:26:44 GMT, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>You'll need a pair of steerable yagis or helixes, for mode U/V. You can
>build these yourself and save a bunch of money. When the sat is near apogee,
>it hangs in virtually the same spot in the sky for long periods, so you can
>aim the antennas by hand, no need for auto-tracking, or even for rotators.
>The antennas don't have to be very high off the ground, since they are
>looking up. You can use a tripod or post mount and turn them directly
>by hand as needed. The antennas can be made from a length of 2x2 and use
>aluminum clothesline wire for elements. There are a number of antenna
>programs available on the net which can optimize the design for you.

I thought the P3D antenna gain and power output was high enough to allow the use of omni antennas on the ground. Is this not true?

Jerry Gardner, W6UV | Bill Clinton has all the steely resolve of a (w6uv@ccnet.com) | kamakaze pilot on his 37th mission.

3593. Need help with YIG Oscillator connections

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Perry Kottke <pkottke@execpc.com>
Message-ID: <33401033.4BE1@execpc.com>
Source record: 95415

I have a Watkins-Johnson YIG Oscillator that covers 2.16-4.16 GHz.
It is in a cubic package about 3.5 cm on a side. There is an SMA
connector on one side and 8 feedthrough terminals on another. I
realize 2 are for a heater, 2 more for the magnetic tuning coil,
2 appear to be for a thermister, probably for temperature
control/feedback for the heater. That leaves 2 more terminals for
supply, neither of which are at ground potential as referenced by the
SMA shell. Does any body know what to power this thing with, and
how is the heater typically used, ie over what temperature range.
Any technical info is appreciated as I have no experience
with these devices as of yet.
Thanks - Brad

3594. Re: PC card transceiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <334018E5.767A@vcd.hp.com>
Source record: 95416

M Simon wrote:
>
> Separate the reciever from the control.
>
> It takes a lot of engineering to put a sensitive reciever inside
> a 30 to 100 watt broadband noise source.
>
> Simon
> ---
> David Nye <nyeda@uwec.edu> wrote:
>
> >I just got my tech ticket a couple of weeks ago with my son and we've
> >decided we want to try building a second 2M transceiver. The ARRL
> >Handbook describes some one-chip receiver and transmitter chips, the
> >Motorola MC3363 and MC2831A and a similar Phillips receiver chip the
> >NE627 that we're considering using. We're planning to build it on a PC
> >card so we can use the PC for control, audio out through the sound card,
> >and use the PC's power supply. Obviously we'll need to be careful about
> >shielding the board and use an outside antenna (and wire-wrap is out).
>
> >Has anyone worked with these chips or built a transceiver on a PC card?
> >There is a SWL radio available on a card so it must be possible to
> >overcome the noise problem. Any words of wisdom?
>
> >David Nye KB9PSL Eau Claire, WI
>
> In the end people get the government they deserve.
>
> Read "The Weapon Shops of Isher" by A.E. vanVogt
>
> Simon

Hello Simon OM,

If you want to control the transceiver with a computer, build the transceiver OUTSIDE the computer in its own box, and simply connect via serial or parallel interface to the PC. The data rate for control is very slow anyway (almost static lines). The sound card can be easily connected externally with audio cables. Placing a good receiver inside a PC is surely the hard way to accompish the above. It is a terrible environment of broad-band noise. Also, the transmitter may very well cause crashes in the computer due to RF getting on address, data, and control lines unless you have very thorough shielding of your XMTR. You will probably need to put the entire transceiver in a box INSIDE on the PC card anyway, so why not keep it outside in the first place? In any

event, you will want to prototype the rig outside on the bench to begin with, due to accessibility.

73 and GL,

Don, W6JL

3595. Re: Digital VFO for R2/T2

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <33401B12.1808@vcd.hp.com>
Source record: 95417

Brian Carling G3XLQ / AF4K wrote:
>
> But what about if you added some good band-pass filtering at the
> output for each of the amateur bands?
>
> Wouldn't that clean it up???
>
> johnsonhe@aol.com (JohnsonHE) eloquently wrote:
>
> >There is practically no phase noise on a DDS. What there is, is spurious
> >outputs. These depend on the DDS chip you're using, the frequency you're
> >on and the "nearness" to the Nyquist frequency, (1/2 the frequency of the
> >clock oscillator). I have measured spurious on the Analog Devices 7008,
> >with a 50 MHz clock at an output frequency of 4 MHz, and found them to be
> >60-65 dB down from the carrier. This "ain't bad", but it "ain't good"
> >either. It is irresponsible of the various magazines to put out articles
> >on these such as the "Ultimate VFO". They're not the ultimate or anywhere
> >near. And if you're running more than QRP with one, please don't move in
> >next door to me, I'll be over to put a pin in your coax! For a rig like
> >Rick's direct conversion things, you'd be much better served with limited
> >coverage and a VCXO, and it won't cost you >$100 either if you build it.
> >I'd consider the 7008, the minimum DDS configuration, and they run $40 a
> >pop, not counting the shaft encoder and the other goodies required to make
> >it play. You could use it on 160-40, but even 20 meters is getting too
> >close to Nyquist for a good spurious semi-free output.
>
> >W4ZCB

Hello W4ZCB OM,

A DDS can generate spurious outputs close to the DESIRED frequency.
This means you cannot use a simple BPF to clean it up. The further out
from the desired signal the frequencies are then the easier to filter
out, of course. I would not worry about spurs that are 50-60 dB down
for tranmitting, myself. See recent issues of Communications Quarterly
and Analog Devices data sheets for explanations of DDS spurious outputs.

73 and GL,

Don, W6JL

3596. Re: More power for IC-706 ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <334014A7.1236@rollanet.org>
Source record: 95418

Karl Skoupy wrote:
>
> Hello
> Is there a mod to increase the power for the IC-706 ?
>
> 73, Karl
there's no real modification to increase the power BESIDE cranking up
the pots clearly marked in the owners manual. 15 watts on 2m is about
it and 125 watts on the hf portion. this exceeds the design specs so my
advise is an add-on power amp to provide the required power.
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3597. R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <33401F37.3D6A@vcd.hp.com>
Source record: 95419

Hello Homebrewers,

I have recently completed a version of the R2 receiver. I am very impressed with its performance. Using hand-matched (to 1%) components in each channel of the audio diplexers and phase shifters, I am getting 50 dB of opposite sideband supression over the audio bandpass of 300-3000 Hz. I am using a homebrew Wilkinson power splitter and pi-network for the RF LO phasing (per the QST article). I can hear 1 uV RMS in a 3 KHz audio bandwidth with no RF preamp and a passive double-tuned critically-coupled preselector. Noise figure is around 12 dB. This makes the receiver entirely sensitive enough for 40M work as-is. The audio is the best sounding I have ever heard from any receiver. I have designed a 500 Hz 7-pole ellyptic LPF for CW and FSK use.

I too am working on a DDS VFO for my R2. I want to provide wideband quadrature (I and Q) outputs, and am thinking of using two AD9830 DDS chips for that, one at 0 deg phase, and the other at 90 degrees, running off the same clock. I run 2V p-p into the power splitter of my RF phase shifter, so I will use wideband feedback type (2N5109) amplifiers at the output of each AD9830.

We are living in a great time for homebrewing, guys. Never has it been easier to make excellent performing receivers and transmitters with readily available, relatively low cost parts. Sure is much easier than the old days (I remember them well) of chassis punching and terminal strip wiring!

I used a blank PC board from Kanga for the R2.

73,

Don, W6JL

3598. Re: Static Cling and DX-390

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <hUmJwEASw7PzEw4G@lfheller.demon.co.uk>
Source record: 95420

In article <333fdbb4.914061@news.erols.com>, Bill Meara
<wmeara@erols.com> writes
>Somehow most of this message got dumped in the bit bucket: Let me try
>again:
>
>Last week I was happily listeining to my Radio Shack DX-390 receiver
>while simultaneously performing some routine laundry tasks (sorting
>recently dried clothes). I noticed that while separating a couple of
>wool shirts, lots of static elecricity was unleashed. The receiver
>crackled appropriately, but I dodn't think much of it... until I
>later noticed that the radio's front end appears to have died in the
>process! Sensistivity WAY down on all bands. Only the strongest
>Broadcast stations get through.
>
>My guess is that the electrostatic charge took out the front end
>transistors. RS didn't provide a scematic, but I see Q1 is marked
>3K152 32E:
>
>Any tips on fixing this thing? Anyone heard of similar static
>problems? This never happened with my Hammarlund HQ-100!!!!!!

The Sony 2001D had this problem sometimes, I believe, when external
antennas were attached. Static could blow the front-end FET. Sony
subsequently modified it. Mine's OK, but I only use it with the
telescopic antenna, anyway.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3599. Re: WTB: Big Magnets .... where ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <33402FB3.72E0@cam.org>
Source record: 95421

daveb@buffnet.net wrote:
>
> Hello All
>
> Like to find a source for reasonably prices magnets. The kind used on
> mag mount antennas. Ideally the BIG ones used on HF type mobile
> antennas.

Edmund Scientific has a lot of BIG and powerfull magnets
their URL is :

http://www.edsci.com/

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

3600. Computer control for FT-747? How?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: kf4kjf@post1.com
Message-ID: <33473089.29806070@news.icanect.net>
Source record: 95422
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.misc,rec.radio.amateur.equiptment,rec.radio.amateur.homebrew

Is there any software to interface with my FT-747GX? Thanks,

```
.-.
/ \ .-. .-.
/ \ / \ .-. / \
/ Benjamin_Blavat_KF4KJF\_kfkjf@post1.com
\ / \ / \ / \ /
\ / `-' `-' \ /
`-' `-'

.-.
/ \ .-. .-.
/ \ / \ .-. / \
/_Benjamin_Blavat_KF4KJF\_kfkjf@post1.com
\ / \ / \ / \ /
\ / `-' `-' \ /
`-' `-'
```

3601. Re: Screen supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <333fee3f.16126879@netnews.worldnet.att.net>
Source record: 95423

On Mon, 31 Mar 1997 05:55:05 -0800, measures@mail.vcnet.com (R. L.
Measures) wrote:

>In article <333a6eae.2838545@netnews.worldnet.att.net>,
>W8JItom@worldnet.att.net wrote:
>
>...snip...
>> Any phase lag between the screen voltage and RF envelope level will
>> always result in distortion of the output envelope. That is because
>> the peak screen voltage lags the peak RF input envelope by the
>> charging time, and the declining envelope slope has screen voltage
>> above the level of the increasing envelope slope.
>>
>I've been getting some e-mail lately about an official definition for the
>word 'technoblather". IMO, the above paragraph is a moderately good
>example.
>
>--
>--Rich-- ag6k, 805-386-3734

Are you saying you do not understand phase lag? I can explain it to
you if you like.

73 Tom

3602. MINIATURE FM STEREO TRANSMITTER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Jack Katinsky <"eeinch@cyberenet.net"@cyberenet.net>
Message-ID: <5hp4d1$l5h@news.cyberenet.net>
Source record: 95424

Miniature Stereo Transmitter plugs into any earphone jack or audio source including Walkman, CD, TV, Electronic Keyboard, Computer, and send signal to any FM Radio or Walkman. Only $24.95 + S&H

Suggested Uses: Play portable CD or Tape through car radio or Stereo System

Private listener (Wireless Headphone for TV

Listen to computer sound through stereo system

Wireless music throughout your home

Play electronic keyboard through your stereo system

Transmit sound for hearing impaired

Check us out at http://www.cyberenet.net/~eeinch

3603. WTD: 1N3321 zener diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <33402830.58B4@gte.net>
Source record: 95425

I'm in need for a 24 volt, 50 watt zener diode, 1N3321 or ECG 5464, for the bias on my anplifier. I've called all the local and many of the national distributors, with no luck. Anyone got one, or know a good source? Thank you for your attention.
73,
Ray, W4BYG

3604. Re: More power for IC-706 ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: "George J. Molnar" <gmolnar@cyberportal.net>
Message-ID: <333FB292.57EE@cyberportal.net>
Source record: 95426

Karl Skoupy wrote:
>
> Hello
> Is there a mod to increase the power for the IC-706 ?
>

Hi Karl. I haven't heard of one & doubt that one would be practical/beneficial. With the size of the heat sink on the 706, perhaps a small increase in power (20-30 watts) could be tolerated, given reduced duty cycle operation, but such a small increase (approx 1 db) wouldn't make any difference on the air. If you wanted to go wild with extra cooling and final (maybe driver) replacement, you could probably coax 200 watts from the thing before the other circuits went into meltdown. Is 3 db (half an s-unit) really worth it?

If you need more signal, make sure the antenna you are using is as optimized as it can be, then (and only then) think about an external power amp (and the huge current it will require!).

Good luck!

--
George J. Molnar (KF2T)
Molnar & Associates, Inc.
Lebanon, New Hampshire
Web Site: http://www.cyberportal.net/gmolnar/index.html

3605. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: "Dale R. Parfitt" <par@magg.net>
Message-ID: <334050A4.484B@magg.net>
Source record: 95427
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Roy Lewallen wrote:
>
> In article <5hmgvm$bih@news1.mnsinc.com>,
> bry@mnsinc.com (Brian Carling (Radio G3XLQ / AF4K)) wrote:
>
> >. . .
>
> >ALSO, you can go to -
> >
> >http://www.mnsinc.com/bry/hamfiles.htm
> >
> >and click on KITS for a huge list of suppliers! Thankfully their are
> >many many small companies selling such kits these days!
> >
> >Homebrewing seems to be very popular now!
>
> It also has changed somewhat. Back when people bought an HW-8, followed the
> step-by-step instructions, poked the components into the holes, and soldered
> them, they would tell you they were using a "Heath HW-8". Apparently, this would
> now be a "homebrew" rig.
>
> Admittedly, this is slightly more complex than taking a rig out of a box and
> turning on a switch, and I'm surely in favor of kit building. But is it
> now "homebrew"?
>
> Roy Lewallen, W7EL

Hi Roy,

I would call it a KIT. However, I do not believe you have to design the
rig in order for it to be homebrew. Perhaps it starts being homebrew
when you layout or make the circuit board and housing- a few mods would
certainly qualify. Call it what you want- it should be encouraged.

As an aside- I never met a more genuine group of courteous and
knowledgeable (sp?) hams than at the Dayton QRP get togethers- old time
ham radio.

Dale
W4OP- another ELNEC user

3606. Re: New 80 Meter SSB kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: ttwist@online.no
Message-ID: <33404b76.3414729@news.online.no>
Source record: 95428

On Tue, 25 Mar 1997 19:09:12 GMT, jparker@fix.net (Jerry Parker)
wrote:

>Dan from Dan's Small Parts and Kits has announced a new 80 Meter SSB
>kit at a very nice price.
>
>Check it out at: http://www.fix.net/dans.html
>
>
>Enjoy,,,72,,,Jerry...K

Something has happened to Dan's page, I can reach http://www.fix.net,
but dans.html is not found on the server.

Does anyone know if he has moved his page, or what?

Tom
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

3607. Re: WTB: Big Magnets .... where ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970331165528.5690C-100000@Ocean.CAM.ORG>
Source record: 95429

I get my big magnets from old speakers. They aren't always available, but I've found a fair share of old speakers in the garbage (and I don't go digging through the garbage, only sometimes notice the speakers on top).

The last one I found was behind a club, and the speaker is massive. YOu don't want to mess with it.

Michael VE2BVW

On Mon, 31 Mar 1997, Madjid VE2GMI wrote:

> daveb@buffnet.net wrote:
> >
> > Hello All
> >
> > Like to find a source for reasonably prices magnets. The kind used on
> > mag mount antennas. Ideally the BIG ones used on HF type mobile
> > antennas.
>
> Edmund Scientific has a lot of BIG and powerfull magnets
> their URL is :
>
> http://www.edsci.com/
>
> -------------------
> Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
> NEC4WIN Antenna simulation for Windows
>
>

3608. ** FLEA at MIT ** Sunday April 20th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: w1gsl@athena.mit.edu
Message-ID: <5hpg5m$4i1@senator-bedfellow.MIT.EDU>
Source record: 95430
Cross-posted to:
rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew

Only THREE weeks away !

*** Sellers it is time to get your prepaid advance
reservations in to get into the first admittance line.

*** !!!! WE ARE BACK IN THE GARAGE !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
April 20th, 1997
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >1000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Seperate lines will form prior to gate opening
for prepaid and nonprepaid vendors

A discount sellers SEASON PASS is available for
$50 per space if purchased by April 20th.

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

1997 SELLERS ADVANCED DISCOUNT REGISTRATION if Mailed by the 5th

Name..... Call.....

Address..... Phone.....

City..... State..... Zip.....

Spaces Required ___ Season @ $50 / space = $ .....

___ April ____ May ___ June ____ July

___ Aug ____ Sept ___ Oct

Total Monthy spaces @ $9/ Space = $ .....

Make checks payable to The MIT Radio Society

Mail to PO Box 397082 MIT Branch Cambridge MA 02139-7082

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

3609. Re: PC card transceiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc3e48$d5ced280$6560b6cd@cbx-nt>
Source record: 95431

OhhhhhKeeeee Mike, whats your suggestion. I need a 2 meter transmitter that
will fit into a 1.1" tube, CW is OK.
It cannot weigh allot. Any ideas. And where in creation can you purchase
EASILY crystals for say a Colpits Osc. on 2 meters.

Christopher Cox
KC8FRJ
TRA#4901

Michael L. Ardai <n1ist@netcom.com> wrote in article
<n1istE7x0vK.6w0@netcom.com>...
> In article <01bc3c45$b2235040$6b60b6cd@cbx-nt> "Christopher Cox"
<cobox@netexp.net> writes:
> -Might I suggest 2 Kits. A MFJ 8400 2 meter receiver, which uses a
MC13135,
> -and the FM6 2 Meter FM transmitter by Ramsey. Should give you a good
start
> -on design.
>
> NO NO NO!!! Stay away from that FM-6. It's a basic 12MHz osc/multiplier
> design with no filtering at all. It does however make a great comb
generator,
> putting out spurs every 12MHz up and down the band. Like with ANY Ramsey
> kit, do not put it on the air without checking it first with a spectrum
> analyzer and doing all the required mods to make it ligal.
>
> /mike
>
>
> --
> \|/ Michael L. Ardai N1IST n1ist@netcom.com \|/
> -*- === Boston Amateur Radio Club: http://www.barc.org/barc === -*-
> /|\ or send "info barc-list" to listserv@majordomonetcom.com /|\
>

3610. Re: INFO on YEASU 5100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: otheral@epix.net
Message-ID: <3340A645.68FA@epix.net>
Source record: 95432
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Tim wrote:
>
> Can anyone here that has the 5100 tell me how you can adjust the panel
> light manualy? I have it set for auto and can't remember how you do that
> because I have lost my book. Thanks!!!

Hi Tim:
Starting with the radio off Hold the MHZ button while turning the rig
on, release MHZ and press F/W within 5 seconds, then use the tuning knob
to set brightness. Press F/W or wait 5 seconds to go back to normal
opration. Enjoy
73's de n3tyd Al

3611. Re: Schematics and plans online

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Ken Linney <ken@g3uda.demon.co.uk>
Message-ID: <YbbfLBAcsAQzEw2H@g3uda.demon.co.uk>
Source record: 95433

In article <5hnbl4$7s@news1.mnsinc.com>, "Brian Carling (Radio G3XLQ / AF4K)" <bry@mnsinc.com> writes
>Ken Linney <ken@g3uda.demon.co.uk> eloquently wrote:
>
>>In article <5gq2fd$j2$1@nw003.infi.net>, Matthew Ballance
>><ballance@nr.infi.net> writes
>>>Does anoyone know of a site on the web where you can download schematics,
>>>plans, or other information on homebrew TX/RX equipment?
>>>
>>>Matthew Ballance
>>>KF4BGQ Greensboro, NC
>
>Matthew I have added a ton of new schematics and articles this weekend
>at:
>
>http://www.mnsinc.com/bry/
>
>in the ham radio resources section
>
>ENJOY!
>
>

Just to add to the above re circuits, I found the following in

comp.archives.ms-windows.announce

I have uploaded to Simtel.Net:

http://www.simtel.net/pub/simtelnet/win3/elec/lokon21.zip
ftp://ftp.simtel.net/pub/simtelnet/win3/elec/lokon21.zip 756193 bytes

lokon21.zip Construction & simulation of digital circuits

LoKon will help you with the construction and simulation of digital circuits. It is the most comprehensive product of its type and is a must
have program if you are involved with or interested in digital circuitry.

Feature include context sensitive help (600 KByte) and menus. More than 100 elements (gates, flipflops ...), oscillator, ROM/RAM, PLA, and an oscilloscope. Comfortable creation of own elements.

Includes comprehensive self contained manual and has been tested on Windows95 and OS/2.

The zip file contains the English and German version.

New in LoKon V2.1:
- TTL elements

New in LoKon V2.0:
- Undo/Redo
- macro element for cascading circuits

Shareware. Uploaded by the author.

Heiko Roth
Heiko.Roth@t-online.de
http://home.t-online.de/home/Heiko.Roth

Have not tried the s/ware but looks of interest.

73 Ken

Ken Linney BSc.
Internet : ken@g3uda.demon.co.uk
Amateur Radio : G3UDA
AX25 : G3UDA@GB7PMB.#28.GBR.EU
TCP/IP : g3uda@g3uda.ampr.org [44.131.88.75]

3612. NEW WEBSITE !!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: Simon Robinson <pls5i50e@pop.plasma.co.uk>
Message-ID: <333F72E0.11CA@pop.plasma.co.uk>
Source record: 95434
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.shortwave,rec.radio.swap,uk.radio.amateur

Hello everyone!!

Please take the time to have a look at my new Web Site. It's only a first attempt so don't be too critical. At present it only has a few bits active but each week I intend to extend it so BOOKMARK it and call back each week.

It will hold a list of links I have found of interest both amateur and commercial, plus the EDDYSTONE USER GROUP. In addition there will be items for sale including BoatAnchors, previously enjoyed classic books on radio, old magazines and much more.

The address is http://www.plasma.co.uk/simon/ so do have a look and I hope you find it useful. Any constructive comments would be most welcome.

Regards

Simon

3613. Re: PC card transceiver project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: msimon@rworld.com
Message-ID: <5hmvbp$45v$2@kirin.wwa.com>
Source record: 95592

Separate the reciever from the control.

It takes a lot of engineering to put a sensitive reciever inside
a 30 to 100 watt broadband noise source.

Simon

David Nye <nyeda@uwec.edu> wrote:

>I just got my tech ticket a couple of weeks ago with my son and we've
>decided we want to try building a second 2M transceiver. The ARRL
>Handbook describes some one-chip receiver and transmitter chips, the
>Motorola MC3363 and MC2831A and a similar Phillips receiver chip the
>NE627 that we're considering using. We're planning to build it on a PC
>card so we can use the PC for control, audio out through the sound card,
>and use the PC's power supply. Obviously we'll need to be careful about
>shielding the board and use an outside antenna (and wire-wrap is out).

>Has anyone worked with these chips or built a transceiver on a PC card?
>There is a SWL radio available on a card so it must be possible to
>overcome the noise problem. Any words of wisdom?

>David Nye KB9PSL Eau Claire, WI

In the end people get the government they deserve.

Read "The Weapon Shops of Isher" by A.E. vanVogt

Simon

3614. Re: Homemade crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: "Tony T. Hwang" <oolong@netcom.ca>
Message-ID: <5hn46b$312@tor-nn1-hb0.netcom.ca>
Source record: 95593

In article <1997Mar27.142932.1519@ke4zv.atl.ga.us>,
gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>In article <19970326052500.AAA10782@ladder01.news.aol.com>
commquart@aol.com (CommQuart) writes:
>>
>> I have never much luck using a 1N914 diode, and I have tried
>>various biasing schemes to improve their performance as detectors.
>
>The bias network has to present a *very* high impedance load to the
>circuit in order to work. But it will work.
>
>Gary
>
>--
>Gary Coffman KE4ZV | You make it, | Due to provider
problems
>Destructive Testing Systems | we break it. | with previous uucp
addresses
>534 Shannon Way | Guaranteed! | Email to
ke4zv@radio.org
>Lawrenceville, GA 30244 | |

Try 1N34. No biasing needed. Real Germanium diode.
Tony, VE6CGX

3615. Re: PiNet Toroid

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5hn6fibk1@news3.microserve.net>
Source record: 95594

What power levels are you talking about? The only thing that
would limit your design would be the power level and the
size of the core you are using. At low power levels T60 & T80
size cores can be used, but if you are talking about higher
power levels you would need to go with a larger size core (or
two cores stacked) to avoid saturation of the cores.

Lets hear from others as I am no engineer!

73 Steve
N3FTI

In article <333B9813.6AB0@erols.com>, thebizlk@erols.com says...
>
>Looking for info on using a toroid based coil as part of the output
>pi-net of an amplifier. Anyone??

3616. Re: TS-440 Transvertor Mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5hn6tsbk2@news3.microserve.net>
Source record: 95595

Down East Microwave has avaliable in kit or assembled a
RF attenuator switch system so you can turn the power down
on the (power or mic gain) TS440 and operate the transverter
from the antenna connector. It can be used with any transceiver
with up to 40W output, check downeast's homepage out at
downeastmicrowave.com

73 Steve
N3FTI

In article <333B2A9C.C2@whoi.edu>, jvaldes@whoi.edu says...
>
>Does anyone have any information for using the TS-440 as the IF for a
>VHF transverter? Is there a way to lower power when utilizing a
>transverter? The Icom 735 looks to be a better way to go but I have the
>440.
>Thanks, Jim WA1GPO

3617. Re: Where To Buy Parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <33402608.11519902@eskinews.eskimo.com>
Source record: 95596

"J. Andy Thompson" <jat@wolfenet.com> wrote:

>Where does a person go to buy parts anymore? I am looking for a tank
>coil for a linear, a socket for a 4-1000, and a 7.5 volt 21 amp xfmr,
>and other miscellaneous parts.
>
>It seems like the ham radio stores only sell boxes and antennas for
>them.
>
>Andy - W7CXA
>jat@wolfenet.com

Post your wants on rec.radio.swap. I've gotten those kind of things
with no trouble at all.

73, Bill W7TI
wrt@eskimo.com

3618. STUFF FOR SALE - radio-list.txt [1/1]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: jimmy2@flash.net
Message-ID: <5hnau3leh9@excalibur.flash.net>
Source record: 95597

```
THE LIST FOR SALE

4 TEKK VHF 2 CHANNEL W-P/L 2 WATT HT'S $75.00 EACH
1 RADIO SHACK VHF 2 WATT HT $50.00
5 VHF HT JOBCOMS HT'S $25.00 EACH
1 UHF JOBCOM HT 467.850 $25.00
1 TEKK HT VHF 154.570 $25.00
2 MOTOROLA VHF HT'S PC-10 DIP/SWITCH FREQ/CHANGE $175.00
2 MOTOROLA VHF HT'S SPRIT-PRO DIP/SWITCH/FREQ $175.00
2 RANGER VHF HT'S PROGRAMBLE 1/5 WATT IN BOXES EMAIL.
1 RADIO HXT-202 2MEATER FM TRANSCEIVER $100.00
ALSO A NIGHT-SCOPE FOR SALE
THANKS JIMMY2@FLASH.NET
```

3619. Re: radio parts in NY city...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-03-31 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hnbps$7s@news1.mnsinc.com>
Source record: 95598

raghavan@psych.nyu.edu (Manoj Raghavan) eloquently wrote:

>Does anyone know a good source for homebrew reciever parts in NY city?
>I'm having no luck finding a place that sells variable capacitors...I'm
>looking for an air variable in the 365/500 pf range.

Yes, there are a number of suppliers listed in my file PARTSUPP.TXT
which is available at:

http://www.mnsinc.com/bry/hamfiles.htm

Click on PARTS to get a copy of the list. Then do a search or Find for
the words "New York" or "NY" and you should find a number of neat
places.

>also looking for specs on air core coils for the shorwave range 3-30 mhz...
>...does someone have a handy empirical formula for calculating coil
>inductance from the dimensions?
>anybody?

Yes - ARRL has a program called HAMCALC that will do this for you.

I think it is available at their web site

http://www.arrl.org

ENJOY!

3620. "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5hpp1g$35o_002@blpm02-197.mcn.net>
Source record: 95435
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D satellite. Your donations are tax deductable. See http://www.amsat.org

Amsat-NA
850 Sligo Ave, Suite 600
Silver Spring, MD. 20910-4703
U.S.A.

Telephone: (301) 589-6062

73 de KB7ADL
Vince
Billings, MT.

3621. Homebrew Amplifier - Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: mentor@cin.net
Message-ID: <33407558.24943041@news.cin.net>
Source record: 95436

Thanks for reading this post. I'm looking for a 2-3 KW homebrew amplifier that's built well and has a massive power supply. I know there are some homebrew artists out there that have constructed works of art in the form of linear amplifiers. If you would like to give your homebrew amp a good home, please contact me. Thanks in advance. Jim mentor@cin.net

3622. Re: INFO on YEASU 5100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Bob Brock <bbrock@i-america.net>
Message-ID: <01bc3e50$b7fabd20$1ed4e4ce@default>
Source record: 95437
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

With the transceiver switched off, press and hold the MHz button near the
upper left while switching the transceiver on.

Release the MHz button and press the F/W button. Then, within five
seconds, turn the selector knob to set the desired display brightness.

Wait five seconds, or press F/W again, to return the control functions to
normal operation...

Tim <tim_raffety@oxy.com> wrote in article <333FD2AA.5A84@oxy.com>...
> Can anyone here that has the 5100 tell me how you can adjust the panel
> light manualy? I have it set for auto and can't remember how you do that

> because I have lost my book. Thanks!!!
>

3623. A for real boatanchor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Cruzn <cruzn@waveinter.com>
Message-ID: <33409DD2.5036@waveinter.com>
Source record: 95438

Anyone out there running a turbo-charged DX-100?

How about it, any of you AM gangsters on the channel? Commme onnnn...

WB1EIM

3624. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <3340AB04.396B@icss.net>
Source record: 95439
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Dale R. Parfitt wrote:
>
> Roy Lewallen wrote:
> >
> > In article <5hmgvm$bih@news1.mnsinc.com>,
> > bry@mnsinc.com (Brian Carling (Radio G3XLQ / AF4K)) wrote:
> >
> > >. . .
> >
> > >ALSO, you can go to -
> > >
> > >http://www.mnsinc.com/bry/hamfiles.htm
> > >
> > >and click on KITS for a huge list of suppliers! Thankfully their are
> > >many many small companies selling such kits these days!
> > >
> > >Homebrewing seems to be very popular now!
> >
> > It also has changed somewhat. Back when people bought an HW-8, followed the
> > step-by-step instructions, poked the components into the holes, and soldered
> > them, they would tell you they were using a "Heath HW-8". Apparently, this would
> > now be a "homebrew" rig.
> >
> > Admittedly, this is slightly more complex than taking a rig out of a box and
> > turning on a switch, and I'm surely in favor of kit building. But is it
> > now "homebrew"?
> >
> > Roy Lewallen, W7EL
>
> Hi Roy,
>
> I would call it a KIT. However, I do not believe you have to design the
> rig in order for it to be homebrew. Perhaps it starts being homebrew
> when you layout or make the circuit board and housing- a few mods would
> certainly qualify. Call it what you want- it should be encouraged.
>
> As an aside- I never met a more genuine group of courteous and
> knowledgeable (sp?) hams than at the Dayton QRP get togethers- old time
> ham radio.
>
> Dale
> W4OP- another ELNEC user
Greetings, I've built Heathkits, and I've built other kits. Building

other kits felt like "homebrew" compared to the Heath, but that is
relative. Come on Ten-Tec and fill the gap!!!
73 (singular),
Brian/N0iMD

3625. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Richard Hager <rhager@millcomm.com>
Message-ID: <3340C038.477D@millcomm.com>
Source record: 95440
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

I've seen a couple mentions here recently of a "for profit" BA list.

Apparently, there's a few people with either a mistaken understanding of, or a mistaken assumption about, the BA list.

I don't even own a BA radio, but I like old test equipment, so I subscribed. I'm on several professional mail-reflectors, for cad/cam software, cnc machine tools etc., and I have to say that the BA list is the smoothest running mail reflector I've ever seen. And I love the strong moderation. That's the best part. It's always peaceful and courteous and productive on BA. Any baloney gets squelched fast.

I've done some research into website setup for work, so I know what telcom costs are like. I've also paid attention to the development of BA. The listowners there have lost over $10,000 in the past few years. That is to say, they dug into their own pockets to keep it going and going well. This is a fact.

The subscription fee, a whopping $1.50/month, isn't nearly enough to cover the costs of running an active mail-reflector with close to 1,000 serious members. Think "T1 line costs", think "$1,000+ software packages and updates", think "Unix servers" etc., etc.. It costs real money to process 50,000 mail transactions a month -smoothly and without errors-.

And those who've never managed a busy mail-reflector can't even imagine the hours of admin work involved, not to mention the incredible abuse that rude people pile upon you. It is truly shocking how childishly grown men can act. Of course, anybody who reads rec.radio.swamp experiences this on a daily basis. Remember, the BA listowners aren't getting paid dime one. They do it because they truly love BA's.

Anyway, a discussion of cost vs. no-cost might make some sense, but let's drop the 'for-profit' terminology regarding the BA list, 'cause that just doesn't make any sense at all.

Richard

Richard Hager

+ Ah-ha! Design Group, Inc. -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681 -
+ "I just like to make things" so... -
+ ...for CNC info, please call Ah-ha! direct -
+ http://www.ahha.com -

3626. Re: Need help with YIG Oscillator connections

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: rexa@netgate.net
Message-ID: <5hqm3g$p5j@ss.netgate.net>
Source record: 95441

In article <33401033.4BE1@execpc.com>, pkottke@execpc.com says...
>
>I have a Watkins-Johnson YIG Oscillator that covers 2.16-4.16 GHz.
>It is in a cubic package about 3.5 cm on a side. There is an SMA
>connector on one side and 8 feedthrough terminals on another. I
>realize 2 are for a heater, 2 more for the magnetic tuning coil,
>2 appear to be for a thermister, probably for temperature
>control/feedback for the heater. That leaves 2 more terminals for
>supply, neither of which are at ground potential as referenced by the
>SMA shell. Does any body know what to power this thing with, and
>how is the heater typically used, ie over what temperature range.
>Any technical info is appreciated as I have no experience
>with these devices as of yet.
>Thanks - Brad
>

Hopefully you have the model number of the oscillator. If so, post it; someone may have the exact specs. Without that theres no way to say for sure what voltages are needed. Usually 2 pins are for the heater -- probably 28V at 1 to 2 amps max. Two pins are for tuning coil - needs current driver. Two pins usually are a finer control FM tuning coil. DC for circuits depends on the YIG design. Some WJ specs I looked at use +15 and -5 V, others use +15/+5. Many YIG oscs need adjustment of bias voltages for best operation across the tuning range.

As I said, if you post the model you might get a more exact answer. You may blow the thing if you apply wrong voltages to the circuits.

good luck,
Rex

3627. Re: WTD: 1N3321 zener diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Phil Clements <philk5pc@connect.net>
Message-ID: <3340D4A2.2C8E@connect.net>
Source record: 95442

Ray LaRue wrote:
>
> I'm in need for a 24 volt, 50 watt zener diode, 1N3321 or ECG 5464, for
> the bias on my anplifier. I've called all the local and many of the
> national distributors, with no luck. Anyone got one, or know a good
> source? Thank you for your attention.
> 73,
> Ray, W4BYG

Try K2AW's "Silicon Alley"
He advertizes in QST and CQ each month. He has never failed me with any request!

(((73)))
Phil, K5PC

3628. Need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: aibes@aibes.ksu.ras.ru
Message-ID: <AAvRMWY0pst@aibes.ksu.ras.ru>
Source record: 95443

I'm looking for pinout for IC TA8164p.
Please, replay to: aibes@aibes.ksu.ras.ru.
Thanks in advance,- Alex (UA4RO).

3629. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: anthonys@ix.netcom.com
Message-ID: <5hqo5g$5v8@dfw-ixnews9.ix.netcom.com>
Source record: 95444
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

In <3340C038.477D@millcomm.com> Richard Hager <rhager@millcomm.com>
writes:
>
>I've seen a couple mentions here recently of a "for profit" BA list.
>
>Apparently, there's a few people with either a mistaken understanding
of,
>or a mistaken assumption about, the BA list.
>
>I don't even own a BA radio, but I like old test equipment, so I
>subscribed. I'm on several professional mail-reflectors, for cad/cam
>software, cnc machine tools etc., and I have to say that the BA list
is
>the smoothest running mail reflector I've ever seen. And I love the
>strong moderation. That's the best part. It's always peaceful and
>courteous and productive on BA. Any baloney gets squelched fast.
>
>I've done some research into website setup for work, so I know what
>telcom costs are like. I've also paid attention to the development of

>BA. The listowners there have lost over $10,000 in the past few
years.
>That is to say, they dug into their own pockets to keep it going and
>going well. This is a fact.
>
>The subscription fee, a whopping $1.50/month, isn't nearly enough to
>cover the costs of running an active mail-reflector with close to
1,000
>serious members. Think "T1 line costs", think "$1,000+ software
packages
>and updates", think "Unix servers" etc., etc.. It costs real money to

>process 50,000 mail transactions a month -smoothly and without
errors-.
>
>And those who've never managed a busy mail-reflector can't even
imagine
>the hours of admin work involved, not to mention the incredible abuse
>that rude people pile upon you. It is truly shocking how childishly
>grown men can act. Of course, anybody who reads rec.radio.swamp
>experiences this on a daily basis. Remember, the BA listowners aren't

>getting paid dime one. They do it because they truly love BA's.
>
>Anyway, a discussion of cost vs. no-cost might make some sense, but
let's
>drop the 'for-profit' terminology regarding the BA list, 'cause that
just
>doesn't make any sense at all.
>
>Richard
>
> Richard Hager
>
>+ Ah-ha! Design Group, Inc. -
>+ Precision CNC Technology, since 1991 -
>+ 612-641-1797, Fax: 612-641-8681 -
>+ "I just like to make things" so... -
>+ ...for CNC info, please call Ah-ha! direct -
>+ http://www.ahha.com -

Thank you, Richard! It's really tragic that some have not looked into how well the ORIGINAL BA List works. It's free to all comers for a mimimum of 4-weeks inspection.

What's more tragic is that the list owner at tempe.gov chose to plagerize the name of BoatAnchors thereby impugning the BA Newsgroup as well. We know this latter was a much careful and laborious construct to offer a free avenue for those who preferred not to pay a trivial membership fee.

No one even in the commercial would attempt such a back-stabbing maneuver. Ethics are important to MOST folks.

-=T=-

3630. Re: WTD: 1N3321 zener diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.122.002CF741@phoenix.net>
Source record: 95445

In article <33402830.58B4@gte.net> Ray LaRue <raylarue@gte.net> writes:
>From: Ray LaRue <raylarue@gte.net>
>Subject: WTD: 1N3321 zener diode
>Date: Mon, 31 Mar 1997 13:10:08 -0800

>I'm in need for a 24 volt, 50 watt zener diode, 1N3321 or ECG 5464, for
>the bias on my anplifier. I've called all the local and many of the
>national distributors, with no luck. Anyone got one, or know a good
>source? Thank you for your attention.
>73,
>Ray, W4BYG
Call the mfg. They can tell you who stocks the item.

3631. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: mc@shore.net
Message-ID: <5hr15l$368@northshore.shore.net>
Source record: 95446
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

What's even sadder than the name rip-off is that the server is run by public funds!

I subscribed to see what was going on and so far have read nothing different than much of the stuff on rec.radio.amateur.boatanchors. There is a similar list called otrig-l that is free for anyone to use. I fail to understand any logical reason to set up another list. The digests are freely available to anyone who knows how to get them so you don't have to miss any of the action on the real list. That wisdom and information costs you zip! However if you wish to participate you gotta join the club!

Those whining about the annual fee which is now $20.00 (but some of us paid early and saved $8.00) should consider themselves fortunate to have access to the digests which, somewhat like a repeater, is NOT a God-given right.

I guess there will always be whiners and complainers so maybe it might be a good thing to have a freebie list just for them. They can play around in the sandbox kindergarten level while the rest of us attend Real Radio University.

Interesting to note: There has not been a WORD of this on The List!

73,

Michael Crestohl, W1RC
mc@shore.net

3632. FS: 4-1000 TUBES, SOCKETS, CHIMNEYS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: nimski1@aol.com
Message-ID: <19970401132700.IAA17807@ladder01.news.aol.com>
Source record: 95447

BECAUSE I AM DISCONTINUING A AMPLIFIER PROJECT I HAVE THE FOLLOWING IN PACKAGE DEALS ONLY. 4PR-1000A(TESTED FULL OUTPUT)EIMAC AIR SYSTEM SOCKET AND EIMAC CHIMNEY FOR $200. I HAVE TWO COMPLETE SETS. IF A BUYER TAKES BOTH SETS , I WILL INCLUDE A COMMERCIAL CHASSIS THAT WAS DESIGNED FOR BOTH TUBES. IT HAS A FILAMENT TRANSFORMER AND WIRING FOR BOTH TUBE ASSEMBLIES. CONTACT STEVE AT 508-222-1261 OR NIMSKI1@AOL.COM

3633. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: frussle@erols.com
Message-ID: <33440d2b.3747898@news.erols.com>
Source record: 95448

On Sun, 30 Mar 1997 04:11:13 +0100, schultz@cddis.gsfc.nasa.gov (Dan Schultz) wrote:

>In article <5h3qs3$mou@camel4.mindspring.com>, aruder@pipeline.com wrote:
>
>> >I have discovered a way to xmit music over a
>> >bandspread of =< 100 Hz. Note that is Hertz
>> >not KiloHertz.
>>
>
>
>> Since posting the above, I have received 37 replies telling me it
>> can't be done.
>>
>> To most of those I did not replly.
>>
>> Several said it caint be done, but if it looks interesting, send it to
>> me, and I MAY get interested.
>>
>> to all but one of those, I said "the world is full of people who
>> got no idea what is going on, but who know why it won't work.
>>
>
>
>Your claim does seem a bit extraordinary, and extraordinary claims require
>extraordinary evidence.
>
>Certainly there are cases in history where the leading experts dismissed
>something because it was "impossible". Certain physics professors in 1905
>were still writing that the Wright Brothers claim to have made a flying
>machine was fradulent despite the fact that they had demonstrated their
>machine in public in front of thousands of people. The Wright Brothers
>prevailed, because they showed the world that they could actually do it.
>
>More recently, a group in Utah claimed that they could make hydrogen
>fusion at room temperature in a jar of water. Some scientists dismissed
>the whole thing at once, "knowing" that it was impossible. Others kept
>a more open mind and did not dismiss it immediately, but they still quite
>rightly wanted to see it in action. Unfortunately, none of the cold fusion
>groups to date have been able to show a working cold fusion cell, and those
>who claimed that they had had in fact made some error in their measurements.
>
>Sometimes a person like Einstein comes along who really does rewrite
>the existing laws of physics, and whose work withstands repeated tests

>over a long period of time, but far far more often the claims of new
>physics turn out to be mistaken after further examination.
>
>So show me a working demonstration, or explain clearly how your discovery
>works. Show me enough detail so I can figure out where you made your mistake,
>let me examine your apparatus in detail, and if I can't find any mistake
>then, and only then, I might believe that you have uncovered some new
>communications principle. Until then I would not advise any investor to
>put his money behind your discovery, because it does claim to defy well
>known principles of radio communications which have been around for many
>years and which I will not abandon easily. Keeping an open mind is one
>thing, but we still need to see some convincing proof that your claims are
>correct and that the many experts are wrong.

Dan, he may very well be able to do just what he says. What he didn't say is how much Signal to Noise ratio he'll need to get it to work!

You can phase modulate a signal to such a small degree that the carrier barely wiggles. And you can use that modulation index to put all kinds of bandwidth on the air. The problem is that unless you have a very substantial SNR, this system will sound inferior to a wider signal. In a way, this is the opposite of spread spectrum. Use more power and less bandwidth instead of less power and more bandwidth.

The bottom line, however, is that basic rules of information theory still apply. TANSTAAFL.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

3634. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Al Gerheim <gerheim@sonalysts.com>
Message-ID: <33411815.C69@sonalysts.com>
Source record: 95449
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

Vince Fiscus, KB7ADL wrote:
>
> Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D
> satellite. Your donations are tax deductable. See http://www.amsat.org
>

I have never worked an AMSAT satellite because the gear required costs
too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
a bird I can use, I won't be cheap.

Do you have any idea how I can contribute to the Russian Amateur
Satellite Program?

--

_\\V//_
(O-O)
+-------oOO--`o'--OOo-------+
| Albert P Gerheim, K1QN |
| http://www.sonalysts.com |
| 1 (800) 526-8091 X 218 |
+---------oOO---OOo---------+

3635. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <3340D2C1.5E8C@atl.org>
Source record: 95450
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

Michael-

The elitism espoused, justified by the technical competency found on the list and condemned by ad-nauseum discussions of 'radio wax' and 'enviro-political testimonials', can only server to intimidate potential participants of the one-true-list without whom there would be no list.

The implied threat, "no god given right...." (to the digests) fosters no good feelings toward contributing, on my part, and can only serve as additional discouragement to potential participants.

Analysis of your post and consideration of the above leads me to only one conclusion. You must be one of the renegades. This disinformative diatribe has to be a well disguised from me, perhaps clear to my intellectual superiors, attempt to sabotage the one-true-list.

Thermionics forever!

73,
de Bob
wb4mnf

3636. Re: schematic for 2m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: ciciora@ucsu.Colorado.EDU
Message-ID: <ciciora.859906054@ucsu.Colorado.EDU>
Source record: 95451

Suleyman Yalcinkaya <suleyman@netas.com.tr> writes:
Both TenTec and Ramsy sell 2m transever kits. Manuals can be ordered from each company for $10 each (will credit you if you end up ordering the kit). Also checkout the Motorola Web Site, an application note for one of their FM receiver chips shows how3 to build what you are asking for, but with something like 20 KHz channel spacing (Why?!?)

>Hi all,

>I'm looking for a schematic for 2m (144-146 Mhz) receiver which has
>PLL device.

>Thanks in advance,

>regards,

3637. WTB: RF-CAD program.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <33412515.803@aeneas.net>
Source record: 95452

I'm looking for a used RF-CAD Design Program. If you have one you would
like to get rid of, send me a email with particulars.
Thanks,
Mark

3638. WTB:$$ Hickok 580, Triplett 3344A, RCA WT100 $$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Kevin@UPSCALEaudio.com
Message-ID: <5hrahu$eqf@nnrp1.news.primenet.com>
Source record: 95453

If you have these...and only these..please reply.

Best Regards,

Kevin Deal Fine Tube Components, Home Theater,
UPSCALE and Vintage Tubes from Telefunken,
Audio/Home Theater/Rare Tubes Mullard, Amperex, etc. Showroom
1410 Lemonwood Dr West Open 7 Days By Appointment.
Upland, CA 91786 (909) 931-9686

3639. FS/Trade: Chimneys

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <334161B2.501B@gte.net>
Source record: 95454

I have: (1) New Eimac, chimney for 4-1000
(2) New Eimac, chimney for 4-400's
(1) Mil-surplus Eimac, chimney/cast aluminum, air-socket/mounting bracket, for 4-400, perfect condition. Chimney has 3 bolt flange around the bottom, to secure the glass.

Make offer.
73,
Ray, W4BYG

3640. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <3340F519.1D77@atl.org>
Source record: 95455
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

Michael Crestohl wrote:

> The rest of it makes even less sense!

It's 'low brow' humor.

73

de bob
wb4mnf

3641. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: mc@shore.net
Message-ID: <5hreq8$1g8@northshore.shore.net>
Source record: 95456
Cross-posted to:
rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap,rec.radio.shortwave

Does the expenditure of $12.00 for something I value greatly make me an elitist??

Is the phrase "God-given right" a threat?

The rest of it makes even less sense!

Michael, W1RC

"Well.......I just don't know...", Tim "The Tron" Smith, WA1HLR, ca 1976

3642. Re: Antenna Switching Relays

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: James E Elliott <jelliott@mail.stlnet.com>
Message-ID: <5hrf76$rt2$1@radius1.stlnet.com>
Source record: 95457

The best relay would be a coaxial type that maintains the 50 ohm impedance thru it. An ordinary open relay would introduce an inch or so of improper impedance. This is not significant till you get to vhf or higher where this represents a significant part of a wavelength. Even there some commercial vhf rigs use open relays. At high power levels look for large contact surface and good insulation. An external case is probably not significant usless you are worried about dust getting on the contacts. 73 Jim N0TN

3643. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr1.154510.26891@ke4zv.atl.ga.us>
Source record: 95458
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

In article <32cb5626.9989153@news.ccnet.com> w6uv@ccnet.com writes:
>On Sat, 28 Dec 1996 22:26:44 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
>wrote:
>>You'll need a pair of steerable yagis or helixes, for mode U/V. You can
>>build these yourself and save a bunch of money. When the sat is near apogee,
>>it hangs in virtually the same spot in the sky for long periods, so you can
>>aim the antennas by hand, no need for auto-tracking, or even for rotators.
>>The antennas don't have to be very high off the ground, since they are
>>looking up. You can use a tripod or post mount and turn them directly
>>by hand as needed. The antennas can be made from a length of 2x2 and use
>>aluminum clothesline wire for elements. There are a number of antenna
>>programs available on the net which can optimize the design for you.
>
>I thought the P3D antenna gain and power output was high enough to
>allow the use of omni antennas on the ground. Is this not true?

Wow, been digging in the archives. eh? P3D has a 10x larger power
budget than AO10 or AO13, but I think you'd be hard pressed to work
it using omni antennas when it is at apogee. I understand that it
is planned to be active on more than one mode at once, so the larger
power budget will be shared across more than one transponder at a
time. And while greater output power will make it somewhat easier
to hear, extra power supply at the satellite doesn't make it hear
you any better.

It is supposed to be 3-axis stablized, so squint angles shouldn't
be as much of a problem as they are for AO10, and were for AO13,
but I don't think that will be sufficient to allow you to work
it without a steerable gain antenna at your station. (At perigee,
of course, it should be possible to work it with an omni, but it
won't dwell at perigee long, and coverage will be much less than
when it is at apogee and a whole hemisphere will be in its footprint.)

It shouldn't take quite as elaborate an antenna system to work
P3D as it does to work AO10 (or did to work AO13). Fairly compact
beams should suffice. You shouldn't need anything like the 22 el
2m and 40 el 70cm long boom antennas I'm using for AO10. An 8 el 2m
and a 16 el 70cm antenna should do nicely (that's for CP, halve the
number of elements for linear polarization). That's a boom length
on the order of 6 feet. If you're running a good amp and have a
good mast mounted preamp, you might get away with even smaller
antennas, say a nested quad backed by a reflector screen (but
with decent antennas you shouldn't need to run an amp at all).

You shouldn't have any trouble setting up a workable antenna system
on a patio or balcony. You can cheaply build the antennas needed.
And as I noted in my original post, you can hand steer the antennas
as long as you aren't trying to work perigee passes. The molynia orbit
has a very long dwell at apogee so you don't have to reposition very
often.

The real digital action may be up at S band, and the needed antenna
for that can be quite small. A 1 to 1.5 meter dish should be plenty,
and that's easily handled on a tripod. You might even be able to
dual feed it and use it at L band as well. If not, a modest loop
yagi will do for L band. (I'll be using my 12 foot dish, because
I already have it, but I'm going to have to throttle power *way*
back to avoid being too strong at the satellite.)

P3D is going to be much easier to work than our previous molynia
orbit birds, but don't expect to work it at apogee with a microsat
class station. You'll want a receive antenna with a narrow enough
beamwidth to keep the warm Earth from affecting system noise
temperature (otherwise a low noise preamp will do you no good),
and you'll want a transmit antenna with enough gain to avoid having
to run an external amp. With my current setup, I expect to be using
less than 2-10 watts uplink power for mode U/V (the higher power may
be needed to burn through the treeline for near horizon passes). With
lesser antennas, you may need 25-45 watts uplink power.

The receive setup is really the key, however, as it always is with
satellites. You simply *must* have enough directivity to let the
antenna look at the cold sky. Otherwise system noise temperature
will be limited by the warm Earth, and you won't be able to compensate
by adding more preamplification. An antenna with a 3 db beamwidth of
22 degrees, and a good F/B ratio, should suffice for high passes.
A narrower beam will be needed for near horizon passes.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

3644. Who can save from NOISE?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: bv3fg@alumni.nctu.edu.tw
Message-ID: <5hra2d$k2k@netnews.nctu.edu.tw>
Source record: 95459

I have been suffering from heavy local QRM for 2 years.
The noise sounds like sparking 60 time per minute when freq. is above
5 MHz. On 14 MHz, the strength of the moise is listed below:

PreAmp ON / NB OFF : 9 S-unit
PreAmp ON / NB ON : 6 S-unit
PreAmp OFF / NB OFF : 6 S-unit
PreAmp OFF / NB ON : 3 S-unit

The noise is still very strong (about 4 S-unit) on 50 MHz with
PreAmp ON and NB OFF. So I cannot pick up any weak signal and I must
struggle against the noise for copying the signal so-called 55.

I have made sure that:
1.The noise is ont caused from any equipment in my house and
neighborhood.
2.Ground system (both DC and RF) work well.
3.The so-called low noise receiving antennas don't eliminate the noise
in my situation. They reduce signal and noise at the same time, but
the S/N is still poor.
4.The noise disappears when the whole city loses electricity power.

Because I live very near (about 400m) a large electricity power
transfer station which transfers electricity from about 300KV to lower
voltage, I guess that the noise is generated from this station.

My questions are:
1.Is waht I guess correct?
2.Is AF DSP able to eliminate this kind of noise?
3.Is it possible to kick the noise away before the noise gets into my
receiver?

Please save me from noise!!!
****
de BV3FG Robert Suen E-Mail bv3fg@alumni.nctu.edu.tw

3645. Who can save from NOISE?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: bv3fg@alumni.nctu.edu.tw
Message-ID: <5hra78$k2k@netnews.nctu.edu.tw>
Source record: 95460

I have been suffering from heavy local QRM for 2 years.
The noise sounds like sparking 60 time per minute when freq. is above
5 MHz. On 14 MHz, the strength of the moise is listed below:

PreAmp ON / NB OFF : 9 S-unit
PreAmp ON / NB ON : 6 S-unit
PreAmp OFF / NB OFF : 6 S-unit
PreAmp OFF / NB ON : 3 S-unit

The noise is still very strong (about 4 S-unit) on 50 MHz with
PreAmp ON and NB OFF. So I cannot pick up any weak signal and I must
struggle against the noise for copying the signal so-called 55.

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transfer station which transfers electricity from about 300KV to lower
voltage, I guess that the noise is generated from this station.

My questions are:
1.Is waht I guess correct?
2.Is AF DSP able to eliminate this kind of noise?
3.Is it possible to kick the noise away before the noise gets into my
receiver?

Please save me from noise!!!
****
de BV3FG Robert Suen E-Mail bv3fg@alumni.nctu.edu.tw

3646. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Jack
Message-ID: <3341499C.632C@sullivan.vf.mmc.com>
Source record: 95461
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

Al Gerheim wrote:
>
> Vince Fiscus, KB7ADL wrote:
> >
> > Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D
> > satellite. Your donations are tax deductable. See http://www.amsat.org
> >
>
> I have never worked an AMSAT satellite because the gear required costs
> too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
> a bird I can use, I won't be cheap.

Personally, I can't financially support ANY organization that insists
on using inferior product. I am speaking about the Ariane 5 launch
vehicle. The first one blew up, and the others that had space on
the second launch pulled-out. One would think that Amsat would have
learned over the years that the ESA does not have the world's best
reliability for launch vehicles (anybody remember the early Oscars?
The ones that were lost because the launch vehicle - Ariane - went
into submarine mode?). I know where of I speak, having worked in
the satellite business (RCA and it's successors) for the last 13+
years. When they see the light and use another launch vehicle, THEN
I'll support them (Amsat).
Jack
Modeling the NYC and NYNH&H in HO; D&H and CP Rail in N
ARRL - N2MPU
NRA & NRA-ILA

3647. Re: Kits for phase-3D?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: rob@pe1chl
Message-ID: <E7z42x.G4p@pe1chl>
Source record: 95462
Cross-posted to: rec.radio.amateur.digital.misc,alt.ham-radio.ssb,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space

In <32cb5626.9989153@news.ccnet.com> w6uv@ccnet.com (Jerry Gardner) writes:

>I thought the P3D antenna gain and power output was high enough to
>allow the use of omni antennas on the ground. Is this not true?

Traditionally, there has always been a 10dB discrepancy between
"AMSAT-promised minimum ERP" and realistic minimum ERP. This, of course,
mostly was because of the AGC action caused by alligator stations,
and on P3D the situation might be better because of the countermeasures.

Of course, directional antennas are always better because they help to
reduce noise as well. You can compensate the gain you get from the
antennas by using less output power.

Rob
--
+----------------------------------+--+
| Rob Janssen pe1chl@amsat.org | WWWhome: http://www.pe1chl.demon.nl/ |
| AMPRnet: rob@pe1chl.ampr.org | AX.25 BBS: PE1CHL@PI8WNO.#UTR.NLD.EU |
+----------------------------------+--+

3648. Re: R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000104971451500001@news.europa.com>
Source record: 95463

DDS is a very bad choice for a DC receiver.

I've tried to use several including the discrete DDS using 74AC283's and DAC, to a more high-tech one the AD7008.

Both produce a sound resembling someone playing a xylophone at random as you are tuning. Generally, only strong stations can be heard and the weak ones according to Murphy's law are buried under spurs.

The only way to get rid of the spurs is to use a PLL to clean it up, or use the DDS as the reference for a PLL, like the Rohdes hybrid DDS/PLL ckt. I have built one and it is very clean.

I've also tried to use DDS as VFO for my Drake R4-C. Same problems as in the DC receiver.

Good luck,

Rob.

3649. Re: A for real boatanchor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5hrnt4$32a@news1.mnsinc.com>
Source record: 95464

Try asking this in rec.radio.amateur.boatanchors
or on the new free BA mailing list.

You could also try the fantastically poular new Heathkit
mailing list and GLOWBUGS when they get it cranking again!

There are a lot of DX-100s still out there!

Cruzn <cruzn@waveinter.com> eloquently wrote:

>Anyone out there running a turbo-charged DX-100?

>How about it, any of you AM gangsters on the channel? Commme onnnn...

> WB1EIM

3650. Schematic capture program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Vince <WA2RSX@worldnet.att.net>
Message-ID: <3341B999.4A45@worldnet.att.net>
Source record: 95465

This is a repeat of my attempt to locate software that will run under WIN3.11. Im looking to input various notes, schematic diagrams from years of collecting onto my computer.

Until now, all that I have seen is s/w that runs under WIN95 and expensive stuff as well. I dont need the functionality of PSPICE/SPICE. Just something to enter schematic/wiring info and get printout at later time.

I think there must be some choice software available that will allow ham radio operators to input schematic diagrams and wiring diagrams into the computer software and then later be able to get screen viewing as well as dot matrix printout.

Please advise.

Tnx. 73s,
Vince@WA2RSX.7085kHz,baudot.RTTY

3651. Re: R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Rocci <rocci@worldnet.att.net>
Message-ID: <3341BA4D.76@worldnet.att.net>
Source record: 95466

jupiter@europa.com wrote:

DDS is a very bad choice for a DC receiver....
I've tried to use several including the discrete DDS using 74AC283's
and
DAC, to a more high-tech one the AD7008....
Both produce a sound resembling someone playing a xylophone at
random as
you are tuning. Generally, only strong stations can be heard and
the weak
ones according to Murphy's law are buried under spurs.

Are you sure the problem wasn't just that the receiver was picking up the digital byproducts through the power supply or the antenna? Making clocked digital circuits and low level analog circuits coexist peacefully is like putting cats and dogs together in the same house.....you need to keep them well isolated from each other. It can be done with a little care though. Chances are that the problem was not with the spectral purity of the DDS output, but something else related to the implementation.

Joe
WA3CMQ

3652. Re: Schematic capture program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <3341BE49.7241@onramp.net>
Source record: 95467

Vince wrote:
>
> This is a repeat of my attempt to locate software that will run under
> WIN3.11. Im looking to input various notes, schematic diagrams from
> years of collecting onto my computer.
>
> Until now, all that I have seen is s/w that runs under WIN95 and
> expensive stuff as well. I dont need the functionality of PSPICE/SPICE.
> Just something to enter schematic/wiring info and get printout at later
> time.
>
> I think there must be some choice software available that will allow ham
> radio operators to input schematic diagrams and wiring diagrams into the
> computer software and then later be able to get screen viewing as well
> as dot matrix printout.
>
> Please advise.
>
> Tnx. 73s,
> Vince@WA2RSX.7085kHz,baudot.RTTY

If you need only small schematics got to http://ivex.com/ and get their
free software. It is limited to 100 pins but works well and the have a
companion PCB layout software I have but haven't tried yet...

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid/

3653. yaesu ft900 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Richard LANDRAUD F1ULK <101730.2444@CompuServe.COM>
Message-ID: <5hrpgl$7e1$1@mhade.production.compuserve.com>
Source record: 95468
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

73 dears om's
I am looking for mods to extend tx/rx of my ft900 ?
Thanks!
From F1ULK
France

3654. Re: Who can save from NOISE?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19970401214300.QAA17022@ladder01.news.aol.com>
Source record: 95469

An obvious question is: Have you talked with the power company about correcting the situation. Sounds like there is a faulty connector or ground system at the substation. I do not know if that is an option in your country or not, but it is worth a try. Good luck.

3655. Re: New 80 Meter SSB kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <33414CC4.9CB@emily.net>
Source record: 95470

Tom Twist wrote:
>
> On Tue, 25 Mar 1997 19:09:12 GMT, jparker@fix.net (Jerry Parker)
> wrote:
>
> >Dan from Dan's Small Parts and Kits has announced a new 80 Meter SSB
> >kit at a very nice price.
> >
> >Check it out at: http://www.fix.net/dans.html
> >
> >
> >Enjoy,,,72,,,Jerry...K
>
> Something has happened to Dan's page, I can reach http://www.fix.net,
> but dans.html is not found on the server.
>
> Does anyone know if he has moved his page, or what?
>
> Tom
> Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
> Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
> Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

I had the same problem but finally found Dan's page at
http://www.fix.net/~jparker/dans.html

73 from Lyle, K0LR

3656. Re: lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: Ed Loranger <USE_MY@Sig.Address.pse>
Message-ID: <334149FE.4F0F@Sig.Address.pse>
Source record: 95471

(Note Anti-spam address above. Use address below.)

There is a pdf (Adobe Acrobat) file at this location:
http://www.wenzel.com/pages/mystrylb.htm

find "Lightening Detector".

Haven't tried it though...
-Ed.
--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee
mailto:we6w@qsl.net
http://www.qsl.net/we6w

3657. Re: WTD: 1N3321 zener diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: dave eckhardt <davee@hp5800.desk.hp.com>
Message-ID: <3341A9A4.1198@hp5800.desk.hp.com>
Source record: 95472

Ray LaRue wrote:
>
> I'm in need for a 24 volt, 50 watt zener diode, 1N3321 or ECG 5464, for
> the bias on my anplifier. I've called all the local and many of the
> national distributors, with no luck. Anyone got one, or know a good
> source? Thank you for your attention.
> 73,
> Ray, W4BYG
>>>

I had a similar problem with the bias zener in the Heath SB230 (single
8873 conduction-cooled "bottle"). That zener is 8.4 v at 50 watts. I
gave up easily and connected 11 forward-biased 1N4007 rectifier diodes.
I could have used the 1N4001 diodes, but I had a bunch of 4007's. It
works better than the original 50-watt zener. You need roughly 34
diodes for 24 volts, but they are cheap: <$0.10 each. Its better than
"retiring" an otherwise good amplifier!

Dave - W6LEV

3658. Re: lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-01 00:00:00 UTC
From: dave eckhardt <davee@hp5800.desk.hp.com>
Message-ID: <3341AE44.4186@hp5800.desk.hp.com>
Source record: 95473

```
rinus nienhuis wrote:
>
> dear all, my name is rinus nienhuis and i live inthe netherlands-does
> anyone know how to build a lightning detector,one that really works
> ONLYonly on lightning ,one that gives a signal when detecting
> lightning
> if so, is it possible to send me a schedule or a idea
> thank you very much for your help
>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

If you can spend a little money, try the Intellecast Weather Shop
online. I've seen them for as little as $39 (US).

Dave - W6LEV
```

3659. Info Wanted: Heath SB-1400 Xcvr Power Connector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: pollitt@dmv.com
Message-ID: <3341b175.262418766@news>
Source record: 95474
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swaprec.radio.amateur,rec.radio.amateur.misc

Need any and all info (part number, manufacturer, manufacturer number, where can I buy them , etc etc etc) for the 4-pin power connector on the back of the SB-1400 Xcvr. I need the female connector that plugs into the male connector mounted on the chassis.

I believe that the connector(s) are CINCH .... but I can't determine it from the descriptions in Allied or Newark catalogs .... anyone have better understanding of these connectors ????

Please e-mail ur answers to me at: pollitt@dmv.com

Thanx es 73

Roy C. Pollitt KD4HC
Fenwick Island DE

3660. Re: Toroids for Pi-Net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5hsg0a$5km@news.teleplex.net>
Source record: 95475

In article <3338848A.1732@erols.com>, thebizlk@erols.com says...
>
>I've seen some amplfiers using a toroid for part of the output
pi-network
>inductance (I'm guessing for 160, 80 and maybe 40 meters, I never got a
>close look). I'd like to do something similar in a project I'm working
>on. I'm looking for info on recommneded wire size (for legal limit)
type
>and size of the ferrite toroid and any other pertinent design info.

I built a legal limit linear amp several years ago using a toroidal pi net coil. I used a 4" toriod form of type 2 powered iron material and wound the coil with bare solid #12 wire stripped out of Romex house wiring cable. The wire was sheathed in teflon tubing. The coil worked fine. It was wound for 160 meters with taps for 80,40 and 20. It was extremely compact and worked great. The power tube was a 4-1000 operated grounded grid at 4800 volts on the plate. my Icom 751s max output limited the power output to approximately 2300 watts and I never experienced coil problems. Both of the caps were Vacuum variables, the input was 500pf and the output one 2700pf.

Pat Bunn
N4LTA

3661. Cushman CE-4

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: eugene@loop.com
Message-ID: <5hsma8$717@usenet88.supernews.com>
Source record: 95476

Does anyone have a schematic of the mode switch arrangement, i.e. monitor, cal , signal gen?
I have a CE-6 manual but they are not the same.

de Joe Orrico WB6HRO

eugene@loop.com

3662. Cushman CE-4

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: eugene@loop.com
Message-ID: <5hsm8p$717@usenet88.supernews.com>
Source record: 95477

Does anyone have a schematic of the mode switch arrangement, i.e. monitor, cal , signal gen?
I have a CE-6 manual but they are not the same.

de Joe Orrico WB6HRO

eugene@loop.com

3663. FS: Kenwood YK-455C-1 500Hz Filter , Lower priced.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <3341ec4e.1982347@news.interbusiness.it>
Source record: 95478
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Specially dedicated to TS-140/680, but VG also for lot of others KW
rtx.I sell it tested OK, like new for $ 70 shipped to your door.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

3664. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: Philip Chien <nobody@nowhere.com>
Message-ID: <5hster$a1o$1@ddi2.digital.net>
Source record: 95479
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

Al Gerheim <gerheim@sonalysts.com> said:

>I have never worked an AMSAT satellite because the gear required costs
>too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
>a bird I can use, I won't be cheap.
>
>Do you have any idea how I can contribute to the Russian Amateur
>Satellite Program?

Fair enough. But it's interesting to note that under your logic the only satellite project I should support is SAREX/MIREX, and the only ham radio band I should be interested in keeping as a ham radio band is the 2 meter band. Why should I care about 70 cm, 10 meters, or any other band I'm not on right now?

I don't think you're correct with your comments that AMSAT-NA doesn't support Mode K and A satellites. There's an excellent book available from your local Martha on how to get started on the Russian satellites. And it continues to sell well, indicating that there is interest in those birds.

The keplerian elements for the RS birds are distributed each week by AMSAT-NA, not to mention WWW resources, AMSAT-BB, and other online resources.

If you want to contribute to the Russian amateur satellites then I'm certain we can find the appropriate contact for you. Or a much closer source to home, SEDSAT, under construction at the University of Alabama Huntsville, will have a Mode A transponder. I'm certain they'd appreciate your financial support too.

Phase 3-D may not fulfill every ham operator's dream of a perfect satellite, but it will increase the capabilities of future amateur satellites, which - in the long run - will benefit all of us.

Philip Chien, KC4YER@amsat.org
Earth News - space writer and consultant

my E-mail address is purposely incorrect to avoid SPAM-bots. I will not accept any unsolicited E-mail or commercial advertisements.

3665. Re: Schematic capture program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: larsm@lin.foa.se
Message-ID: <33421f54.6413976@news.lin.foa.se>
Source record: 95480

I have been using schematic programs for ages now, both DOS and
Windows based ones. There are only two reasons for me sticking to a
"true" schematic capture program and that is:
Link to PCB-programs
Library functions
If you do not intend to use a PCB layout program and not using a lot
of different components, why not use any standard windows drawing
program? I would use VISIO!
Good Luck
Lasse SM5GLC
Vince <WA2RSX@worldnet.att.net> wrote:

>This is a repeat of my attempt to locate software that will run under
>WIN3.11. Im looking to input various notes, schematic diagrams from
>years of collecting onto my computer.
>
>Until now, all that I have seen is s/w that runs under WIN95 and
>expensive stuff as well. I dont need the functionality of PSPICE/SPICE.
>Just something to enter schematic/wiring info and get printout at later
>time.
>
>I think there must be some choice software available that will allow ham
>radio operators to input schematic diagrams and wiring diagrams into the
>computer software and then later be able to get screen viewing as well
>as dot matrix printout.
>
>Please advise.
>
>Tnx. 73s,
>Vince@WA2RSX.7085kHz,baudot.RTTY
>

3666. QSK modification for SB-230 Heathkit???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: kovar@zeus.ia.net
Message-ID: <5ht69t$h28@hera.ia.net>
Source record: 95481

I would like to try to make a couple of Kilovac Vacuum tube relays

into a QSK circuit for my SB-230 Amp.

I would like to use TEN-TEC concept of two control wires from

tranceiver to sense hot switching.

I have read Measure's conversion of 922 and sb220 and Don't have

a clue on use of two control wire system.

I looked a TEN-TEC TITAN schmematic and was overwhelmed by complexity.

ANY HELPFUL HINTS TO GET ME GOING IN CORRECT DIRECTION?

Thanks for possible interest in helping.

Jack Kovar
K0VAR

3667. Re: Schematic capture program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970402114501.GAA02155@ladder01.news.aol.com>
Source record: 95482

> I think there must be some choice software available that will allow ham
> radio operators to input schematic diagrams and wiring diagrams into the
> computer software and then later be able to get screen viewing as well
> as dot matrix printout.

Criminy, if that's all you want, you're talking hardware. A flat bed
scanner will do that. I do it all the time.

W4ZCB

3668. Re: lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.123.0019E9BC@phoenix.net>
Source record: 95483

In article <333FC039.7695@ix.netcom.com> Rolf Mathson <rmathiso@ix.netcom.com> writes:
>From: Rolf Mathson <rmathiso@ix.netcom.com>
>Subject: Re: lightning detector
>Date: Mon, 31 Mar 1997 08:46:33 -0500

>Bigdad wrote:
>>
>> rinus nienhuis wrote:
>> >
>> > dear all, my name is rinus nienhuis and i live inthe netherlands-does
>> > anyone know how to build a lightning detector,one that really works
>> > ONLYonly on lightning ,one that gives a signal when detecting
>> > lightning
>> > if so, is it possible to send me a schedule or a idea
>> > thank you very much for your help
>>
>> Way back when...i used to use a oscilloscope tube and had one dipole
>> orientated east and west connected to the horizontal deflection plates,
>> and one orientated north and south connected to the vertical plates. With
>> a little experimentation i could tell from what direction the
>> storm/lightning was coming from. All ya need is a scope tube like a 3BP1
>> or so and the circuit to power it up and a couple of dipoles.
>>
>> 73 Art WB9HNJ

>Actually a couple of three foot diameter 50-turn loop gap antennas with
>a small vertical antenna to provide a blanking signal to eliminate the
>directional ambiguity (i.e. is the received signal to the north or south
>of the east-west loop) will work quite well. Direction can be read from
>the CRT face and relative distance can be estimated by signal strength
>[sort of :)]. There is a site however, http://www.boltek.com that has
>a more elegant solution. His system will interface to your PC, record
>and display realtime strikes.

> I'd be curious to know if there are any other methods that anyone has
>tried (that don't require a line item in the national budget or half the
>continent for an antenna farm !).

>Regards,
>Rolf
Also several years ago.
I used a television tuned to channel 2. Seems lightning puts off radio waves
in this regon stronger than any other. Use and outside ant with rotator to
fond direction. Be careful.
joe d in Seabrook,Tx USA K5ZCX

3669. Re: R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <3342867B.162E@vcd.hp.com>
Source record: 95484

jupiter@europa.com wrote:
>
> DDS is a very bad choice for a DC receiver.
>
> I've tried to use several including the discrete DDS using 74AC283's and
> DAC, to a more high-tech one the AD7008.
>
> Both produce a sound resembling someone playing a xylophone at random as
> you are tuning. Generally, only strong stations can be heard and the weak
> ones according to Murphy's law are buried under spurs.
>
> The only way to get rid of the spurs is to use a PLL to clean it up, or use
> the DDS as the reference for a PLL, like the Rohdes hybrid DDS/PLL ckt. I
> have built one and it is very clean.
>
> I've also tried to use DDS as VFO for my Drake R4-C. Same problems as in
> the DC receiver.
>
> Good luck,
>
> Rob.

Hi Rob, OM,

I am surprised that you were unable to use a DDS source for either the
R2 or as Drake R4-C L.O. Are you sure you had the DDS circuit well
isolated from the mixer you were driving? I am assuming you had the
R4-C well separated from the DDS, no commong power supplies that were
not well decoupled, DDS output fed via coax, etc. I am building a DDS
for my recently completed R2 receiver here. From looking at the
spectral output of the DDS, I cannot see how it should result in the
symptoms you describe, but I could be wrong, as I have not actually
tried it yet. Were your problems the result of close-in spurs or
wideband ones? The specs on the AD7008 show spurs >50 dB down, if the
output frequency is < 1/3 of Fclock (1/3 of 50 MHz). Also, there have
been other builders (QST article on the "digibrain" VFO), who have had
no problems using them as an LO source for a receiver, such as the
Kenwood TS820.
I am sincerely interested in understanding your bad experience in
using a DDS chip as an LO in the R2.

73,

Don, W6JL
HP-Vancouver, Camas, Wash.

3670. Re: QSK modification for SB-230 Heathkit???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <33428A00.2866@vcd.hp.com>
Source record: 95485

Jack Kovar KE0AX wrote:
>
> I would like to try to make a couple of Kilovac Vacuum tube relays
>
> into a QSK circuit for my SB-230 Amp.
>
> I would like to use TEN-TEC concept of two control wires from
>
> tranceiver to sense hot switching.
>
> I have read Measure's conversion of 922 and sb220 and Don't have
>
> a clue on use of two control wire system.
>
> I looked a TEN-TEC TITAN schmematic and was overwhelmed by complexity.
>
> ANY HELPFUL HINTS TO GET ME GOING IN CORRECT DIRECTION?
>
> Thanks for possible interest in helping.
>
> Jack Kovar
> K0VAR

Hi Jack OM,

You didn't say why you wanted QSK. Is it for true QSK CW operation, or for AMTOR/PACTOR operation? I am not familiar with the SB-230, but I have been running my SB-220 for several years with stock t/r switching on TOR, and it works fine, driven by TS820. Both rigs use relay switching, of course. I have measured the t/r switching time on the SB-220 and it switches from r to t in < 9 milliseconds, plenty fast enough for TOR. It runs QSK on CW OK at 35 wpm also. Yes, you can sure hear the relays clacking, but otherwise, no sweat. Have you actually tried using your SB-230 as-is?

73,
Don, W6JL
Camas, Wash.

>
>

3671. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr2.190027.1994@ke4zv.atl.ga.us>
Source record: 95486
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

In article <3341499C.632C@sullivan.vf.mmc.com> @sullivan.vf.mmc.com writes:
>
>Personally, I can't financially support ANY organization that insists
>on using inferior product. I am speaking about the Ariane 5 launch
>vehicle. The first one blew up, and the others that had space on
>the second launch pulled-out. One would think that Amsat would have
>learned over the years that the ESA does not have the world's best
>reliability for launch vehicles (anybody remember the early Oscars?
>The ones that were lost because the launch vehicle - Ariane - went
>into submarine mode?). I know where of I speak, having worked in
>the satellite business (RCA and it's successors) for the last 13+
>years. When they see the light and use another launch vehicle, THEN
>I'll support them (Amsat).
>Jack

Well gee, Jack, if you're willing to pay the difference in launch costs, AMSAT will be happy to use a different launch supplier. But realize that ESA has only had one launch failure with an AMSAT satellite on board, that was P3A, and our ride was *free* on that one because it was a developmental flight. ESA has given amateurs a free (or very reduced cost) ride up until now, as a piggyback payload, and they're only charging $100,000 for the P3D solo launch to GTO. If you know of another launch supplier who'll give us a ride to GTO for $90 a pound, lets hear about it.

The Chinese Long March (which doesn't have a sterling success record) costs 10x as much. Atlas II is even more (and has had failures too). Titan holds the all time record for longest launch delay, 1000 days sitting on the pad before it was ready to go, and Titans have blown up too, and cost even more than an Atlas II launch. And Shuttle is over $20,000 a pound, can't even reach GTO, and has had a spectacular failure of its own. The Russians recently had a blown launch too. Now Proton is about the most reliable launcher in the world, but guess what a GTO flight costs using it? It's quite a bit more than a Long March.

ESA gives amateurs a very cheap ride (way below their cost). The tradeoff for that has been some launch delays, and one launch failure, because we get all the new developmental launches at that price. That's a good tradeoff. We couldn't afford to launch on Atlas, or Titan, or even Proton.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems

Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

3672. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr2.182555.1723@ke4zv.atl.ga.us>
Source record: 95487
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

In article <33411815.C69@sonalysts.com> Al Gerheim <gerheim@sonalysts.com> writes:
>Vince Fiscus, KB7ADL wrote:
>>
>> Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D
>> satellite. Your donations are tax deductable. See http://www.amsat.org
>>
>
>I have never worked an AMSAT satellite because the gear required costs
>too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
>a bird I can use, I won't be cheap.

Huh? You can work the microsats with a dualbander, even in some cases
a HT dualbander. If you don't have either of those, a $50 80 watt GE
Exec II or 110 watt Mastr II can make a dandy UHF uplink transmitter.
Use the temperature compensation input of the Icom for doppler tracking
and/or VXO. You've already got the 2m gear apparently if you're working
the mode A birds. Or you can certainly use one of the converter circuits
in the various Handbooks to translate receive down to the HF receiver
you've got to have to work mode A. Antennas are merely a matter of a
wooden 2x2 boom and some aluminum clothesline wire for elements.

If you can't get on the microsats or mode B birds for under $100, you
aren't trying.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

3673. Wanted: technical help for micro-radio station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: Mike Dash <dash@primus.com>
Message-ID: <3342EC24.69E9@primus.com>
Source record: 95488
Cross-posted to: alt.radio.pirate,rec.radio.amateur.misc,rec.radio.shortwave,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.shortwave

We are looking for an RF engineer to help us start a micro-radio FM station in Seattle. The station will cover a range of things including news, music and spoken word. We have a motivated, energetic group of people. We have a fair amount of equipment. But we don't have a working transmitter, and that's where you come in.

So far we have two transmitters on hand. But neither one is putting out clean signals, so we're up against a wall. We need help from someone who knows RF design and troubleshooting. Current FM broadcasting technical practice is a big plus. If you have access to test equipment, that would help too. Our technical expertise is actually quite good and we've gotten pretty far ourselves -- now we just need your help to get us over the top.

If you think you can help, please contact cameron at 206-729-8409 or email slr@scn.org.

3674. Heathkit Weather Station ID4001

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: jginnat@uswnvg.com
Message-ID: <860030198.2657@dejanews.com>
Source record: 95489

Does anyone have the computer interface for this weather station. In the manuals there are some instructions to connect to the microprocessor to gather data. It appears to be a parallel interface but I have been unable to locate any information on this connection. Also is this the same interface as the ID5001 weather station.

Thank You

Jeri Ginnaty e-mail jginnat@uswnvg.com
Issaquah, WA

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

3675. PA Tube Chimney - Available at K-Mart

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: "Tom V. Pfaffenbach" <tvpfaffe@mail.delcoelect.com>
Message-ID: <3342B494.6A59@mail.delcoelect.com>
Source record: 95490

K-mart has replacement PYREX lenses for Coleman Gasoline Camping
Lanterns
that also fit the bill rather nicely!

73 de K9JDU

3676. Re: Schematic capture program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970402204100.PAA27156@ladder01.news.aol.com>
Source record: 95491

I am using Ivex WinDraft with great results; using an Epson
Pro inkjet my output is good enough for magazine work.
I am using the 350 pin registered version of WinDraft and
WinBoard. You can download the shareware 100-pin programs
from WWW.Ivex.com

Peter
Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

3677. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5hucvc$lqt@hpscit.sc.hp.com>
Source record: 95492

In article <33440d2b.3747898@news.erols.com>,
Jake Brodsky <frussle@erols.com> wrote:
>On Sun, 30 Mar 1997 04:11:13 +0100, schultz@cddis.gsfc.nasa.gov (Dan
>Schultz) wrote:
>
>>In article <5h3qs3$mou@camel4.mindspring.com>, aruder@pipeline.com wrote:
>>
>>> >I have discovered a way to xmit music over a
>>> >bandspread of =< 100 Hz. Note that is Hertz
>>> >not KiloHertz.
>>>
>>
>>
>Dan, he may very well be able to do just what he says. What he didn't
>say is how much Signal to Noise ratio he'll need to get it to work!
>
>You can phase modulate a signal to such a small degree that the
>carrier barely wiggles. And you can use that modulation index to put
>all kinds of bandwidth on the air. The problem is that unless you
>have a very substantial SNR, this system will sound inferior to a

If you barely phase modulate, you simply have NBFM or NBPM, which
as we all know, occupy the same bandwidth as AM, no matter how
small the deviation.

Regarding SNR, if you assume 90 dB. SNR, the Shannon limit is
something like 3,000 bits per second.

Usually when one sees these claims, the validity of the claim
hinges on accepting some non-standard definition of "bandwidth".
For example, the narrow FM scheme "works" if you define bandwidth
as the band in which 99% of the energy lies (or pick any other
%). You can always satisfy this criterion if you use narrow
enough deviation, and you have the SNR to get away with it.
Other claims of this nature depend on using spread spectrum
techniques to "borrow" spectrum from some other service, in
which case the inventor says that spectrum doesn't "count".

So I would encourage the inventor to rephrase his claim in
rigorous language, defining what he means by occupied bandwidth,
what post-demoduation SNR and bandwidth constitutes listenable
music, and what assumptions he is making about the "channel"
over which this communication is taking place. For all I
know, he is going to send the "music" as MIDI data to be
reconstructed at the other end. I wouldn't be surprised if

you could connect a piano roll to a player piano over a link
that would fit into 100 Hz. bandwidth. Does this constitute
"sending music over a 100 Hz. BW"?

After a while, one starts to approach these claims like one
evaluates a "bar bet", where semantics are everything. Also,
regarding the Shannon limit, if you had actually read and
understood Shannon's paper, "The Mathematical Theory of Communication"
you might be less inclined to just blow it off, as
you seem to be doing. It really is an airtight proof.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

3678. Re: yaesu ft900 mods

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <3343370B.55B8@rollanet.org>
Source record: 95493
Cross-posted to: aus.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Richard LANDRAUD F1ULK wrote:
>
> I am looking for mods to extend tx/rx of my ft900 ?

slide the top cover/heat sink towards the rear to expose the CNTL-1
unit.
locate test points TP3001 & TP3002 on the CNTL board [top/center of the
board]
connect a temporary jumper between TP3001 & TP3002 [alligator clip
works]
reconnect power. press and hold [proc] & [att] & [ipo] & [nb] & turn
power on
release the four keys
display shows "off". turn the vfo dial until display shows "on"
press [proc] to store new rf/tx range
remove jumper from test points
--
A.C.Curtis
KB0WLF
Pres DCARC Salem, MO http://www.rollanet.org/~jack/
mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3679. high voltage xfrmr ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: ed finn <ed.finn@ustc.vlsi.com>
Message-ID: <3342A677.7F10@ustc.vlsi.com>
Source record: 95494

Hello,

Is anyone out there aware of a good source for a ~2kv .5A transformer
110v primary?

thanks in advance,
Ed
--

Ed Finn VLSI Technology Inc.
Princeton Technology Center
Phone: (609)799-5700 x32 311C Enterprise Dr.
FAX: (609)799-5720 Plainsboro NJ 08536-3344
Email: ed.finn@ustc.vlsi.com VAXmail: ed@osprey

3680. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5hupbq$liv@rosenews.rose.hp.com>
Source record: 95495

Claudio Fornaro (fornaro@athena.polito.it) wrote:
: Hi all,
: I'd want to build a "home made" radio receiver for AM (or even SW...) by
: putting
: together pieces that can be found at home, that is you have not to buy
: them in an
: electronic shop.
: To explain better: I intend to build capacitors (maybe with alluminium
: sheets and
: plastic bags), inductors (copper wire), the crystal is a problem... one
: usually
: has no galena crystal at home... the loudspeaker maybe is a bigger
: one...
: Has anyone ever seen such a project made or has s/he any idea about
: building it?
: Thanks in advance.

If you want to keep the materials under the category of 'stuff around
the house', you can try using the razor blade and needle technique
of providing detection.

This is the infamous 'GI foxhole radio' that soldiers used to
put together to detect AM during the WWII.

I dont have the specifics, but articles on these are relatively
common, I have seen lots over the years. Everything is basically
the same as a crystal radio except that the razor and pin are
used instead of the galena or diode.

Good luck!

3681. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-02 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5htepp$cvg@news.Hawaii.Edu>
Source record: 95496
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Note: Rec.radio.swap and .shortwave removed from header.

-=Tony=- <anthonys@ix.netcom.com> wrote:
>
> Thank you, Richard! It's really tragic that some have not looked
>into how well the ORIGINAL BA List works. It's free to all comers
>for a mimimum of 4-weeks inspection.

Actually, the one you speak of is the third BA list. The "original" one was at gnu.mit.edu.

> What's more tragic is that the list owner at tempe.gov chose to
>plagerize the name of BoatAnchors thereby impugning the BA Newsgroup as
>well.

"Boatanchors" is a generic term that dates back to at least the 50s. Hams and ham magazines have used it now for decades. That was the basis of our arguments for the creation of the BA *newsgroup* name, when those who fought against such a name said it's not widely recognized.

>We know this latter was a much careful and laborious contruct to offer
>a free avenue for those who preferred not to pay a trivial membership
>fee.

Think of it this way: With two BA lists and a NG (and now Collins and Heath lists, too) a greater number of hams who are interested in equip-ment of past decades can be reached.

> No one even in the commercial would attempt such a back-stabbing
>maneuver. Ethics are important to MOST folks.

What do you feel was done that is unethical? Choice of name? The name is generic. Free venue? It gives those who've left over the past 12 months another forum to participate in, and brought in new folks who had never sub'd to the paid list (the latter equates to more of the older equipment (and tubes) being saved rather than being dumped into landfills!).

Jeff KH2PZ

3682. QRP amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: "Robert F.Haas" <rfhaas@sunlink.net>
Message-ID: <33435B32.3971@sunlink.net>
Source record: 95349

Can anyone point me to a schematic anywhere on the web for a 10 to 20
watt amplifier for a 1 watt 40 meter QRP rig?
Tnx.

3683. Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: archer@netgate.net
Message-ID: <334368ce.95973964@nntp.netgate.net>
Source record: 95350
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

I've designed a really quiet three-stage GaAsFET pre-amp for an active antenna, and it works very nicely with a 6" whip on the West Coast as long as I shut down both of my PCs and all fans/motors. (Those little MRF966 GaAsFET puppies are almost $5 each, but they sure bring the signal up without adding noise...) I haven't measured the gain of the

thing because I don't have the equipment, but it nicely hot. Nonetheless, it's aggravating to be plagued with RFI.

I'm told that this sort of interference is short-range, and that the best solution is to put the active antenna outside and up above the noise sources. Okay, this sounds like good advice, but it brings up a lot of questions:

1. Should I put the amplifier up with the antenna? If I do this it might be hard to control the gain remotely, and presents some weatherproofing (static-proofing?) difficulties, but then I won't have to worry about losing signal in the coax lead-in. Also, I don't have to worry about super-shielding the amp if it's away from the local noise?

2. I need some sort of an AM filter to keep from overloading the preamp. Should that go in front of the first stage, or after a stage or two, or should it be at the receiver (I'm worried maybe the coax will pick the AM back up even if I'm very careful to filter it at the antenna or antenna amplifier, or am I being paranoid?)

3. Would a hybrid approach be worthwhile? I'm thinking of putting maybe 1 or 2 stages of fixed-gain amplifiers at the antenna (enough to compensate for the coax lost worst-case and then some but not enough to ever overload -- because it's irritating to have to climb on the roof to switch on an attenuator -- hehe) and then have a "box" at the receiver end with the remaining stage(s) with adjustable gain and filter.

Design goal is top performance without being overly difficult to build, so that others can play with the design and not spend over (say) $200 and a weekend of assembly for everything. So I want to avoid fancy relay/remote gain control/microprocessor-control/remote tuning assemblies.

I'm willing to share the schematics, experience gained, etc. with the group on the theory (and I may
be completely wrong about this) that a no-compromise design will exceed almost anything you can buy store-bought, or at least

anything store-bought that I can afford! ;)

Any radio engineers out there with advice on this?

3684. Re: QSK modification for SB-230 Heathkit???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R0304970130340001@news.vcnet.com>
Source record: 95351

In article <5ht69t$h28@hera.ia.net>, kovar@zeus.ia.net (Jack Kovar KE0AX) wrote:

> I would like to try to make a couple of Kilovac Vacuum tube relays
>
> into a QSK circuit for my SB-230 Amp.
>
> I would like to use TEN-TEC concept of two control wires from
>
> tranceiver to sense hot switching.
>
> I have read Measure's conversion of 922 and sb220 and Don't have
>
> a clue on use of two control wire system.

Why try to figure out how to use a two control wire system on a one control wire system that operates in under 2mS? If something works, why fix it? A two millisecond amplifier is faster than any radio currently on the market.

Why use two HC1 vacuum relays when you need only one plus a Matsushita RF reed relay that costs $10, makes or breaks in under one millisecond, and is acoustically quite a bit quieter?

--
--Rich-- --, ag6k-805-386-3734

3685. FS: Parts & rigs etc. !!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5i078d$89d@news1.mnsinc.com>
Source record: 95352
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

PARTS!!!

RIGS!!!

Many for sale or trade!- see my list of Buy/Sell items
at:

http://www.mnsinc.com/bry/

Drop me a note on what you need if it is on my list!

Bry, AF4K

3686. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3343C8BB.755@crpl.cedar-rapids.lib.ia.us>
Source record: 95353

Richard Karlquist wrote:
>
> In article <33440d2b.3747898@news.erols.com>,
> Jake Brodsky <frussle@erols.com> wrote:
>
> >>In article <5h3qs3$mou@camel4.mindspring.com>, aruder@pipeline.com wrote:
> >>
> >>> >I have discovered a way to xmit music over a
> >>> >bandspread of =< 100 Hz. Note that is Hertz
> >>> >not KiloHertz.
>
> >Dan, he may very well be able to do just what he says. What he didn't
> >say is how much Signal to Noise ratio he'll need to get it to work!
> >

> So I would encourage the inventor to rephrase his claim in
> rigorous language, defining what he means by occupied bandwidth,
> what post-demoduation SNR and bandwidth constitutes listenable
> music, and what assumptions he is making about the "channel"
> over which this communication is taking place.

It is not necesaary to transmit in real time. If the music is digitized
and sent as a very slow data stream using MSK or QAM, etc, the bandwidth
and the SNR can be anything we like.

But it may take awhile to play the Star Spangled Banner and the audience
may get bored amd leave early.

Bill W0IYH

3687. Re: Static Cling and DX-390

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: timbo <tim_raffety@oxy.com>
Message-ID: <3343AACC.46D@oxy.com>
Source record: 95354

Leon Heller wrote:
>
> In article <333fdbb4.914061@news.erols.com>, Bill Meara
> <wmeara@erols.com> writes
> >Somehow most of this message got dumped in the bit bucket: Let me try
> >again:
> >
> >Last week I was happily listeining to my Radio Shack DX-390 receiver
> >while simultaneously performing some routine laundry tasks (sorting
> >recently dried clothes). I noticed that while separating a couple of
> >wool shirts, lots of static elecricity was unleashed. The receiver
> >crackled appropriately, but I dodn't think much of it... until I
> >later noticed that the radio's front end appears to have died in the
> >process! Sensistivity WAY down on all bands. Only the strongest
> >Broadcast stations get through.
> >
> >My guess is that the electrostatic charge took out the front end
> >transistors. RS didn't provide a scematic, but I see Q1 is marked
> >3K152 32E:
> >
> >Any tips on fixing this thing? Anyone heard of similar static
> >problems? This never happened with my Hammarlund HQ-100!!!!!!

Always used Bounce on my SW rig while doing domestic work like that. just take about three or four Bounce sheets, rub the entire outside of the radio and antenna. If you have your antenna up on a tower, clinb the tower and rub the antenna down really well. Do the feed line and the whole tower and the ground system. Now the key to it all. Take the SW radio completely apart and rub the sheets all over the insides - even the batteries! This, you will see, works wonders on static cling. I have stuffed every thing I have over here with Bounce sheets and I would never go back to using Downey again. Bounce works best, period!

3688. Re: Schematic capture program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: the2x4@aol.com
Message-ID: <19970403160801.LAA27858@ladder01.news.aol.com>
Source record: 95355

The original post should have explained
"Schematic Capture".

I am sure the poster wants a program
to automaticaly produce a PCBoard layout from a
schematic.

The2x4

3689. UTC S47 Transformer specs?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: landisj@nad.com
Message-ID: <1997Apr3.103408.698@main03>
Source record: 95356
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi all,
I've been running a parallel 4cx250 amp using an old UTC S47 transformer in full wave ct producing a little over 2kv with a cap input filter. Was wondering what kind of current this transformer is rated at. I'm not pushing it that hard - yet and it seems to be holding it's own but I'd like to know before I try to really push the amp in NEW-GRID! mode :)

Thanks and 73,
Joe AA3GN
landisj@nad.com - speaking only for myself, of course

3690. Microwave Components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: w9sz@prairienet.org
Message-ID: <5i0f6f$j7m@vixen.cso.uiuc.edu>
Source record: 95357

Does anybody know for sure what happened to Microwave Components of Michigan? I have tried calling Norm for a couple months with no answer. Now it seems the number is disconected.

I have heard a couple rumors but I wondered if anyone knows.

Zack W9SZ

--

3691. Heath Mailing List?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: don.phelps@infoway.com
Message-ID: <860085829@infoway.com>
Source record: 95358

Je> -=Tony=- <anthonys@ix.netcom.com> wrote:
>
Je> Think of it this way: With two BA lists and a NG (and now Collins and
Je> Heath lists, too) a greater number of hams who are interested in
Je> equip- ment of past decades can be reached.

OK, so how do I subscribe to the Heath list?

73, Don N6MCE

... Don.Phelps@Infoway.com 1:125/104 POBox 9739 San Rafael,CA 94912
___ Blue Wave/386 v2.30 [NR]

3692. Re: lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <334104a4.1969555@news5.inter.NL.net>
Source record: 95359

eyesonly@globalxs.nl (rinus nienhuis) wrote:

>dear all, my name is rinus nienhuis and i live inthe netherlands-does
>anyone know how to build a lightning detector,one that really works
>ONLYonly on lightning ,one that gives a signal when detecting
>lightning
>if so, is it possible to send me a schedule or a idea
>thank you very much for your help
>
Hallo Rienus, ik ben er ook in ge-interesseerd. Als je iets hebt, wil je
me dat dan door sturen ?
Ik heb wel een heel epistel, maar dat is in het technisch Frans, zodat
ik er niet veel wijs uit kan worden, maar dat behandelt het onweer
detecteren van A tot Z.
Ik zal dat opzoeken en eveneens naar je sturen.
73 de Bart PA3GGM.

3693. Re: QRP amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <3343E9CB.5B87@vcd.hp.com>
Source record: 95360

Robert F.Haas wrote:
>
> Can anyone point me to a schematic anywhere on the web for a 10 to 20
> watt amplifier for a 1 watt 40 meter QRP rig?
> Tnx.

Robert OM,

See any of Doug Demaw's books or articles. There are dozens of designs
for low power amps using bipolar and mosfet devices. I have found
books to be of more use than looking for a specific schematic file
on the WWW. Your local library may also have ARRL handbooks, which
will contain at least one design you are looking for. You want
a complete explanation of the theory of operation, mechanical
arrangement, etc, as well as supporting design and operation description
text. In my experience, if you just try to duplicate a design from a
schematic only, your chances of success are greatly diminished.

73 and GL,

Don W6JL

3694. Trade or Buy OSCILLOSCOPE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: cwonders4@aol.com
Message-ID: <19970403180500.NAA04309@ladder01.news.aol.com>
Source record: 95361

Would love to trade it for QRP equipment and/or
other measuring instruments.

Got two SS5702 Jiwatsu,
Dual Trace,
DC-20MHz,
4" X 3" blue display,
Backlit graticule,
20 V to 1mV settings,
with calibrate settings,
bought used, works fine,
nice.

If no trade then I would like to get $200.00 for one of them.

If you would like to make a reasonable offer
reply via email only, stiwari@cwonders.com

Tnx
KF6HST
Sameer

3695. Solar Panels

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: cwonders4@aol.com
Message-ID: <19970403182900.NAA05584@ladder01.news.aol.com>
Source record: 95362

I also have a whole bunch of Solar Panels which
I wanna get rid off.

12v 4W Amorphous Silicon, 12" X 12", very light.

Price - $60, you pay shipping.

Reply via email only to stiwari@cwonders.com

KF6HST
Sameer

3696. Re: QSK modification for SB-230 Heathkit???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: Bob Morris K2RK <robrk@fyi.net>
Message-ID: <3343FE60.3746@fyi.net>
Source record: 95363

R. L. Measures wrote:
>
> In article <5ht69t$h28@hera.ia.net>, kovar@zeus.ia.net (Jack Kovar KE0AX)
> wrote:
>
> > I would like to try to make a couple of Kilovac Vacuum tube relays
> >
> > into a QSK circuit for my SB-230 Amp.
> >
> > I would like to use TEN-TEC concept of two control wires from
> >
> > tranceiver to sense hot switching.
> >
> > I have read Measure's conversion of 922 and sb220 and Don't have
> >
> > a clue on use of two control wire system.
>
> Why try to figure out how to use a two control wire system on a one control
> wire system that operates in under 2mS? If something works, why fix it? A
> two millisecond amplifier is faster than any radio currently on the market.
>
> Why use two HC1 vacuum relays when you need only one plus a Matsushita RF
> reed relay that costs $10, makes or breaks in under one millisecond, and is
> acoustically quite a bit quieter?
>
> --
> --Rich-- --, ag6k-805-386-3734

Rich,
What's the part number of the Matsushita RF reed relay ?
My little brain is to lazy to work it out,that you problably know
off hand....What speed relay is needed for QSK up near 40wpm ? Or a
better question, would be the total "circuit" speed needed, input,
bias, output ?

Thanks, Bob

3697. Re: Schematic capture program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000304971157220001@news.europa.com>
Source record: 95364

As I said to someone else, if you go to Microsim's website and fill out a simple form, they will send you a free CD with a circuit size limited version of their entire development suite.

I use the schematic capture and PSpice and parametric optimization for crystal filter design.

I haven't tried the autorouter and other pc board stuff, yet.

As long as you are aren't designing something with 100 IC's and transistors, it will probably work for you.

Rob.

3698. Re: Wanted: technical help for micro-radio station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: rickets@earthlink.net
Message-ID: <33440ca9.14157410@news.earthlink.net>
Source record: 95365
Cross-posted to: alt.radio.pirate,rec.radio.amateur.misc,rec.radio.shortwave,sci.electronics.repair,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.shortwave

On Wed, 02 Apr 1997 15:30:45 -0800, Mike Dash <dash@primus.com> wrote:
> We need help from someone who
>knows RF design and troubleshooting. Current FM broadcasting technical
>practice is a big plus. If you have access to test equipment, that would
>help too. Our technical expertise is actually quite good and we've
>gotten pretty far ourselves -- now we just need your help to get us over
>the top.
Try <alt.radio.pirate>
dr

3699. BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <334448EF.4EB9@concentric.net>
Source record: 95366
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Ross Archer wrote:
>
> I've designed a really quiet three-stage GaAsFET pre-amp for an active
> antenna, and it works very nicely with a 6" whip on the West Coast as
> long as I shut down both of my PCs and all fans/motors. (Those little
> MRF966 GaAsFET puppies are almost $5 each, but they sure bring the
> signal up without adding noise...)

GaAsFETs are primarily used for extremely high frequency, low
signal amplification projects. By extremely high frequency, I mean GHz
not Mhz. GaAs FETs certainly have low injection or "shot" noise, and
should work fantastic for this application albeit a bit overkill. :)
Most RF amps use JFETs for the initial gain stage, Bipolars for the rest.

> I haven't measured the gain of the
>
> thing because I don't have the equipment, but it nicely hot.
> Nonetheless, it's aggravating to be plagued with RFI.

Amplify the signal, means amplify the noise as well. :) There
is a way around this, have you ever thought about designing a purely
MAGNETIC influence antenna? Some hams from years past have played around
with these designs, nothing more than a VERY large ferrite rod, wrapped
with a faraday shield to eliminate the electrical component, followed by
a shielded amplifier and delivery system (coax). These types of antennas
are very directional however, but this can be an advantage if you are
trying to pick a weak signal out of a stronger one. Since this type of
antenna only receives the magnetic field of the transmitting station,
and rejects all electrostatic fields, noise is GREATLY reduced. Imagine
SW with the clarity of local AM broadcasts! Now you see what I am
talking about here! I'm suprised nobody is marketing this type of
antenna today! For example, when you use this type of antenna, that
60Hz buzz from your neighbors TV disappears. Power transformer noise
also is greatly reduced if not completely eliminated. Lights with
dimmers that used to make terrible buzz when they come on would now
only produce the turn-on pop. The design is simple, wind a resonant
tank (inductor and variable capacitor) onto a very large, high Q ferrite
rod, shield in chicken wire, mount in a movable base (very directional,
so you need to move it to pick up different stations), connect to a
standard RF amp design, which is mounted inside the case, and you're
there! The most expensive part is the large hi-Q ferrite rod.......sq

(if there would be a market for such a device, I might design a version that would be "for consumer use" and put it out for sale. Sorry, Mr. TinyTenna, don't mean to horn in on your busines, but.....)

3700. WTB: PLATE MODULATION IRON (TRANS.)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19970403223700.RAA20946@ladder01.news.aol.com>
Source record: 95367

Hi; I'm looking for a modulation transformer for a kw AM rig.
My pref. is for multi-tap. The rig runs pr. of 813 @ 2150vdc with
load imp. of about 4500 ohms. Modulators are 813's at p to p imp. of
17,000 ohms. Trans should have approx. 2:1 turns ratio. If you have
anything
close will consider changes to meet transformer. Call (540) 972-9628 or
e-mail N4MXF@aol.com. TNX and 73; Bill (N4MXF)

3701. Turning off amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: Tom Taylor <ttaylor@adobe.com>
Message-ID: <33443CE7.6F0C@adobe.com>
Source record: 95368

A couple of years ago I built a homebrew dual 4-400A amp based on some plans from the 1978 (approximately) ARRL Handbook. I use the amp fairly often and it seems to work pretty well.

The amp has four staged switches for turning the various parts of the amp on in an orderly manner: fan, filament, high voltage, operate. When I turn the amp off, I turn each stage off in reverse order. After I turn off the HV, it takes a little while to bleed off the HV from 3200v down to 0v. I usually wait until the HV is zero before turning off the filaments. Is this wait necessary? Can a 4-400 be damaged from HV on the plate with no filament heating?

Thanks,
Tom Taylor N7TM

3702. Re: R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000304971657380001@news.europa.com>
Source record: 95369

In article <3342867B.162E@vcd.hp.com>, Don W6JL <donh@vcd.hp.com> wrote:

:Hi Rob, OM,
:
: I am surprised that you were unable to use a DDS source for either the
:R2 or as Drake R4-C L.O. Are you sure you had the DDS circuit well
:isolated from the mixer you were driving? I am assuming you had the
:R4-C well separated from the DDS, no commong power supplies that were
:not well decoupled, DDS output fed via coax, etc. I am building a DDS
:for my recently completed R2 receiver here. From looking at the
:spectral output of the DDS, I cannot see how it should result in the
:symptoms you describe, but I could be wrong, as I have not actually
:tried it yet.

Assume your DC receiver's MDS is -130dbm. Assume that you use an RF amp
with just enough gain to offset other losses, maybe 8db.

Now you have a mixer being fed with LO with close-in spurs -70db down from
a 1v DAC output. Injecting the spur at the LO port of the mixer is the
same as injecting a similar spur on the RF IN port at the rf input freq.

So its equivalent to a "spur generator" hooked up to the antenna with spur
levels at -70db from 1v. So your spurs are huge compared to any signal
input.
Even if your spurs were -100db down, youd still have problems.

Thats why no ham equipment manufacturers use DDS, except as an elaborate
part of some hybrid scheme using PLL's.

Rob.

3703. Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: rickets@earthlink.net
Message-ID: <33440ec2.14694154@news.earthlink.net>
Source record: 95370
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Thu, 03 Apr 1997 08:54:42 GMT, archer@netgate.net (Ross Archer)
wrote:

>1. Should I put the amplifier up with the antenna?
Yes. The combined length of antenna + transmission line must be less
than 1/4 wave at highest frequency of interest.
>2. I need some sort of an AM filter to keep from overloading the
>preamp.
Preamp? Which pre-amp?
>3. Would a hybrid approach be worthwhile? I'm thinking of putting
>maybe 1 or 2 stages of fixed-gain amplifiers at the antenna (enough to
>compensate for the coax lost worst-case and then some but not enough
>to ever overload -- because it's irritating to have to climb on the
>roof to switch on an attenuator -- hehe) and then have a "box" at the
>receiver end with the remaining stage(s) with adjustable gain and
There are remote controllable co-ax switches available.
dr

3704. Homemade External VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: David McKain <mckain@cemr.wvu.edu>
Message-ID: <3343B5C4.7349@cemr.wvu.edu>
Source record: 95371

A friend of mine is proposing to me that I can build an external VFO for
my Kenwood TS-520S.
I was interested since the current VFO doesn't seem to stay stable
(spring tension, warmup) and,
unlike most of the newer HF rigs, my radio is not a general coverage
reciever (1.8,3.5,7,14,21,28,28.5,29.1) +600KHz.
The chip that he suggested is only about $20 and will oscillate from 0
to 40MHz with a sensitivity of
less than 0.006Hz. I would use an RS-232 port to control the chip and
write a small software program
to operate as the VFO controller.

Has anyone had any experience trying to do this?
Any suggestions would be appreciated (except to by another rig)

73
KC8GGV
Dave

3705. Re: Homemade External VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5i1r0k$2uj@mtinsc04.worldnet.att.net>
Source record: 95372

What is the chip number? Sounds like a PLL, not (an analog) VFO. BTW,
do you mean stability rather than sensitivity? - Woody

David McKain wrote:
>
> A friend of mine is proposing to me that I can build an external VFO for
> my Kenwood TS-520S.
> I was interested since the current VFO doesn't seem to stay stable
> (spring tension, warmup) and,
> unlike most of the newer HF rigs, my radio is not a general coverage
> reciever (1.8,3.5,7,14,21,28,28.5,29.1) +600KHz.
> The chip that he suggested is only about $20 and will oscillate from 0
> to 40MHz with a sensitivity of
> less than 0.006Hz. I would use an RS-232 port to control the chip and
> write a small software program
> to operate as the VFO controller.
>
> Has anyone had any experience trying to do this?
> Any suggestions would be appreciated (except to by another rig)
>
> 73
> KC8GGV
> Dave

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3706. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: Dan Cox <village1@lightspeed.net>
Message-ID: <334423C4.615D@lightspeed.net>
Source record: 95373

John Lockhart wrote:

I bought some surplus 470 uF 450 VDC Rubycon electrolytic
capacitors recently and have a couple of questions on using
them.

I don't see a vent hole/plug - do they vent up ("blow their top)
or down?

I'm amazed at their small size (about 1 3/4" H by 1 1/4" Diam).
Is this a typical package size for 470 uF at 450 V nowadays??
(want to leave room for replacement in future)

Thanks for your help. I don't want to build them into a project/
repair incorrectly.

73,

John W0DC

The radial caps often lack a venting hole and as far as the size is
concerned that doesn't sound right at all!
I just replaced some caps in an old receiver using 47 mike at 450 and
they were are inch and a 1/4 diameter and inch and a half long or more.
They were pretty fat. That was just for a 47!

3707. Re: R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: rohrwerk@pcOnline.com
Message-ID: <rohrwerk-0304970757430001@tsc-p14.pconline.com>
Source record: 95374

In article <33401F37.3D6A@vcd.hp.com>, Don W6JL <donh@vcd.hp.com> wrote:

> Hello Homebrewers,
>
> I have recently completed a version of the R2 receiver. I am very
> impressed with its performance. Using hand-matched (to 1%) components
> in each channel of the audio diplexers and phase shifters, I am getting
> 50 dB of opposite sideband supression over the audio bandpass of

Welcome to the club!

> as-is. The audio is the best sounding I have ever heard from any
> receiver. I have designed a 500 Hz 7-pole ellyptic LPF for CW and FSK
> use.

Sweetest sound on earth. Let me know your filter design when you're done.

> I too am working on a DDS VFO for my R2. I want to provide wideband
> quadrature (I and Q) outputs, and am thinking of using two AD9830 DDS
> chips for that, one at 0 deg phase, and the other at 90 degrees, running
> off the same clock. I run 2V p-p into the power splitter of my RF phase
> shifter, so I will use wideband feedback type (2N5109) amplifiers at the
> output of each AD9830.

Caveat: For various reasons, the audio phase shifting is not precisely 90 degrees, and it's a bit different in the T2 exciter. Has to do with driving impedance. I have a little paper by Rick following up some of these questions (from the kit supplier, N8ET).

Bottom line: your RF phase shifting has to be tweakable, as much as 91 degrees or so. There are also variations in the mixers, probably more subtle, but still real.

> Noise figure is around 12
> dB.

I take it you read some of the modifications. My original R2 board has been cobbled to include the NE5532 op-amp stage after the preamp, like his later miniR2 and like the Technical Correspondence piece he published later regarding noise figure improvement (I eliminated the emitter follower while I was at it).

> 73,
>
> Don, W6JL

John Seboldt K0JD
http://www.pconline.com/~rohrwerk/k0jd/

3708. Re: R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: rohrwerk@pcOnline.com
Message-ID: <rohrwerk-0304970809040001@tsc-p14.pconline.com>
Source record: 95375

In article <3342867B.162E@vcd.hp.com>, Don W6JL <donh@vcd.hp.com> wrote:

> jupiter@europa.com wrote:
> >
> > The only way to get rid of the spurs is to use a PLL to clean it up, or use
> > the DDS as the reference for a PLL, like the Rohdes hybrid DDS/PLL ckt. I
> > have built one and it is very clean.

> > Good luck,
> >
> > Rob.
>
> Hi Rob, OM,
>

> From looking at the
> spectral output of the DDS, I cannot see how it should result in the
> symptoms you describe, but I could be wrong, as I have not actually
> tried it yet. Were your problems the result of close-in spurs or
> wideband ones? The specs on the AD7008 show spurs >50 dB down, if the
> output frequency is < 1/3 of Fclock (1/3 of 50 MHz). Also, there have
> been other builders (QST article on the "digibrain" VFO), who have had
> no problems using them as an LO source for a receiver, such as the
> Kenwood TS820.

The 820 has a PLL to clean up the VFO, does it not? Same with the QST
DigiVFO -- he put it into a Drake TR7.

Noise is too high also. The DigiVFO article (March 1996 QST) shows noise
only 80 dB down close to the carrier. Too close to the dynamic range of
the mixers.
If it doesn't beat this, it's worse than a good analog VFO. Definitely
need the PLL.

For a receiver, any spur above the noise is problematic. the DigiVFO's
close in spurs were about 55 dB down, the others 70 dB. No good.

>
> 73,
>
> Don, W6JL
> HP-Vancouver, Camas, Wash.

John Seboldt K0JD
http://www.pconline.com/~rohrwerk/k0jd/

3709. BIG transistors F.S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: "Mark C. Olson" <molson@win.bright.net>
Message-ID: <01bc3fe8$8d480080$LocalHost@molson.cray.com>
Source record: 95376
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

Powerex KS621K60 single Darlington transistor module.
600 Amperes / 1000 Volts

Have 4 of these units for sale. New
$300ea. plus shipping (Newark has them for ~$640 ea.)

E-mail for more details
--
==========
molson@win.bright.net
daytime (work) 715-726-8218 voice-mail
night (home) 715-568-5207

Mark Olson N9LTJ
17114-120th Street
Bloomer, WI 54724

3710. High Volt Capacitors F.S.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: "Mark C. Olson" <molson@win.bright.net>
Message-ID: <01bc3fea$fe6106c0$LocalHost@molson.cray.com>
Source record: 95377
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

35 mFd, 2000 Volt DC capacitors for sale
$10 ea. plus shipping. Caps are 6"H x 3 3/4"W x 4 1/2"D, weigh 5.2 lb.
includes mounting brackets
reply to email address below, and include your Zip code to determine
shipping $.

--
==========
molson@win.bright.net
daytime (work) 715-726-8218 voice-mail
night (home) 715-568-5207

Mark Olson N9LTJ
17114-120th Street
Bloomer, WI 54724

3711. Re: Static Cling and DX-390

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5hvi4g$m1u@news.Hawaii.Edu>
Source record: 95378

Leon Heller <leon@lfheller.demon.co.uk> wrote:
><wmeara@erols.com> writes

>>My guess is that the electrostatic charge took out the front end

>The Sony 2001D had this problem sometimes, I believe, when external
>antennas were attached. Static could blow the front-end FET. Sony

A 1K resistor placed between the GND and ANT terminals should
prevent this from happening in the future. If you notice any loss
in sensitivity (you shouldn't with that high of value) use an even
higher valued resistor.

73, Jeff KH2PZ (regularly using a DX-440 rcvr and homebrew xmtr on 40m)

P.S. Looking for a junked DX-400 for parts.

3712. Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19970403014100.UAA17976@ladder01.news.aol.com>
Source record: 95497

For Sale : Henry 3000 D RF Generator , RF deck built at 13.65 MHz
It has : 3CX3000A7 Tube, Socket , Chimney , tuned input
coil , Plate Capacitor w/ Turns counter , Tank Coil S/Plate
Load Capacitor w/ Turns counter , 9 HV Door Knob Caps.
Filament transformer 230 V pri. , 7.5 V at 51 Amps ,
Blower Dayton $ 695.00 as listed.
(512) 267 7385 after 7:00 PM , kb5mer@aol.com

3713. Re: "Satellite Operators Unite!"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-03 00:00:00 UTC
From: fiscus@mcn.net
Message-ID: <5hv35d$170_002@blpm02-210.mcn.net>
Source record: 95498
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.swap

>> Satellite users, Amsat-NA needs donations to complete and launch the Phase 3D
>> satellite. Your donations are tax deductable. See http://www.amsat.org
>>
>
>I have never worked an AMSAT satellite because the gear required costs
>too much. I work only RS-10, RS-12, and RS-15. When AMSAT puts up
>a bird I can use, I won't be cheap.

Al,
If you look at the Phase 3D transponder matrix, you will see that there is a
15m uplink and a 10m downlink. Think of the possiblities...

73 de KB7ADL
Vince

3714. Re: R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000404971149140001@news.europa.com>
Source record: 95249

On a note totally unrelated to DDS's:

I built my own receiver after the Cambell article first came out. It ran 80M to 10M using a helical resonator VHF vfo. :) :) No joke.

I then took the vhf signal and divided it down using 74AC74 and gates as switches. This signal went to the digital Quad generator using two more 74AC74.
Band was selected by a BCD front panel switch.

On 15M I take the 40M signal and triple it. All this sounds complicated, but it did fit into a relatively small box.

I sold the receiver to a friend years ago, and he still claims its his best sounding receiver.

Oh, and also, I used a front panel control for tweeking the phasing, so that good sideband suppression could be obtained on all bands.

Rob.

ps. one thing that definitely helped in building the rcvr was an abundance of mil 1% caps that I put in series parallel or whatever to get the values I needed for the diplexer.

3715. Skywarn site updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: tadunlap@kellnet.com
Message-ID: <334592d6.1226273@207.126.101.82>
Source record: 95250

I've updated my Skywarn page with alot of info and links. Please visit the site and let me know what you think. Any opinions and suggestions would be greatly appreciated. Thanks.

http://www.qsl.net/kc8eds

Todd...
KC8EDS
Net Control / Asst. LFG Coordinator - North Central Ohio Skywarn
tadunlap@kellnet.com
HOMEPAGE: http://www.qsl.net/kc8eds

3716. Re: Antenna Switching Relays

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <334579d9.9395305@news.erols.com>
Source record: 95251

On 29 Mar 1997 19:51:04 GMT, "Dale Martin" <kg5u@hal-pc.org> wrote:

>What's the general consensus regarding the use of relays for switching
>antenna feedlines?
>
>Beyond the power level/handling requirements, are there any particular
>relays that are
>recommended more than others for use at different power levels (QRP,
>100-200w, legal
>limit)? Over the years, I have used all kinds of relays with little regard
>for SWR, losses or
>power; they all seemed to work pretty well--little, if any, SWR change, no
>arc'ing problems,
>etc.. Generally, I use relays inclosed in plastic cases, but otherwise,
>that's pretty much
>the limits of my selection process.
>
>What say?
>
>--
>Dale Martin
>kg5u@hal-pc.org
>http://www.hal-pc.org/~kg5u
****
Dale I have a tuner that has relays in it -- one switches the tuner
in/out. Other relays select three output for different antennas/balun.
The tuner is made in UK and I don't know anything about the relays
except they are quite small - enclosed in plastic and accoding to the
manual good for 3KW peak. They should have little if any effect on
VSWR.

Hope this helps.

73/Jim/AC4CZ

3717. tuning duplexers:how to needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: n1ddzrjc@aol.com
Message-ID: <19970404212700.QAA05301@ladder01.news.aol.com>
Source record: 95252

Hi

Looking for a discussion, or pointers to a reference, that gives a good practical discussion of the ins and outs of tuning duplexers in the VHF and UHF ranges. I'm also interested in test equipment requirements and variations in tuning procedures that may affect results.

Bob Crowley

3718. microwave limiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: Allen Wallace <allen_wallace@powertalk.dtint.com>
Message-ID: <33458786.0@news.itsnet.com>
Source record: 95253

I�m making a microwave pre-scalar which will connect to a frequency counter. The device I�ve chosen is the MC12079 (it�s good to 2.8 Ghz, any other suggestions?). The chip needs an input from -15 dbm to +5 dbm, and anything over 15dbm can destroy the device. Now, I�d like to have a larger dynamic range. How do I limit microwave signals?

I think I would use a cheap ERA-3 MMIC pre-amplier, and even if it goes into saturation, it should drive the pre-scaler just fine. However, the ERA-3 has a Max input of 13 dbm, and I�ve like to limit my signals to avoid burning it out. Just how much power might I throw at it? maybe 30 dbm.

How does one limit microwave signals ranging from -60 dbm to +30 dbm to 0 dbm?

thanks,

Allen Wallace

3719. Re: FM transmitter and FCC approval

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: jgramsey@aol.com
Message-ID: <19970404232301.SAA12769@ladder01.news.aol.com>
Source record: 95254

Back to the original thread:

"Can someone tell me what is the upper limit in watts for use in FM transmitter without FCC approval."

Take a look at the Ramsey Electronics Web Site for a reprint of FCC info regarding this.

www.Ramseyelectronics.com

3720. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: markem@primenet.com
Message-ID: <5i3m52$le2@nnrp1.news.primenet.com>
Source record: 95255
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Has it ever occurred to you that perhaps the free list might have been started just to pull your chains and see what kind of silly comments it provoked? I'll bet the guy who runs it is sitting there laughing his whatever off.

Jeez people...WHO CARES??? Don't you have anything more important to worry about? I've never read such a self-righteous bunch of crap. Get a life.

3721. NII/SUPERNet devices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: "Andrew M. Appel" <aappel@duncan.nac.net>
Message-ID: <3345CE5B.2DDE@duncan.nac.net>
Source record: 95256
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.antenna,sci.electronics.equipment

Have you heard that the FCC has made available 350 megahertz of spectrum
(READ BELOW).

I'm looking for some tech weenies experienced in building homebrew
equipment.
I want to sit down and start developing some wireless LAN equipment
utilizing this newly liberated airspace. I very experienced in the
LAN/WAN technology but I lacking in hands on, hardware design,
experience.

Think of it! A wireless LAN device, cheap to manufacture, that would be
inexpensive enough for every household in America to purchase. Forget
these money grubbing telcos. If we can supply the technology cheap
enough we can build our own wireless Internet and minimize the
dependency on the telcos.

Any takers? Any dreamers? Any entrepreneurs willing to take a chance?

Drop me a line if interested!

-Andy

*****

COMMISSION PROPOSES TO MAKE SPECTRUM AVAILABLE FOR USE
BY NEW UNLICENSED EQUIPMENT;
NII/SUPERNet Devices Would Facilitate Interconnection to NII
(ET Docket No. 96-102)

The Commission has adopted a Notice of Proposed Rule Making to make
available 350 megahertz of spectrum at 5.15 - 5.35 GHz and 5.725 - 5.875
GHz for use by a new category of unlicensed equipment called
NII/SUPERNet devices. The Commission stated the proposed rules would
foster the development of a broad range of new devices, stimulate the
growth of new industries, and promote the ability of U.S. manufacturers
to compete globally by enabling them to develop unlicensed digital
products for the world market.

NII/SUPERNet devices would provide short-range, high-speed wireless
digital information transfer and could support the creation of new
wireless local area networks (LANs) as well as facilitate access to the
National Information Infrastructure without the expense of wiring.
These devices may further the universal service goals of the
Telecommunications Act by offering classrooms, libraries, health care
providers, and other users inexpensive networking alternatives which may

access advanced telecommunications services.

3722. Help: Part specs???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5i3vbe$qdc@news1.mnsinc.com>
Source record: 95257

Can someone help me decide which scheme is best for cathode keying of a typical medium tube power xmtr?

I can use either of three parts to pull this off but I am not sure of their maximum voltage ratings.

TWO of them are small 14-pin DIP relays, and the other is a power transistor, which is type TIP22

The relays are:

GUNTHER
3570 1210 053
07-93 Date code

TELEDYNE
641-1

The voltage I need to be able to switch is typically up to 200V DC or a little more in the un-keyed condition.

The relays are designed for 24 V DC or 120V AC service respectively, but I have no idea what the max ratings would be.

The TIP22 is used to switch 24V DC solenoid valves so I am sure it has plenty of current handling capacity. They typically drive the TIP122 with an iso-optical/darlington device like the 6N139 from HP.

Anyone have any specs on these? Or recommend which I ought to be using between my CMOS keyer's bipolar 2N2222A NPN output transistor and my cathodes of the old 1625s etc. ??

I really don't want to go find a horizontal output transistor, as I would rather use what is already in the junk box here!

It SEEMS like the relays would be the best way to go since they are probably fast enough for up to 35-40 wpm and could still be also used for grid-block keying if called-upon for that duty too at some point!

Regards - Bry, G3XLQ / AF4K

3723. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: Dave - AI7R <aa7tq@primenet.com>
Message-ID: <01bc418d$428492b0$122e44c6@web1>
Source record: 95258
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Tony Said...

> -=Tony=- W6ANV San Francisco, CA
>
> ps: I find it strange that the "owner" of the Tempe BA list
> is not participating in the exchanges here. If he/she is,
> he has not ID'd as such to my knowledge. I'd like to hear
> (read) what HE has to say. "From the horses mouth", so to
> speak. So would others like to read, I presume.
>
>

Well, greetings from "the horses mouth".

I got such a kick out of reading all of the comments I thought I'd stop by and say HI to my fellow BAers.

Since some are interested in "why" there is another list for the BAs it's simple. I believe (and I'm allowed that pleasure) that on the Internet the mail lists should be free. If it cost to much to run it for free, find another way to run it or simply don't. I'd hate to see a trend started...although I'm sure it will happen. Now, do I think you need to "believe" I'm right? Nope....but I expect the flames anyhow.

Is it run by the City with the strange looking City Hall...that same City that brought you the Super Bowl 1996 and brings you the Fiesta Bowl each year? Yep. Do you think that football stuff cost any tax money? Hmmmm...I think SB XXX cost us about $200,000.

The reason the "Radio" groups are on our server (we also host the Collins and Heath lists) is mainly for testing. We bought a list server software package for $2,000 that we needed to learn how to manage - and test. You can't test a package without running some live data though it...hence the "ham" lists. It worked...we found some bugs (just ask the Collins guys), and at this point we think we have them all crushed. We are already starting to populate the server with some "city" lists now and we feel good about its operation.

Tempe is a big supporter of ham radio - giving us meeting rooms for our club, places for VE testing, and recently a classroom for ham classes. We are installing a station in the adult center and they donated a 2 meter repeater that we maintain on one of the City sites. Don't you wish YOUR City was as "ham friendly"? Enough about the host for the list server. As far as tax money...I see any tax money that "we actually get to make use of" as a good thing!! And who wouldn't?

You'll notice that I have not been pushing the subscription to the Tempe BA list...heck, I work for a City, and as a civil servant I'm sworn to not care if you live or die. Just kidding....but my attitude is...if enough people want it it will fly...if not, it won't. Time will tell. Meanwhile it's an option...not a stab at the other list (that I'm a member of by the way - and enjoy)...not an ego boost...but maybe it is the thing that I can offer to my fellow hams.

Let's get back to talking about radios that warm the shack and the heart!

73

Dave
AI7R
ex-WA7GPF ex-AA7TQ

3724. Making duplexer for handheld

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: "H.Silvia" <hrsil@flinet.com>
Message-ID: <3344F642.6C8C@flinet.com>
Source record: 95259

I've been looking for info. on a small size duplexer for dual band handheld. Any sites or info. books avail?
Thanks, Henry KE4WBW

3725. Re: BIG transistors F.S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: ZygomaD & Darkezza <do_not@spam.here>
Message-ID: <3345CC3F.167A@spam.here>
Source record: 95260
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

Mark C. Olson wrote:
>
> Powerex KS621K60 single Darlington transistor module.
> 600 Amperes / 1000 Volts
>
> Have 4 of these units for sale. New
> $300ea. plus shipping (Newark has them for ~$640 ea.)
>
> E-mail for more details

Holy sh.....er.... geez, how big a heat sink does one of these beasts need when running at max rated? Sorry to waste the bandwidth with other than an "I'll take it"-type message, but those specs really caught my eye!
--Barney--
kl7hny@qsl.net
Soldotna, Alaska, USA

3726. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5i2daj$ese@news.Hawaii.Edu>
Source record: 95261
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

-=Tony=- <anthonys@ix.netcom.com> wrote:
>Responding to: jeffreyh@Hawaii.Edu (Jeffrey Herman)

>>It gives those who've left over the past 12
>>months another forum to participate in, and brought in new
>>folks who had never sub'd to the paid list (....)

> Where are your data? ;-)

Empirical. =:o Just looking at the callsigns of those now posting to
the tempe BA list shows old hands I hadn't seen in over a year,
and also calls I haven't seen before.

> Please review the just immediate paragraphs. Your statement
>seems to me to be more of personal philosphy than
>_reality_of_purpose_.

Sure sounded good though, didn't it?

>>(the latter equates to more of the
>>older equipment (and tubes) being saved rather than being
>>dumped into landfills!).

> Mixed metaphor/s? "the latter" (as phrased) is not clear
>to me. Nevertheless, I agree totally with the basic thoughts.

"The latter" was supposed to refer to the new folks who had never
sub'd to the paid list. They might not have been interested enough
in BA gear to have paid to sub, but now with a free list (and all
its exposure!) hopefully their interests will have been sparked
into salvaging gear found in the garage, basement, attic, neigh-
bor's garage, et cetera. Our worst nightmare is hearing of old
gear and crates of tubes being tossed into a dumpster. If it takes
a second list to help save some of the older equipment from extinction,
then so be it.

Don't forget that in the past years, everytime someone on the BA list
brought up the idea of going to a newsgroup format (such as we now
have here), almost everyone else would shout "NO! It will dilute
the group!" It took going to a paid subscription to bring about
the creation of this rec.radio.amateur.boatanchors forum. And
mention of a future $20/yr fee (one week of meals for me),
tempe.gov simultaneously created the free BA, Heath, and
Collins lists. I believe we're better off now having all
these wonderful nets.

73 Tony,
Jeff KH2PZ / KH6

3727. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5i1hfh$871@news1.mnsinc.com>
Source record: 95379
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

w7el@teleport.com (Roy Lewallen) eloquently wrote:

>In article <5hmgvm$bih@news1.mnsinc.com>,
> bry@mnsinc.com (Brian Carling (Radio G3XLQ / AF4K)) wrote:

>>ALSO, you can go to -
>>
>>http://www.mnsinc.com/bry/hamfiles.htm
>>
>>and click on KITS for a huge list of suppliers! Thankfully their are
>>many many small companies selling such kits these days!
>>
>>Homebrewing seems to be very popular now!

>It also has changed somewhat. Back when people bought an HW-8, followed the
>step-by-step instructions, poked the components into the holes, and soldered
>them, they would tell you they were using a "Heath HW-8". Apparently, this would
>now be a "homebrew" rig.

>Admittedly, this is slightly more complex than taking a rig out of a box and
>turning on a switch, and I'm surely in favor of kit building. But is it
>now "homebrew"?

>Roy Lewallen, W7EL

Thanks Roy - actually the two comments were somewhat unrelated but I
see how you could draw that conclusion!

I have listings for supplies used in homebrewing, and they ARE in a
seperate category from my list for KITS!!

There is a BUTTON for each at the web site listed above if you take a
look!

Enjoy - 73 de AF4K / G3XLQ

3728. Static cling DX-390 fixed!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <334499dc.89832748@news.erols.com>
Source record: 95380

Thanks to the info provided by group members, I was able to replace the front end FET on my DX-390 receiver. Popped an MPF-102 from RS in there and the receiver came back to life. It is always very satisfying to fix a reciever - especially when it is one that you have grown accustomed to using. (I'd been using the 390 to listen to 160 meter QSOs at bed time.)

Anyway, thanks to all those who provided info... and watch out for that static!

73 de Bill N2CQR

3729. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5i1mni$el2@senator-bedfellow.MIT.EDU>
Source record: 95381
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <334448EF.4EB9@concentric.net> "Steve J. Quest" <Squest@concentric.net> writes:
> Amplify the signal, means amplify the noise as well. :) There
> is a way around this, have you ever thought about designing a purely
> MAGNETIC influence antenna? Some hams from years past have played around
> with these designs, nothing more than a VERY large ferrite rod, wrapped
> with a faraday shield to eliminate the electrical component, followed by
> a shielded amplifier and delivery system (coax). These types of antennas
> are very directional however, but this can be an advantage if you are
> trying to pick a weak signal out of a stronger one. Since this type of
> antenna only receives the magnetic field of the transmitting station,
> and rejects all electrostatic fields, noise is GREATLY reduced.

Ah, that myth! The idea that man made noise is predominantly
electrostatic has been around for a long time. It may even have
been true for an earlier generation of technology, but it isn't
now. Computers, in particular, tend to make noise that's predominantly
magnetic.

This isn't to say that magnetic antennas aren't useful, but they
are no miracle cure for noise pickup. In a noisy environment where
one cannot block common mode on the feedline a balanced magnetic
antenna will likely outperform an unbalanced electrostatic (whip)
antenna. However, compared with a *balanced* electrostatic antenna
it may be worse.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

3730. Re: Heath Mailing List?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5i1o30$cav@news1.mnsinc.com>
Source record: 95382

don.phelps@infoway.com (Don Phelps) eloquently wrote:

> OK, so how do I subscribe to the Heath list?

> 73, Don N6MCE

Hello Don.

The Heath list is:

Send a message to:

LISTSERV@LISTSERV.TEMPE.GOV

No subject

and the text:

subscribe HEATH <Your FULL Name>
==========

You do the same for BOATANCHORS (the new ***FREE*** one!) -

Send a message to:

LISTSERV@LISTSERV.TEMPE.GOV

No subject

and the text:

subscribe BOATANCHORS <Your FULL Name>

Both lists are VERY informative & quite busy!

3731. Re: QRP amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5i1o5s$cav@news1.mnsinc.com>
Source record: 95383

Don W6JL <donh@vcd.hp.com> eloquently wrote:

>Robert F.Haas wrote:
>>
>> Can anyone point me to a schematic anywhere on the web for a 10 to 20
>> watt amplifier for a 1 watt 40 meter QRP rig?
>> Tnx.

>Robert OM,

> See any of Doug Demaw's books or articles. There are dozens of designs
>for low power amps using bipolar and mosfet devices. I have found
>books to be of more use than looking for a specific schematic file
>on the WWW. Your local library may also have ARRL handbooks, which
>will contain at least one design you are looking for. You want
>a complete explanation of the theory of operation, mechanical
>arrangement, etc, as well as supporting design and operation description
>text. In my experience, if you just try to duplicate a design from a
>schematic only, your chances of success are greatly diminished.

> 73 and GL,

> Don W6JL

But his chances are growing all of the time
because between N6EV, G3YCC, AF4K and Steven Chubbs
(England) there are now perhaps hundreds of construction
articles for ham gear on the WWW.

3732. HELP ASTRON VLS-25M (Dont do is job)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: evincent@mediom.qc.ca
Message-ID: <5i28sh$34u$2@wagner.spc.videotron.ca>
Source record: 95384

Anybody can help me, my power supply, ASTRON VLS-25M dont work very well. At low current (3-5 amps.) it will be ok but when I want more current (5 and up) the voltage and the current go down.

If you have any hint, let me know.

Thank's from VE2VXT.

3733. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <3344C55E.2079@concentric.net>
Source record: 95385
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
>
> Ah, that myth! The idea that man made noise is predominantly
> electrostatic has been around for a long time. It may even have
> been true for an earlier generation of technology, but it isn't
> now. Computers, in particular, tend to make noise that's predominantly
> magnetic.

True, but the computer generated noise seems to be blocked by
my 8" ferrite rod antenna. :) It also seems to eliminate lightning
pops, which when my longwire is installed show up as deafening pops and
crackles. However, my 8" ferrite antenna is not a performer like my
longwire. Give and take I guess.

>
> This isn't to say that magnetic antennas aren't useful, but they
> are no miracle cure for noise pickup. In a noisy environment where
> one cannot block common mode on the feedline a balanced magnetic
> antenna will likely outperform an unbalanced electrostatic (whip)
> antenna. However, compared with a *balanced* electrostatic antenna
> it may be worse.

Does anyone currently sell magnetic antennas? I built mine out
of theory, nothing much to go on except old textbooks, but the theory is
simple enough, who needs plans. ;)

sq

3734. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <334da3a2.321182365@news.sci.fi>
Source record: 95386
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

jpd@space.mit.edu (John Doty) wrote:

>In article <334448EF.4EB9@concentric.net> "Steve J. Quest" <Squest@concentric.net>
writes:
>> Amplify the signal, means amplify the noise as well. :) There
>> is a way around this, have you ever thought about designing a purely
>> MAGNETIC influence antenna? Some hams from years past have played around
>> with these designs, nothing more than a VERY large ferrite rod, wrapped
>> with a faraday shield to eliminate the electrical component, followed by
>> a shielded amplifier and delivery system (coax). These types of antennas
>> are very directional however, but this can be an advantage if you are
>> trying to pick a weak signal out of a stronger one. Since this type of
>> antenna only receives the magnetic field of the transmitting station,
>> and rejects all electrostatic fields, noise is GREATLY reduced.
>
>Ah, that myth! The idea that man made noise is predominantly
>electrostatic has been around for a long time.

This is true only in the near field of the noise source within
lamda/(2pi), on 80 m the limit is 27 m. The closer to the noise source
you are, the greater the difference between the electric and magnetic
field, at 0.01 wavelengths the difference is about 20 dB.

>It may even have
>been true for an earlier generation of technology, but it isn't
>now. Computers, in particular, tend to make noise that's predominantly
>magnetic.
>

Paul OH3LWR

3735. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: anthonys@ix.netcom.com
Message-ID: <5i1i5n$8f0@dfw-ixnews11.ix.netcom.com>
Source record: 95387
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Responding to: jeffreyh@Hawaii.Edu (Jeffrey Herman)

Jeff:

You make some very coherent arguments in debate but,
obviously, I cannot agree with all. Rather than rehash all,
I'll pick up on your closing paragraph with some additional
comments.

>What do you feel was done that is unethical? Choice of name?

Unethical may have been too strong but an identical choice
of name for BA list at Tempe is totally foolish IMO.

>The name is generic.

Not quite! Certainly the PHRASE is generic but the
application is NOT. Tempe's choice is foolish for another
Mail List because it causes confusion for those that are seeking
the "Boat Anchors Mail List" when responses from helpful persons
will point to one or the other; either way, IDENTITY is DILUTED.

>Free venue?

This very newsgroup (alt.radio.amateur.boatanchors) already
gives "free venue". Is there something wrong with this? The
"third prong" from Tempe brings confusion and seems to add
nothing more.

>It gives those who've left over the past 12
>months another forum to participate in, and brought in new
>folks who had never sub'd to the paid list (....)

Where are your data? ;-)

Please review the just immediate paragraphs. Your statement
seems to me to be more of personal philosphy than
_reality_of_purpose_.

>(the latter equates to more of the
>older equipment (and tubes) being saved rather than being
>dumped into landfills!).

Mixed metaphor/s? "the latter" (as phrased) is not clear
to me. Nevertheless, I agree totally with the basic thoughts.

-=Tony=- W6ANV San Francisco, CA

ps: I find it strange that the "owner" of the Tempe BA list
is not participating in the exchanges here. If he/she is,
he has not ID'd as such to my knowledge. I'd like to hear
(read) what HE has to say. "From the horses mouth", so to
speak. So would others like to read, I presume.

3736. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: archer@netgate.net
Message-ID: <3344cab7.3011771@nntp.netgate.net>
Source record: 95388
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Thu, 03 Apr 1997 16:18:55 -0800, "Steve J. Quest"
<Squest@concentric.net> wrote:

>Ross Archer wrote:
>>
>> I've designed a really quiet three-stage GaAsFET pre-amp for an active
>> antenna, and it works very nicely with a 6" whip on the West Coast as
>> long as I shut down both of my PCs and all fans/motors. (Those little
>> MRF966 GaAsFET puppies are almost $5 each, but they sure bring the
>> signal up without adding noise...)
>
> GaAsFETs are primarily used for extremely high frequency, low
>signal amplification projects. By extremely high frequency, I mean GHz
>not Mhz. GaAs FETs certainly have low injection or "shot" noise, and
>should work fantastic for this application albeit a bit overkill. :)
>Most RF amps use JFETs for the initial gain stage, Bipolars for the rest.
>
I know that the design is tremendous overkill. I wanted to get as
close to "long wire/passive" as humanly possible. Granted, it may
turn out that I'm optimizing something which really doesn't need it.
Could be kind of like worrying about the effect of Pluto's gravity on
the tides, I dunno. . ;) Actually, the amp works great on my scanner,
which is one of the first places I tried it.

>
> Amplify the signal, means amplify the noise as well. :) There
>is a way around this, have you ever thought about designing a purely
>MAGNETIC influence antenna? Some hams from years past have played around
>with these designs, nothing more than a VERY large ferrite rod, wrapped
>with a faraday shield to eliminate the electrical component, followed by
>a shielded amplifier and delivery system (coax). These types of antennas
>are very directional however, but this can be an advantage if you are
>trying to pick a weak signal out of a stronger one. Since this type of
>antenna only receives the magnetic field of the transmitting station,
>and rejects all electrostatic fields, noise is GREATLY reduced. Imagine
>SW with the clarity of local AM broadcasts! Now you see what I am
>talking about here! I'm suprised nobody is marketing this type of
>antenna today! For example, when you use this type of antenna, that
>60Hz buzz from your neighbors TV disappears. Power transformer noise
>also is greatly reduced if not completely eliminated. Lights with
>dimmers that used to make terrible buzz when they come on would now
>only produce the turn-on pop. The design is simple, wind a resonant
>tank (inductor and variable capacitor) onto a very large, high Q ferrite

>rod, shield in chicken wire, mount in a movable base (very directional,
>so you need to move it to pick up different stations), connect to a
>standard RF amp design, which is mounted inside the case, and you're
>there! The most expensive part is the large hi-Q ferrite rod.......sq
>
>(if there would be a market for such a device, I might design a version
>that would be "for consumer use" and put it out for sale. Sorry, Mr.
>TinyTenna, don't mean to horn in on your busines, but.............)

I hadn't considered loops thus far. One thing I had thought about
though was twin whips, on the theory that a lot of noise would be
common-mode, but I'm afraid a lot of the signal might be common mode
too if the whips aren't resonant, or at least long enough. :(

As for directionality -- unfortunately, that's a minus for a roof
mount antenna on my budget (and with my apartment restrictions!) :(

Thanks for some ideas. I may toy with the loop idea anyways, since I
have heard they can work exceptionally well in many cases.

3737. Re: Homemade External VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: rohrwerk@pcOnline.com
Message-ID: <rohrwerk-0404970657280001@tsc-p17.pconline.com>
Source record: 95389

In article <3343B5C4.7349@cemr.wvu.edu>, David McKain
<mckain@cemr.wvu.edu> wrote:

> A friend of mine is proposing to me that I can build an external VFO for
> my Kenwood TS-520S.
> I was interested since the current VFO doesn't seem to stay stable
> (spring tension, warmup) and,
> unlike most of the newer HF rigs, my radio is not a general coverage
> reciever (1.8,3.5,7,14,21,28,28.5,29.1) +600KHz.
> The chip that he suggested is only about $20 and will oscillate from 0
> to 40MHz with a sensitivity of
> less than 0.006Hz. I would use an RS-232 port to control the chip and
> write a small software program
> to operate as the VFO controller.
>
> Has anyone had any experience trying to do this?
> Any suggestions would be appreciated (except to by another rig)
>
> 73
> KC8GGV
> Dave

See the R2 RECEIVER thread about DDS VFO problems. You cannot use a DDS directly for receiving applications; noise and spurious responses are too high. It has to be cleaned up with a PLL after it.

Now, that can be qualified a little bit. I have a flyer for new, cheap DDS's from Analog Devices. The AD9850 clocks at 125 MHz, so it should generate up to 40 MHz or better. Its spectrum has few spurs above the noise, but the noise in only about 80 dB down. You might get by with that with an older transceiver like the 520, (maybe it's better than I think, dynamic range wise), but that's right on the border for any modern design with a diode ring mixer.

The other problem: you gotta watch out when you stretch the range of a transceiver by just changing the VFO input. What problems are you going to get into with the rig's heterodyne scheme? Tuned circuit tuning ranges? Etc.

John Seboldt K0JD
http://www.pconline.com/~rohrwerk/k0jd/

3738. 2SC2879 & 2SC2290 - who makes/sells these + need data sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: "Joseph M. Zawodny" <J.M.Zawodny@LaRC.NASA.gov>
Message-ID: <3345024E.1A53@LaRC.NASA.gov>
Source record: 95390

Hi,

I am in need of information on the 2SC2879 & 2SC2290.
Who makes these? Where can I get data sheets for these? Who sells
these in sets of 2 or 4 at a reasonable price (I can currently get
the 2879 for $23.00 ea and the 2290 for $18.50 ea)?

Finally, why should I use these instead of the MRF454?

Thanks,

KO4LW
--

Work: Dr. Joseph M. Zawodny Play: Joe Zawodny
NASA Langley Research Center KO4LW@amsat.org
E-mail: J.M.Zawodny@LaRC.NASA.gov zawodny@exis.net
(757) 864-2681 (757) 864-2671 FAX http://wwwp.exis.net/~zawodny

3739. Re: Homemade External VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5i313i$4oh@news1.mnsinc.com>
Source record: 95391

There have been some excellent articles on this in QST over the past
few years regarding the DDS type VFO/synthesizer units.

You can build your own or buya kit of parts from Engalnd or from S&S
Engineering in Maryland.

Woody White <"eMail "@ my.www.page.Mailto> eloquently wrote:

>What is the chip number? Sounds like a PLL, not (an analog) VFO. BTW,
>do you mean stability rather than sensitivity? - Woody

>David McKain wrote:
>>
>> A friend of mine is proposing to me that I can build an external VFO for
>> my Kenwood TS-520S.
>> I was interested since the current VFO doesn't seem to stay stable
>> (spring tension, warmup) and,
>> unlike most of the newer HF rigs, my radio is not a general coverage
>> reciever (1.8,3.5,7,14,21,28,28.5,29.1) +600KHz.
>> The chip that he suggested is only about $20 and will oscillate from 0
>> to 40MHz with a sensitivity of
>> less than 0.006Hz. I would use an RS-232 port to control the chip and
>> write a small software program
>> to operate as the VFO controller.
>>
>> Has anyone had any experience trying to do this?
>> Any suggestions would be appreciated (except to by another rig)
>>
>> 73
>> KC8GGV
>> Dave

>--
>de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
>Work: Electron Microscopist/Microanalysist
>Balance: Ham radio "homebrewer", shade tree mechanic,
>'90 Nissan 240SX, wish still had my Mcycle too!
>http://www.geocities.com/capecanaveral/3722
>.

3740. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5i318o$4oh@news1.mnsinc.com>
Source record: 95392

Dan Cox <village1@lightspeed.net> eloquently wrote:

>John Lockhart wrote:

> I bought some surplus 470 uF 450 VDC Rubycon electrolytic
> capacitors recently and have a couple of questions on using
> them.

> I don't see a vent hole/plug - do they vent up ("blow their top)
> or down?

> I'm amazed at their small size (about 1 3/4" H by 1 1/4" Diam).
> Is this a typical package size for 470 uF at 450 V nowadays??
> (want to leave room for replacement in future)

> Thanks for your help. I don't want to build them into a project/
> repair incorrectly.

> 73,

> John W0DC

> The radial caps often lack a venting hole and as far as the size is
>concerned that doesn't sound right at all!
>I just replaced some caps in an old receiver using 47 mike at 450 and
>they were are inch and a 1/4 diameter and inch and a half long or more.
>They were pretty fat. That was just for a 47!

No Dan, they really are that small. I bought a dozen of them here and
love them!

3741. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5i30vd$4oh@news1.mnsinc.com>
Source record: 95393
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

anthonys@ix.netcom.com(-=Tony=-) eloquently wrote:

>ps: I find it strange that the "owner" of the Tempe BA list
>is not participating in the exchanges here. If he/she is,
>he has not ID'd as such to my knowledge. I'd like to hear
>(read) what HE has to say. "From the horses mouth", so to
>speak. So would others like to read, I presume.

Probably a wise person to stay out of all the silly pissing contests!

3742. helical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: JERRY JOHNSON <MMP2@MSG.TI.COM>
Message-ID: <33454D2C.736F@MSG.TI.COM>
Source record: 95394

does anybody know if a helical antenna will pick up a
vert. transmitted signal,if so how effective?
jerry

3743. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: robertc908@aol.com
Message-ID: <19970404184100.NAA24702@ladder01.news.aol.com>
Source record: 95395

The size varies with manufacture. I have in recent weeks purchased the same value capacitor and the physical size in just about as previously described.

Bob WA7OGU

3744. Re: R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: Don W6JL <donh@vcd.hp.com>
Message-ID: <3345569C.4B78@vcd.hp.com>
Source record: 95396

jupiter@europa.com wrote:
>
> In article <3342867B.162E@vcd.hp.com>, Don W6JL <donh@vcd.hp.com> wrote:
>
> :Hi Rob, OM,
> :
> : I am surprised that you were unable to use a DDS source for either the
> :R2 or as Drake R4-C L.O. Are you sure you had the DDS circuit well
> :isolated from the mixer you were driving? I am assuming you had the
> :R4-C well separated from the DDS, no commong power supplies that were
> :not well decoupled, DDS output fed via coax, etc. I am building a DDS
> :for my recently completed R2 receiver here. From looking at the
> :spectral output of the DDS, I cannot see how it should result in the
> :symptoms you describe, but I could be wrong, as I have not actually
> :tried it yet.
>
> Assume your DC receiver's MDS is -130dbm. Assume that you use an RF amp
> with just enough gain to offset other losses, maybe 8db.
>
> Now you have a mixer being fed with LO with close-in spurs -70db down from
> a 1v DAC output. Injecting the spur at the LO port of the mixer is the
> same as injecting a similar spur on the RF IN port at the rf input freq.
>
> So its equivalent to a "spur generator" hooked up to the antenna with spur
> levels at -70db from 1v. So your spurs are huge compared to any signal
> input.
> Even if your spurs were -100db down, youd still have problems.
>
> Thats why no ham equipment manufacturers use DDS, except as an elaborate
> part of some hybrid scheme using PLL's.
>
> Rob.

Hi Rob,

I think I am beginning to see your point! IF the mixer is a true
multiplier, then of course the complete spectrum of the LO is able to
mix with the input signal, and all resulting spurs will appear in the
output. In fact, having an otherwise very clean front-end, with high
dynamic range, demands a very pure LO signal indeed. Seems like one
needs an LO with spurs at least as far down (in terms of equivalent
uVolts RMS at the input the mixer), as the minimum detectable signal, to
avoid hearing the spurs in the output.
Where I was going wrong I think was in thinking of the LO as a high
level, saturating drive which merely turns the diodes on and off in the

ring mixer, very hard. If the LO is cancelled (say by 40 dB or so), in the output, due to the balanced nature of the ring mixer, then I thought that the LO spurs would also be similarly attenuated.
Still scratching on paper about this...

73,
Don

3745. Re: hlp pls, i need change my tone voice

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: JUAN CARLOS GIMENEZ <juancar@zar.hnet.es>
Message-ID: <01bc412e$0778f580$c645e0c2@none.zar.hnet.es>
Source record: 95397
Cross-posted to: rec.radio.amateur.homebrew,es.rec.radio.amateur

esto es una prueba perdon

Brian Carling AF4K/G3XLQ <bry@mnsinc.com> escribi&#65533; en art&#65533;culo
<5gqc7q$aod@news1.mnsinc.com>...
> "Andy" <muldowne@wilde.oit.umass.edu> whistled a happy tune like:
>
> |>Leon Heller <leon@lfheller.demon.co.uk> wrote in article
> |><UmsBfqASNzJzEwta@lfheller.demon.co.uk>...
> |>> In article <5g4o64$5r0$1@diana.ibernet.es>, Alfonso
> |>> <alfonsog@redestb.es> writes
> |>> >Hi, all.
> |>> >
> |>> >I need help to modify my tone voice. I have a problem with my voice,
> |>> >more people, don't think my age, no think my callsign, is similary a
> |>> >girl voice. I want down the frequency to be similary with a men.
> |>> >
> |>> >Do you know any chip, construccion or circuit to made this mod?
> |>> >
> |>> >Thanks for your help. The bests 73's EB3FYJ
> |>>
> |>> OKI have a Speech Pitch Controller chip, the MSM6322GSK, that should
do
> |>> what you want. It costs #10.20 (UK) from Maplin, and the circuit is
in
> |>> their current catalogue. You can shift the pitch of input speech in
17
> |>> steps either one octave up or one octave down. Maplin is on 01702
> |>> 554000.
> |>>
> |>> Leon
> |>> --
> |>> Leon Heller, G1HSM
>
> |>You could also try an octaver guitar effect. Just an idea.
>
> Or how about a sex change? :-)
>
>
>

3746. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-04 00:00:00 UTC
From: ve7ldh@amsat.ORG
Message-ID: <199704041846.KAA11842@BC.net>
Source record: 95398

w7el@teleport.com (Roy Lewallen) wrote:

> (snip...)
> It also has changed somewhat. Back when people bought an
> HW-8, followed the step-by-step instructions, poked the
> components into the holes, and soldered them, they would
> tell you they were using a "Heath HW-8". Apparently, this
> would now be a "homebrew" rig.

> Admittedly, this is slightly more complex than taking a rig
> out of a box and turning on a switch, and I'm surely in favor
> of kit building. But is it now "homebrew"?

At the time Heath made HW-8 kits, perhaps not. But that was a long time ago. *Now*, in 1997, with so few hams doing any construction of any kind, I'm prepared to be a lot more lenient on the definition of "homebrew", and hope others would be too.

Laura Halliday VE7LDH "C'est une femme mutine, assez
lhalliday@creo.com elegante, grave et legere, ayant le
ve7ldh@amsat.org sens du confort et du plaisir
Locator: CN89mg en tout." - C. Deneuve

3747. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33451fc6.12597372@netnews.worldnet.att.net>
Source record: 95262

On Thu, 03 Apr 1997 21:40:20 +0000, Dan Cox <village1@lightspeed.net>
wrote:

>John Lockhart wrote:
>
> I bought some surplus 470 uF 450 VDC Rubycon electrolytic
> capacitors recently and have a couple of questions on using
> them.
>
> I don't see a vent hole/plug - do they vent up ("blow their top)
> or down?
>
> I'm amazed at their small size (about 1 3/4" H by 1 1/4" Diam).
> Is this a typical package size for 470 uF at 450 V nowadays??

I have no idea which direction the capacitors vent.

Be aware that the smaller packages in general have higher ESR, and
lower ripple current ratings.

You may never have a problem with heat or deterioration from ripple
current, but it is potentially a worse problem with the smaller caps.

73 Tom

3748. FS test equipment and much more

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: vantonova@aol.com
Message-ID: <19970405013600.UAA22268@ladder01.news.aol.com>
Source record: 95263

I have the following stuff for sale:

Canadian Marconi military radio transmitter.
Transistor with dual tube final stage.
Transmitts around 400Mhz in FM
Puts out about 100W
$100

Racal-Dana digital programmable function generator.
HPIB
$400

HP signal generator
3.8Ghz to 7.8Ghz
Tube, in excellent condition
$150

Ail-Tech 727 Spectrum Analyzer
1Mhz to 20Ghz in 5 ranges or 1-20Ghz in one sweep
missing CRT, but easily hooks up to scope
$500

RF Communications laboratory amplifier.
10-500Mhz
8W output
transistor, tube final stage
$200

Tek 5110 scopes. 3, one storage
6 plug-ins
4-channel; 100Mhz, depending on plug-in
$600 for all

Boonton Radio Co. signal generator
10-500Mhz, AM and FM
Beautiful piece of old tube equipment
$100

Boonton Radio Co. signal generator
54-216Mhz, am and FM
another beautiful old piece of equipment
$75

Telequipment transistor testing scope
$100

HP 6180A Waveforn Recorder
2-cannel digital storage scope. Uses external screen (scope)
HPIB
$400

HP 182T analog scope
100 Mhz, 2 channel
beatiful scope
$350

HP 1630A logic analyser
5 pods
HPIB
$500

HP 493A microwave amp
4-8 Ghz
$150

HP 54201A Digital storage scope
300Mhz
HPIB
one channal is dead, otherwise works great
$500

3 Superior Electric indexing stepper motor drivers
12A, chopping
$300 for all

2 CompuMotor stepper drives
$200 for both

Stepper motors, ask

I live in CA, Santa Clara and prefer local buyers. Call me at (408)
244-6607 or e-mail me. Prices are flexible. I prefer volume buyers. $4000
takes all.

3749. FS test equipment and much more

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: vantonova@aol.com
Message-ID: <19970405013500.UAA22247@ladder01.news.aol.com>
Source record: 95264

I have the following stuff for sale:

Canadian Marconi military radio transmitter.
Transistor with dual tube final stage.
Transmitts around 400Mhz in FM
Puts out about 100W
$100

Racal-Dana digital programmable function generator.
HPIB
$400

HP signal generator
3.8Ghz to 7.8Ghz
Tube, in excellent condition
$150

Ail-Tech 727 Spectrum Analyzer
1Mhz to 20Ghz in 5 ranges or 1-20Ghz in one sweep
missing CRT, but easily hooks up to scope
$500

RF Communications laboratory amplifier.
10-500Mhz
8W output
transistor, tube final stage
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Tek 5110 scopes. 3, one storage
6 plug-ins
4-channel; 100Mhz, depending on plug-in
$600 for all

Boonton Radio Co. signal generator
10-500Mhz, AM and FM
Beautiful piece of old tube equipment
$100

Boonton Radio Co. signal generator
54-216Mhz, am and FM
another beautiful old piece of equipment
$75

Telequipment transistor testing scope
$100

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2-cannel digital storage scope. Uses external screen (scope)
HPIB
$400

HP 182T analog scope
100 Mhz, 2 channel
beatiful scope
$350

HP 1630A logic analyser
5 pods
HPIB
$500

HP 493A microwave amp
4-8 Ghz
$150

HP 54201A Digital storage scope
300Mhz
HPIB
one channal is dead, otherwise works great
$500

3 Superior Electric indexing stepper motor drivers
12A, chopping
$300 for all

2 CompuMotor stepper drives
$200 for both

Stepper motors, ask

I live in CA, Santa Clara and prefer local buyers. Call me at (408)
244-6607 or e-mail me. Prices are flexible. I prefer volume buyers. $4000
takes all.

3750. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3344f96b.2776356@netnews.worldnet.att.net>
Source record: 95265
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Fri, 04 Apr 1997 07:19:27 GMT, keinanen@sci.fi (Paul Kein&#65533;nen)
wrote:

```
>jpd@space.mit.edu (John Doty) wrote:
>
>>In article <334448EF.4EB9@concentric.net> "Steve J. Quest" <Squest@concentric.net>
writes:
>>> Amplify the signal, means amplify the noise as well. :) There
>>> is a way around this, have you ever thought about designing a purely
>>> MAGNETIC influence antenna? Some hams from years past have played around
>>> with these designs, nothing more than a VERY large ferrite rod, wrapped
>>> with a faraday shield to eliminate the electrical component, followed by
>>> a shielded amplifier and delivery system (coax). These types of antennas
>>> are very directional however, but this can be an advantage if you are
>>> trying to pick a weak signal out of a stronger one. Since this type of
>>> antenna only receives the magnetic field of the transmitting station,
>>> and rejects all electrostatic fields, noise is GREATLY reduced.
>>
>>Ah, that myth! The idea that man made noise is predominantly
>>electrostatic has been around for a long time.
>
>This is true only in the near field of the noise source within
>lamda/(2pi), on 80 m the limit is 27 m. The closer to the noise source
>you are, the greater the difference between the electric and magnetic
>field, at 0.01 wavelengths the difference is about 20 dB.
>
>>It may even have
>>been true for an earlier generation of technology, but it isn't
>>now. Computers, in particular, tend to make noise that's predominantly
>>magnetic.
>>
>
>Paul OH3LWR
>

The change from near field to far field is a gradual change, not an
abrupt one.

But I do agree with Paul and others that "magnetic antennas" are a
myth. The signal you hear at any distance at all, whether the noise is
from a NATURAL transmitter like a lightning discharge, a MAN MADE
ACCIDENT like a electric motor , or an INTENTIONAL transmitter is all
the same to the antenna.
```

If the antenna only responded to magnetic fields, you would hear no distant signal at all. If it responded to electric fields, the same would be true.

In the near-field (that distance is also determined by the size of the noise source antenna and receiving antenna size) either a near field magnetic dominant or near field electric field dominant antenna might be better.

But make no mistake about it, once the noise is from a very small distance away it makes no difference what the near field response is like. Only the PATTERN of the antenna will control noise response. It is also impossible to build a magnetic or electric field only antenna, stop one field and you stop the other.....completely.

73 Tom

3751. Re: microwave limiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: rick@area.com
Message-ID: <5i4eq6$r1f$1@news.spies.com>
Source record: 95266

In article <33458786.0@news.itsnet.com>,
Allen Wallace <allen_wallace@powertalk.dtint.com> wrote:
>How does one limit microwave signals ranging from -60 dbm to +30 dbm to 0
>dbm?

I designed the "C channel" of the HP 5334B frequency counter. This
was a prescaler channel good from 90 MHz. to 1.3 GHz. What I did
was put a small resistor in series with the input connector; I think
it was around 50 ohms. This had two pairs of Schottky diodes connected
from the resistor to ground. This same node went to the first
preamplifier. It was important to use SMT Schottky's not the leaded
ones due to lead inductance. Anyway, this could withstand at least a
watt of input power if the resistor was good for a watt. It limited
cleanly, so that the counter still worked OK. If you try to limit
by overdriving amplifiers, they typically screw up your signal, unless
they are balanced amplifiers. In any event, like you say, 1 watt
will burn out most amplifiers.

Rick Karlquist N6RK
rick@area.com

>
>thanks,
>
>Allen Wallace

3752. Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: steve.higgins@worldnet.att.net!
Message-ID: <3347c278.14282496@netnews.worldnet.att.net>
Source record: 95267
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Thu, 03 Apr 1997 08:54:42 GMT, archer@netgate.net (Ross Archer)
wrote:

>
>I've designed a really quiet three-stage GaAsFET pre-amp for an active
>antenna, and it works very nicely with a 6" whip on the West Coast as
>long as I shut down both of my PCs and all fans/motors. (Those little
>MRF966 GaAsFET puppies are almost $5 each, but they sure bring the
>signal up without adding noise...) I haven't measured the gain of the

6 Inch is a typo, right? 6 feet maybe?
>
>thing because I don't have the equipment, but it nicely hot.
>Nonetheless, it's aggravating to be plagued with RFI.

Is it in a metal shielded enclosure? That would at least help.

>I'm told that this sort of interference is short-range, and that the
>best solution is to put the active antenna outside and up above
>the noise sources. Okay, this sounds like good advice, but it brings
>up a lot of questions:
>
>1. Should I put the amplifier up with the antenna? If I do this it
>might be hard to control the gain remotely, and presents some
>weatherproofing (static-proofing?) difficulties, but then I won't have
>to worry about losing signal in the coax lead-in. Also, I don't have
>to worry about super-shielding the amp if it's away from the local
>noise?

Ideally I suppose locating it near the antenna would be best, but as
you noted there are several drawbacks. If the lead-in is Coax, you
probably won't notice that much difference from a noise standpoint.

If you decide to put your preamp near your receiver, and your
listening room doubles as your computer room you will probably want to
put the amplifier in a metal box to shield it. You might also try to
eliminate the RFI by putting Ferrite beads around your Computer
Monitor's video cable, that was the worst offender on my system. It
helped, but did not eliminate the problem.

>2. I need some sort of an AM filter to keep from overloading the
>preamp. Should that go in front of the first stage, or after a stage
>or two, or should it be at the receiver (I'm worried maybe the coax
>will pick the AM back up even if I'm very careful to filter it at the
>antenna or antenna amplifier, or am I being paranoid?)

Locate the AM trap before the Preamplifier, so that strong AM stations are attenuated before they hit your preamp. Better to filter them out early, and only amplify signals in the range you're REALLY interested in.

>3. Would a hybrid approach be worthwhile? I'm thinking of putting
>maybe 1 or 2 stages of fixed-gain amplifiers at the antenna (enough to
>compensate for the coax lost worst-case and then some but not enough
>to ever overload -- because it's irritating to have to climb on the
>roof to switch on an attenuator -- hehe) and then have a "box" at the
>receiver end with the remaining stage(s) with adjustable gain and
>filter.

I doubt that coax loss will be that great unless you're running it a LONG way. Ideally, you want as much gain as early as you can get it in the system, so you minimize the amplification of noise. As for the rest, I'm starting to like your idea of locating the amp near the radio.
;-)

I guess you could run extra control lines to the amp and control the bias on the GaAsFETs remotely to alter their gain. You're going to have to run DC power and Ground to the amp anyway. (or are you using batteries??)

I'm not familiar with your circuit, or the GaAsFETs you're using, so its tough to say. Another option would be to use a relay to remotely switch amplifiers in/out of the circuit as need be to prevent overloading the front end of your receiver or the later stages in your pre-amp.

>Design goal is top performance without being overly difficult to
>build, so that others can play with the design and not spend over
>(say) $200 and a weekend of assembly for everything. So I want to
>avoid fancy relay/remote gain control/microprocessor-control/remote
>tuning assemblies.

Well, so much for that idea.....another potential patent bites the dust.......
;-)

>I'm willing to share the schematics, experience gained, etc. with the
>group on the theory (and I may
>be completely wrong about this) that a no-compromise design
>will exceed almost anything you can buy store-bought, or at least
>anything store-bought that I can afford! ;)
>
>Any radio engineers out there with advice on this?

Hope I helped a little,

Steve
steve.higgins@worldnet.att.net

3753. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: wayneb1103@aol.com
Message-ID: <19970405035101.WAA01806@ladder01.news.aol.com>
Source record: 95268

This "is it homebrew" issue keep cycling around every so often. There just arnt that many EE's in the ranks that can sort out why one needs to put which part where. I am also not fond of mail
ordering to seven different parts houses to get what it is that I need. If someone wants to make up a kit and put it on the market Than to me this is a good thing. Please remember that I am the one
who has to build the kit and I am the one who has to make it work. I may not have designed the circuit but after 3 kits I sure know how to read one and each kit has been an excellent learning tool.
Is it hombrew, who cares.

Wayne WB7WHI
Spokane, Wa.

Wayne WB7WHI
Spokane, Wa.

3754. Re: lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: NOSPAM.wessel@via.nl
Message-ID: <860232941.553091@news.via.nl>
Source record: 95269

eyesonly@globalxs.nl (rinus nienhuis) wrote:

>dear all, my name is rinus nienhuis and i live inthe netherlands-does
>anyone know how to build a lightning detector,one that really works
>ONLYonly on lightning ,one that gives a signal when detecting
>lightning
>if so, is it possible to send me a schedule or a idea
>thank you very much for your help

Rinus,

Zie ook: Elektron November 1994, pag 613-615, "Donder en bliksem" van PA0CX.

Hij gebruikt een scoop om het signaal van twee antenne's te bekijken, met
daaraan toegevoegd een 'sense' schakeling voor de Z-ingang. Deze laatste is
voor jou misschien een basis om op verder te borduren.

There may be a NOSPAM. in front of my E-mail address.
It is there to fool machines, not people.

3755. Need help..Ts440 power?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: George <kilowatt@jadeinc.com>
Message-ID: <01bc4179$c391ece0$b2e01ece@george>
Source record: 95270

Hi
My 440 decided that it would overheat will I was talking. Well when it cooled off I turned it back on and nothing happened, it is drawing 20 amps , the supply heats up and no lights or output. I checked the fuse and I have power to the radio. Anyone got any good ideas beside the sledge hammer?

73's george

3756. 900 mhz cordless phone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: lar01@sprynet.com
Message-ID: <33467351.17026891@news.sprynet.com>
Source record: 95271

Greetings
I commented, a few weeks ago, about getting a cordless phone. A couple weeks, after the purchase, I discovered it was a 44 mhz phone. I commented to both motorola and radio shack, via, email that the phone was somewhat missadvertised. In the advertising, there was no meantion of frequency used yet it was on the same page as new 900 mhz units. I figure a natural mistake, even for an amateur, hi/chuckle. I took the cordless phone back to radio shack, who were very nice and,

realising my error, replaced it. I bought the sanyo clt-9261, the only one in the store of 900 mhz operation. I advertizes to use spreadspectrum and 900 mhz. I hope i am right this time, hi.
I many reason for the purchase was to educate myself about the style of operation even though it is very 'close circuit'. As time goes on I would like to get more familiar with spread spectrum. Personally

i think that spread spectrum will eventually replace traditonal radio like vhf fm replaced traditional local contact coverage on amateur radio during the 70's and 80's.
Any observations/comments from anyone else?
Larry ve3fxq

3757. Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr5.134600.5895@ke4zv.atl.ga.us>
Source record: 95272
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <334368ce.95973964@nntp.netgate.net> archer@netgate.net writes:
>
>I've designed a really quiet three-stage GaAsFET pre-amp for an active
>antenna, and it works very nicely with a 6" whip on the West Coast as
>long as I shut down both of my PCs and all fans/motors. (Those little
>MRF966 GaAsFET puppies are almost $5 each, but they sure bring the
>signal up without adding noise...) I haven't measured the gain of the
>thing because I don't have the equipment, but it nicely hot.
>Nonetheless, it's aggravating to be plagued with RFI.
>
>I'm told that this sort of interference is short-range, and that the
>best solution is to put the active antenna outside and up above
>the noise sources. Okay, this sounds like good advice, but it brings
>up a lot of questions:

Some RFI is short range, just an E field or just an H field, but
if the source is large enough to form an effective antenna, or is
connected to wires in such a phase that the Poynting vector is
synthesized, an EM field, IE ordinary radio wave, will be generated,
and that can propagate long distances.

>1. Should I put the amplifier up with the antenna? If I do this it
>might be hard to control the gain remotely, and presents some
>weatherproofing (static-proofing?) difficulties, but then I won't have
>to worry about losing signal in the coax lead-in. Also, I don't have
>to worry about super-shielding the amp if it's away from the local
>noise?

The feed impedance of a short voltage probe antenna is very high.
If you use a direct coax feed, your signal will be lost to the
coax capacitance. The first stage preamp needs to connect directly
to the antenna.

>2. I need some sort of an AM filter to keep from overloading the
>preamp. Should that go in front of the first stage, or after a stage
>or two, or should it be at the receiver (I'm worried maybe the coax
>will pick the AM back up even if I'm very careful to filter it at the
>antenna or antenna amplifier, or am I being paranoid?)

A filter *after* the preamp contributes nothing to preventing preamp
overload. But as noted above, the impedance presented by a short
voltage probe antenna is *very* high, and matching to a filter before
the preamp first stage is very difficult. A solution is to make the
preamp first stage a source follower. This will act as an active
impedance transformer and can then drive a more conventional filter

before the second and third preamp stages (which can then be of more conventional voltage gain configuration).

Good coax, driven with a source impedance matching the coax characteristic impedance, and terminated with an impedance matching the coax characteristic impedance, should be adequate to avoid BCB pickup. If you have common mode problems, one of the RS snap together ferrite chokes should take care of that.

>3. Would a hybrid approach be worthwhile? I'm thinking of putting
>maybe 1 or 2 stages of fixed-gain amplifiers at the antenna (enough to
>compensate for the coax lost worst-case and then some but not enough
>to ever overload -- because it's irritating to have to climb on the
>roof to switch on an attenuator -- hehe) and then have a "box" at the
>receiver end with the remaining stage(s) with adjustable gain and
>filter.

You can certainly do that. It's a good division of resources.
Be sure to get a good source match to the coax.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

3758. Re: lightning detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: W.B.Mudde@net.HCC.nl
Message-ID: <33476b92.2339805@news5.inter.NL.net>
Source record: 95273

eyesonly@globalxs.nl (rinus nienhuis) wrote:

Hallo Rinus, ik ben er ook in ge-interesseerd. Als je iets hebt, wil je
me dat dan door sturen ?
Ik heb wel een heel epistel, maar dat is in het technisch Frans, zodat
ik er niet veel wijs uit kan worden, maar dat behandelt het onweer
detecteren van A tot Z.
Ik zal dat opzoeken en eveneens naar je sturen.

Sorry het werd wat later dan gepland, maar druk met het werk, vandaar.

Van : F6AGV
Aan : TECHNI @EU
Datum/tijd : 05-Mrt 18:41 - Verzonden op: 05-Mrt 16:26
Type/status : BF - Bericht nr : 33689
Onderwerp : ��>DETECTEUR D'ORAGE.

Path:
!PI8ZAA!DB0RWI!DB0NDK!DB0AIS!DB0ZDF!DB0GE!LX0PAC!ON7RC!ON4AWP!ON1CED!
!ON4KTK!ON1KPU!ON1LJA!

From: F6AGV@ON1LJA.#TY.HT.BEL.EU
To : TECHNI@EU

F6AGV/TPK 1.82 Msg #:1247 Le 5/03/97 a 15:56Z

Bonjour merci de lire ce message,
Il y a un certain temps, j'ai realise un detecteur electrostatique
avec un transistor a effet de champ (2n3819) et quelques transistors
(2n708...). La detection se traduisait par l'allumage d'un voyant.
Ce montage fort simple a ete un peu ameliore depuis, mais son principe
de base est reste le meme : l'utilisation d'un FET, transistor a effet
de champ. (grande impedance grille/source).
Une description est apparue dans le RADIO-REF de Novembre 93, sous la
plume de Michel F9VX. Des articles ont ete publies dans differentes
revues comme ELEKTOR : electrometre...champ electrique...ions...
Des articles tres interessants sont apparus dans le bulletin des
physiciens sur le principe physique des detecteurs electrostatiques.
Quelques experiences sont decrites, tout ceci donne l'envie de
realiser un petit montage tres facile a faire et surtout tres
amusant avec la participation des enfants et de la famille.
Les phenomenes magnetiques sont bien connus de tous ; on possede tous
quelques aimants puissants comme la partie magnetique d'un vieux
haut-parleur. La boussole met en evidence le champ magnetique
terrestre : le pole Sud de la boussole est attire par le pole Nord
de la planete.

En ce qui concerne les phenomenes electrostatiques, les choses sont bien plus mysterieuses a priori, et on ne realise pas vraiment que nous sommes situes en permanence dans un champ electrique.
Sauf les personnes qui habitent sous les lignes a haute-tension !
Parfois, on est confronte au probleme des charges electrostatiques, qui peuvent avoir un effet nefaste, en particulier pour les composants electroniques. D'ou l'utilisation des emballages speciaux anti-statiques. On a tous ete intrigues par les charges accumulees sur l'ecran du televiseur familial, l'attraction de petits bouts de papier avec un stylo en plastique, le sous-vetement genre "moi froid jamais" que l'on retire dans le noir, la decharge sur la portiere du vehicule ou les arcs echanges avec notre chat prefere.
...
Plus grave, l'utilisation d'une moquette dans la station radio peut avoir des effets destructeurs et de nombreuses pannes mysterieuses peuvent trouver leur origine dans la presence de fortes charges electrostatiques invisibles mais dangereuses (au sol ou sur le bureau).
Vous avez peut etre ete surpris par un petit arc entre votre clavier 102 touches et votre doigt arrive a quelques millimetres d'une touche. C'est rare mais cela existe.
Le detecteur d'orage, qui est en fait un "detecteur d'influence electrostatique" mettra bien en evidence tous les phenomenes presents autour de vous et beaucoup d'experiences feront la joie de votre entourage. Ne pas trop maltraiter votre minet quand meme !

A signaler, tout de suite la forte charge accumulee par les bouteilles d'eau (vides) en plastique, qui serviront par la suite comme charges disponibles pour effectuer les tests du detecteur. (mise au point).

Mais, l'utilisation la plus spectaculaire est encore la mise en evidence des charges atmospheriques a proximite ou meme situees au dessus de nos tetes, on realise alors que les nuages si charmants vehiculent en permanence des charges electriques plus ou moins importantes et de signes positifs ou negatifs.

Pour fixer un peu les idees, sans faire un cours de physique, la terre et les couches ionisees de l'atmosphere forment un enorme condensateur, la terre etant negative, avec une tension de l'ordre de 300 a 400000 kV,
pour la ionosphere par rapport au sol pris comme reference.
Ce qui fait, environ un champ dans les 130 V/m au niveau du sol, tension et champ non mesurables avec un simple voltmetre .
Les conditions atmospheriques changent constamment et les nuages qui vehiculent des charges se polarisent par rapport au champ electrique terrestre, c'est a dire charges positives dans la partie inferieure et negatives dans la partie superieure. (normalement).

Certains nuages sont neutres ou echangent des charges avec la terre, par exemple les montagnes ou le relief. On assiste a des phenomenes d'influence ou des transferts de charges (courants electriques).

Ainsi, vous pouvez tres bien etre en danger sur une montagne, si vous etes pris dans un echange de charges entre un nuage et le sol, par simple effet de passage de courant a travers le corps. (pas encore la foudre). N'oubliez jamais que nous sommes conducteur du courant. La resistance moyenne d'un individu se situe au alentour de 1000 Ohms. Pour les phenomenes plus violents comme la foudre, il s'agit par exemple, de nuages d'orage de type cumulonimbus, dont le sommet se situe a environ 12000 metres a -50°C et qui accumulent une energie colossale. Sans rentrer dans l'explication meteorologique pure qui n'est pas reellement terminee, (voir les tornades ou la foudre en boule, par exemple), on peut constater que les charges electriques positives se situent dans la partie superieure etant donne les forts courants ascendants et les charges negatives se situent vers le bas du nuage. Le sol se charge positivement par influence.

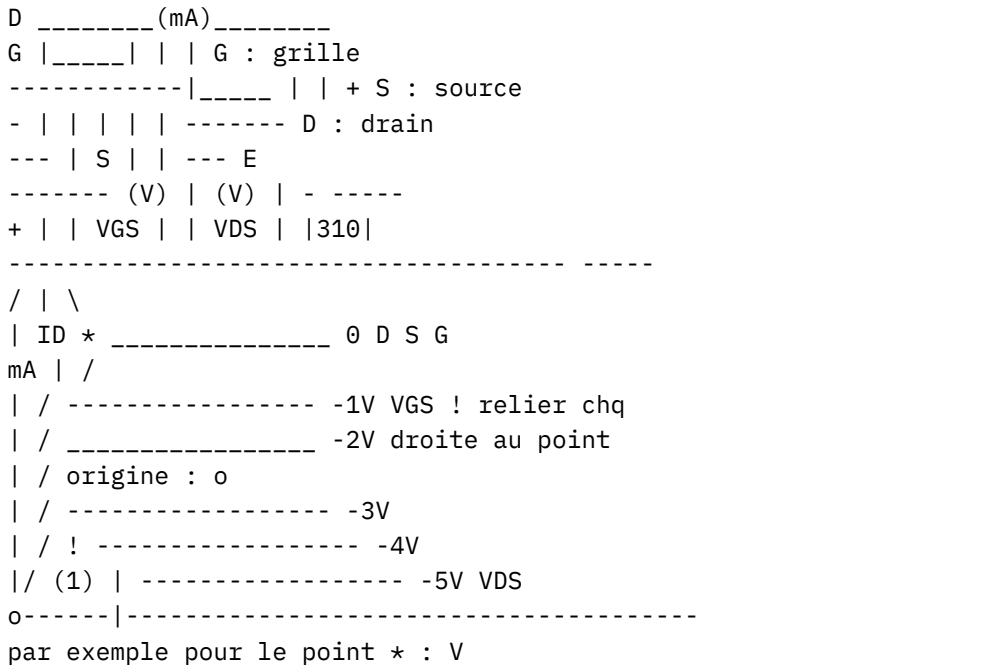
Il y a donc, des decharges electriques (eclairs) entre les parties electriques differentes du ou des muages et le sol.
Tout depend de l'importance de la charge accumulee, de la tension entre les elements de charges differentes et bien sur de la distance et de l'hygrometrie de l'atmosphere.
Le detecteur d'orage sera donc sensible aux eclairs, il permettra de prevoir l'arrivee de l'orage ou signalera un danger possible de decharge electrique locale. Longtemps a l'avance, le detecteur signalera l'activite electrostatique de l'atmosphere, les orages lointains alors que le ciel est parfaitement degage, et le flots de charges positives a l'avant de la masse orageuse.
Nous aurons donc un detecteur capable de donner l'alarme en vue du debranchement des antennes. (en version alarme).
Cette question est suffisamment serieuse, pour que l'on daigne s'attarder a trouver une solution et a mettre au point un detecteur fiable qui ne sera pas considere comme un gadget amusant pour des experiences futiles. C'est un veritable appareil de controle.
Je pense a tous ceux qui ont eu des degats importants dans leur station, ou meme ressenti comme moi le "courant passer" en faisant des essais d'antenne verticale dans le jardin, quand la foudre est tombee non loin de la. Pensons aussi aux nombreux equipements calcines des stations repetitrices situees sur les points hauts, comme par exemple le relais du Roc de Gourdon ou les batteries eventrees jonchent le sol et les cables coaxiaux grilles donnent une idee de ce qui est arrive a l'interieur de la cabine.
Tous les temoignages seront d'ailleurs bienvenus...
Le detecteur n'empechera pas la foudre de tomber ou elle veut, mais il donnera une indication et une alarme, c'est son but.
Voir la suite, pour le principe du montage et la realisation.

NB : Pour la petite histoire, les OMs se reconnaitrons,
non, il n'y a pas de vipere autour de la cabane !?
mais le sol est surement vitrifie, par endroit...

Sans plus attendre nous allons passer a la description du detecteur d'orage ou "detecteur d'influence electrostatique".
Par la suite nous pourrons revenir sur la theorie et examiner quel-

ques experiences ou vos resultats et impressions.

Le transistor a effet de champ : type J 310
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
C'est l'element principal du detecteur, un transistor a effet de
champ canal N, du type FET (ou TEC) : field effect transistor.
On peut realiser un petit montage pour etudier ce transistor et
relever ses caracteristiques : ID



par exemple pour le point * : V

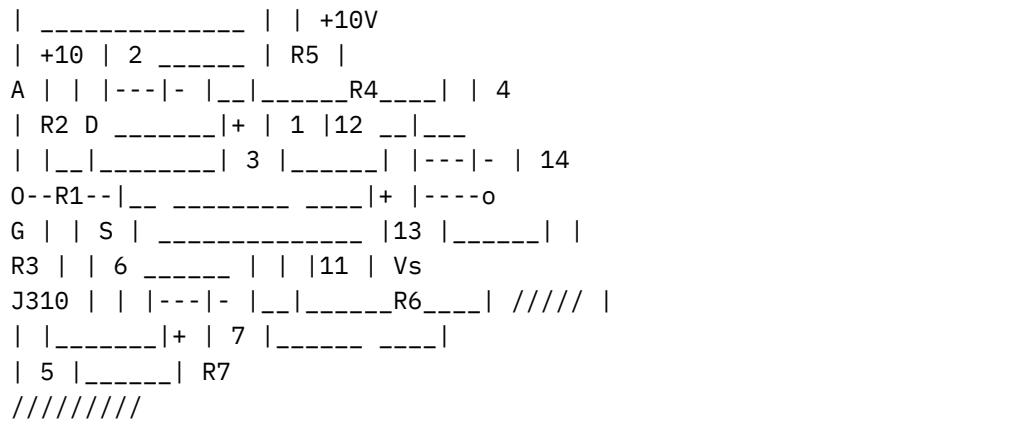
ID = 0,65 mA, VGS= 0 et VDS= 1V
On peut deduire de la caracteristique ci-dessus que le transistor
est une resistance variable dans la zone (1), du point o au point *
le reglage se fait par action sur la tension VGS.
en appliquant la loi d'Ohm :

VDS 1
Rfet = --------- = --------- = 1538,5 Ohms a VGS = 0
ID 0.00065

Cette resistance est faible, elle peut meme etre de quelques Ohms.
Si on applique une tension negative et de plus en plus negative,
entre la Grille et la Source, la resistance Rfet augmente et elle
peut atteindre une tres grance valeur, le courant ID s'annule.

On peut expliquer ce fonctionnement en examinant la structure
interne du transistor : le canal, mais ce n'est pas le but, on
admettra que le canal qui laisse passer le courant du Drain vers
la source s'etrangle plus ou moins suivant la tension negative VGS.
Avec VGS, negatif par exemple -8V, le canal bloque le courant ID.

Schema de base : installer le transistor dans un pont diviseur,
~~~~~~~~~~~~~~
//////

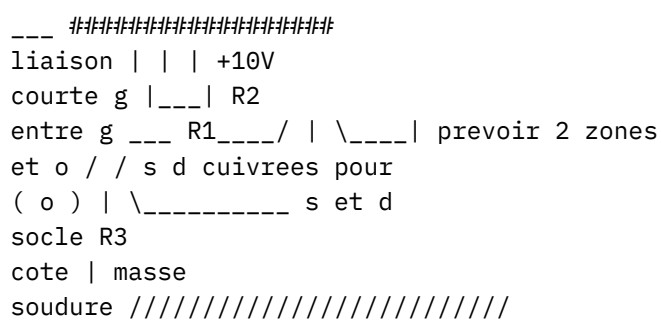


Antenne Pont div. montages suiveurs soustracteur
0,5m J310 LM324 LM324
inox
Placer l'antenne sur une embase isolee (O) par exemple SO239 teflon.
L'extremite etant vissee sur une fiche banane male.
(possibilite de changer le type de l'antenne).
La tension de sortie de ce montage varie entre 0 et un maximum.
Les suiveurs sont presents pour bien isoler le pont diviseur.
Le soustracteur nous donne en sortie :

Vs = VD - VS = VDS et VDS depend de VGS.
donc de l'etat de l'antenne.

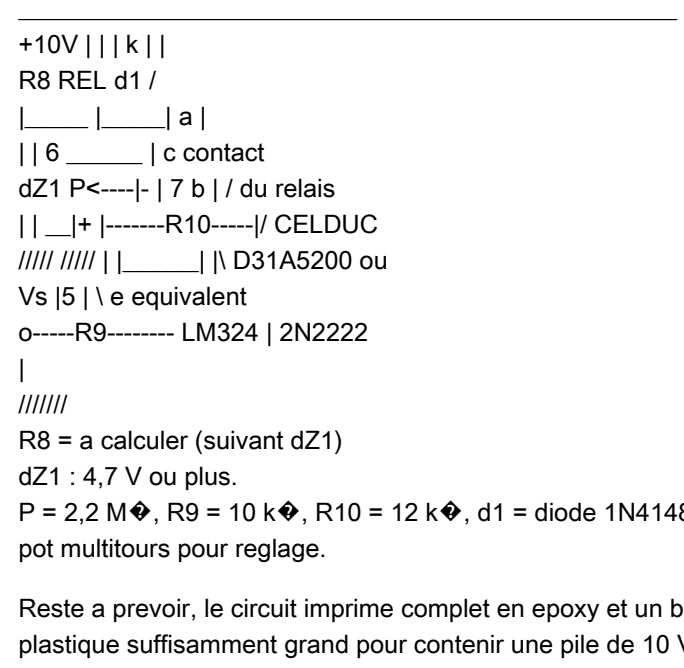
Les resistances sont :
R1 = 10 M&#65533;, R2 = 2,7 k&#65533;, R3 = 1 k&#65533;, R4=R5=R6=R7= 4,7 k&#65533; Alim : 10V.
(une tension de 9V peut convenir, ou meme 12 V).

Attention : les resultats dependent du bon isolement de la Grille et
de l'antenne, le transistor sera soude cote cuivre ou mieux installe
sur un support de transistor a proximite du socle S0239 :



Vue cote cuivre : R1,R2,R3 et support J310.
~~~~~~~~~~~~~~~
Montage pour alarme :
~~~~~~~~~~~~~~~~~~
La sortie sera dirigee vers un montage de mise en forme dans le but
de donner une tension de 0,6 a +4,6V de facon a attaquer un voltmetre
ou une interface vers un PC (il faudrat prevoir une isolation dans ce
cas avec un opto-coupleur par exemple). description a suivre.

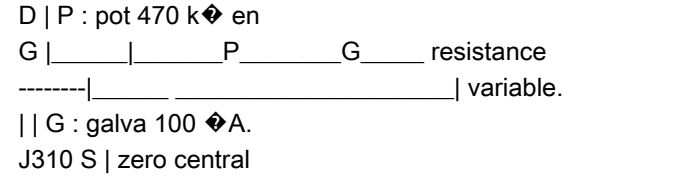
Elle peut se diriger vers un montage d'alarme par depassement d'un
seuil reglable, qui declenchera un circuit exterieur, voyant,sirene...
par exemple :



R8 = a calculer (suivant dZ1)
dZ1 : 4,7 V ou plus.
P = 2,2 M&#65533;, R9 = 10 k&#65533;, R10 = 12 k&#65533;, d1 = diode 1N4148 ou eq.
pot multitours pour reglage.

Reste a prevoir, le circuit imprime complet en epoxy et un boitier
plastique suffisamment grand pour contenir une pile de 10 Volts.
Dans ce cas, la tension chute relativement rapidement et au bout
d'un certain temps le montage ne fonctionne plus, mais pour une
utilisation exterieure il faut prevoir l'emplacement d'un bloc de
piles ou un accu. Voir le probleme de l'alimentation secteur et la
protection par VDR eventuellement.
On pourrait prevoir un galvanometre de 100 &#65533;A en serie avec un pot.
de 470 k&#65533; a commande externe, comme moyen de controle visuel.
Ce montage est a relier entre D et S du J310 directement sur le
circuit imprime, prevoir des picots par exemple.
Derniere chose, tres importante la face superieure du boitier
plastique doit etre recouverte de papier d'aluminium en contact
avec la masse de la SO239, pour eviter un effet capacitif par
accumulation de charges sur le plastique.
La description est terminee, la realisation peut commencer.
Eventuellement je peux vous proposer les plans et une photocopie
du typon contre ETSA, ecrire REF-ARAN-59, qui transmettra.
~~~~~~~~~~~

Une petite explication sur les premiers tests a effectuer avec le
detecteur d'orage.
Placer par exemple le galvanometre pour observer l'influence
electrostatique des charges environnantes :


~~~~~~~~~~~

ou non.
Voir schema precedent : (2).
La pile ou l'alimentation 10V etant branchee, approcher une charge
negative de l'antenne du detecteur. C'est la bouteille d'eau minerale
en plastique (vide bien sur !) qui constitue une forte charge negative.
Le galvanometre doit devier a fond et la tension de sortie est forte.
Que se passe t-il ?
charges : - et + attraction
__ _ __ _ - et - repulsion
____-__-__) |+ + et + repulsion
----> |+ antenne
charges |+
negatives | ID
| Ig | D ^ 100 0
|__<___|--- | \ <-- Vs = maxi
- - - |--- S |VDS \
VGS | | \
///// GALVA

Les electrons (-) de l'antenne sont repousses vers la grille du FET.
Celui ci se bloque et VDS augmente, d'ou le courant dans le galva.
VDS
Igalva = ----------
P
Une tension VGS negative est donc presente ce qui rend ID faible
proche de zero, et VDS augmente vers la tension de la pile.
Si la charge est fixe, au bout d'un certain temps le galva retourne
a zero : les electrons diffusent dans la resistance d'entree du FET.
Elle est de l'ordre de 10+12 M�.
En eloignant la charge il ne se passe plus rien, si elle s'approche
a nouveau il y a une nouvelle deviation du galvanometre.

Important : la distance entre l'antenne et votre bouteille "etalon"
doit etre la plus grande possible, le detecteur doit reagir et
sa sensibilite est fort grande pour une distance de plusieurs metres.
Sinon, verifier l'isolement de l'antenne (tige inox verticale 0,5 m)

Si on approche une charge positive de l'antenne (verre charge),
rien ne se passe, par contre en eloignant le verre, il doit y avoir
une deviation importante :
La charge positive attire les electrons vers le haut de l'antenne,
la grille est donc positive et le FET est conducteur, comme il etait
deja conducteur avec VGS = 0, rien ne se passe en sortie ou sur le
galvanometre.
Par contre en eloignant la charge positive du verre, les electrons
refluent vers la grille et bloquent le canal.
Meme phenomene que plus haut.

Votre detecteur fonctionne donc parfaitement, et des deviations
rapides se produisent quand il est a l'exterieur. Reste a regler
le seuil de l'alarme, suivant le temps orageux ou pas.

Pour cette derniere application il est possible d'amortir un peu
les variations en placant un condensateur chimique en sortie Vs.
(avec une resistance aux bornes de 47 k&#65533; par exemple pour la
decharge du condensateur).

Vous etes donc pret a faire quelques experiences chez vous ou dans
la nature, par exemple a proximite des pylones a haute tension.
(attention quand meme a ne pas vous mettre en contact avec les
tensions du reseau EDF !!!)

Il serait interessant de disposer de charges positives ou negatives
connues avec un condensateur plan que vous pouvez charger vous meme.
Prendre 2 disques en carton et recouvrir une face avec une feuille
d'aluminium que l'on trouve dans la cuisine. Demander a votre YL !
Le disque inferieur sera pose sur une plaque de polystyrene, face
alu au dessus et le disque superieur sera pose exactement au meme
endroit mais avec une feuille de papier intermediaire.
(pas de feuille de plastique, ou polystyrene ...)
Coller un corps plastique de stylo pour pouvoir deplacer le disque
superieur sans le decharger avec les doigts.
En reliant les disques a une tension continue, vous pouvez charger
votre condensateur plan avec la charge que vous voulez :

S m&#65533; Surface
Q = C . U et C = &#65533;o.&#65533;r -------- disque
Coulomb Farad Volt Farad e m epaisseur
papier
-12
&#65533;o = 8,854 10 permittivite du vide

La permittivite du papier sec &#65533;r = 2,5
" " de l'air &#65533;r = 1,0006
" " du verre &#65533;r = 5 a 12

(La rigidite dielectrique de l'air est 3000 kV/m environ).

Un disque sera positif et l'autre sera negatif quand vous les
separerez.
Suivant la polarite de la pile utilisee.
Fixer le fil de liaison souple denude sur l'aluminium avec un adhesif.
Pour le disque sans poignee, l'autre sera charge avec une pointe de
touche au bout d'un fil.

Voila, terminee cette description j'espere que vous aurez toute
satisfaction notamment en ce qui concerne la detection de l'orage.
Vous pouvez faire un autre detecteur pour les experiences.

Une antenne avec une partie pliee a 90&#65533; ameliore la detection :
Faire les essais, prevoir une protection en extremite (petite boule
en aluminimu par exemple : voir x).
x x--------
| |

| |
verticale | |
simple | repliee |
| |
o fiche o fiche

Une liaison antenne vers detecteur par coaxial ne semble pas convenir
en raison des pertes et fuites dans les isolants.
Le detecteur exterieur doit etre protege de la pluie, d'ou la boite
electrique etanche grise utilisee....et l'antenne inox...

73 de Alain F6AGV@ON1LJA.#TY.HT.BEL.EU

Toutes remarques et resultats bienvenus, merci,
Vivement l'orage pour tester le detecteur !

-- Einde van bericht 33705 van F6AGV --

73 de Bart PA3GGM.

3759. Re: Need help..Ts440 power?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <334674d2.58831035@news.flash.net>
Source record: 95274

On 5 Apr 1997 04:32:18 GMT, "George " <kilowatt@jadeinc.com> wrote:

>Hi
>My 440 decided that it would overheat will I was talking. Well when it
>cooled off I turned it back on and nothing happened, it is drawing 20 amps
>, the supply heats up and no lights or output. I checked the fuse and I
>have power to the radio. Anyone got any good ideas beside the sledge
>hammer?
>
>73's george
I had a friend with an older Icom that did this. It was his finals
Try pulling the power to the finals and then turn it back on - but
just for a second!
Kerry Miller
WD5ABC

3760. Re: HELP ASTRON VLS-25M (Dont do is job)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: lecourss <lecourss@total.net>
Message-ID: <3346797E.5E93@total.net>
Source record: 95275

Eric Vincent wrote:
>
> Anybody can help me, my power supply, ASTRON VLS-25M dont work very well. At
> low current (3-5 amps.) it will be ok but when I want more current (5 and up)
> the voltage and the current go down.
>
> If you have any hint, let me know.
>
> Thank's from VE2VXT.
Check your regulation system
--
Stephane Lecours
VE2JTX
Quebec contest group
http://www.riq.qc.ca/users/mcaron/qcg

3761. WTD: Right angle drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: "J. Andy Thompson" <jat@wolfenet.com>
Message-ID: <33468566.2531@wolfenet.com>
Source record: 95276

I need two right angle drives for controls in a linear project I
am working on. Anyone have them?

Andy W7CXA
jat@wolfenet.com

3762. tube socket wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: "W.Piesiewicz" <sp5abl@free.polbox.pl>
Message-ID: <01bc41d3$1c10cfe0$3ffb74c3@default>
Source record: 95277

I looking for tube socket for 4cx1000 or 4cx1500. Where to buy it? Second hand one is ok also.

3763. Re: R2 RECEIVER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000504970945550001@news.europa.com>
Source record: 95278

:Hi Rob,
:
: I think I am beginning to see your point! IF the mixer is a true
:multiplier, then of course the complete spectrum of the LO is able to
:mix with the input signal, and all resulting spurs will appear in the
:output. In fact, having an otherwise very clean front-end, with high
:dynamic range, demands a very pure LO signal indeed. Seems like one
:needs an LO with spurs at least as far down (in terms of equivalent
:uVolts RMS at the input the mixer), as the minimum detectable signal, to
:avoid hearing the spurs in the output.
: Where I was going wrong I think was in thinking of the LO as a high
:level, saturating drive which merely turns the diodes on and off in the
:ring mixer, very hard. If the LO is cancelled (say by 40 dB or so), in
:the output, due to the balanced nature of the ring mixer, then I thought
:that the LO spurs would also be similarly attenuated.
: Still scratching on paper about this...
:
: 73,
: Don

I think the true answer is somewhat murkier than my oversimplification. Certainly any two spurs or LO to spur with a difference in freq somewhere in the audio range will show up in the audio output. But its probably very hard to predict their level due to to port to port isolation and any other wierdness in the mixer and diplexer. You'd probably need a supercomputer since it seems the DDS manufacturers haven't totally figured out how to predict spurs in their products either.

Still, though -70db minus another -40db for port isolation still equals a loud signal.

I have never tried a commutating mixer in a DC receiver. It seems you'd need an audio transformer on the output and some kind of network so that it would act like a real transformer also at the LO freq.

Best regards, Rob.

3764. Re: NII/SUPERNet devices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: rwclark@rwclark.seanet.com
Message-ID: <3346904b.2361164@news.seanet.com>
Source record: 95279
Cross-posted to:
rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.antenna,sci.electronics.equipment

On Fri, 04 Apr 1997 23:00:27 -0500, "Andrew M. Appel"
<aappel@duncan.nac.net> wrote:

>Have you heard that the FCC has made available 350 megahertz of spectrum

snip
>
>NII/SUPERNet devices would provide short-range, high-speed wireless
>digital information transfer and could support the creation of new
>wireless local area networks (LANs) as well as facilitate access to the
>National Information Infrastructure without the expense of wiring.
>These devices may further the universal service goals of the
>Telecommunications Act by offering classrooms, libraries, health care
>providers, and other users inexpensive networking alternatives which may
>access advanced telecommunications services.
>

Hi Andrew,

Given the frequency and application, you may wish to see what
modulation modes are allowed. My hunch is that it will be spread
spectrum. Not a simple task to build these systems much less the RF
plumbing at 5 Gigs.

73's
Richard Clark, KB7QHC

3765. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: stubstad@ix.netcom.com
Message-ID: <5i69st$epn@dfw-ixnews1.ix.netcom.com>
Source record: 95280
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In <5i1mni$el2@senator-bedfellow.MIT.EDU> jpd@space.mit.edu (John Doty) writes:

>> MAGNETIC influence antenna?

>> antenna only receives the magnetic field of the transmitting station,
>> and rejects all electrostatic fields, noise is GREATLY reduced.
>
>Ah, that myth! The idea that man made noise is predominantly
>electrostatic has been around for a long time. It may even have
>been true for an earlier generation of technology, but it isn't
>now. Computers, in particular, tend to make noise that's predominantly
>magnetic.

True, but non propagating near fields are usually the worst problem in residential EMI, and the power transfer to antenna due to non-propagating magnetic fields decrease as 1/r^3, whereas the electric decreases as 1/r^2...also magnetic loop antennas that are highly symmetric in geometry and loading exhibit deep narrow nulls and broad maxima in 3-D so that by rotating and tilting the loudest self-coherent local magnetic noise source (usually line related noise or CRT noise), whether propagating or near field, can be reduced by 20-30 dB with little effect on polarization scattered ionospheric reflected signals or most groundwave signals which happen to have somewhat different azimuth and/or polarization. A short dipole has an end fire null too, but in my practical experience (inadequate balance?) it is not close to a shielded magnetic loop null in depth or sharpness.

>
>This isn't to say that magnetic antennas aren't useful, but they
>are no miracle cure for noise pickup. In a noisy environment where
>one cannot block common mode on the feedline a balanced magnetic
>antenna will likely outperform an unbalanced electrostatic (whip)
>antenna. However, compared with a *balanced* electrostatic antenna
>it may be worse.
>
>--
>John Doty "You can't confuse me, that's my job."
>jpd@space.mit.edu

Jim

3766. Diode for wide band RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: leeleduc@pacbell.net
Message-ID: <3346b5a8.259355@news.pacbell.net>
Source record: 95281

I'm building a FSM to check for low level (a few milliwats) rf for frequencies in the 500 Mhz to 1 Ghz range. Could someone recommend a diode I could use for a detector at these frequencies? I find that the 1N34 is not suited for this purpose.

Thanks.

3767. FS: Tubes, rf components, parts, etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: Gerald Cluff <cluffg@sisna.com>
Message-ID: <01bc3885$50de8f20$639d62cf@cluffg>
Source record: 95282

see page for details
--
W7CKW
GERALD CLUFF
7946 W. OREGON AVE
GLENDALE, AZ 85303
H: (602)872-8888 W: (602)436-6276
http://www.sisna.com/users/cluffg/ham.htm
email: j142@doitnow.com

3768. IC-720A and relay current ratings

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: Mark David <mjdavid@ibm.net>
Message-ID: <01bc41e6$f764e780$LocalHost@squbbsy>
Source record: 95283
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hi,
I'm trying to breath some new life into an old Icom 720A transceiver by replacing the faulty rotary relay in the band pass filter unit.
Working on an article written by WB0GAZ in 1993 I'm hoping to replace the relay with indivdual band switching relays, of which some 14 are required (to switch filter input and output).
Space constraints dictate these relays should be as small as possible, which then limits the current rating of the relay.
The question is, am I right in assuming the current rating of the realy can be calculated (using formula P=I^2 R, P=100W, R=50ohms) to be 1.4A, and therefore a relay rated at 2A AC will work, or am I missing something?
Put the question another way, what relay current rating should I use to handle 100W?

Thanks

Mark
G4MEM
mjdavid@ibm.net

3769. Re: Diode for wide band RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5i6mh5$qt6@mtinsc05.worldnet.att.net>
Source record: 95284

Woody sez:
Don't have the number handy, but check out hewlet packard hot carrier
diodes, maybe # 5082-3304 or 3303?? Old 1N23 or 1N78 may work also.

Lee Leduc wrote:
>
> I'm building a FSM to check for low level (a few milliwats) rf for
> frequencies in the 500 Mhz to 1 Ghz range. Could someone recommend a
> diode I could use for a detector at these frequencies? I find that the
> 1N34 is not suited for this purpose.
>
> Thanks.

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3770. Re: BIG transistors F.S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: Dave VanHorn <dvanhorn@stonewest.com>
Message-ID: <3347150C.3E66@stonewest.com>
Source record: 95285
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

> > Powerex KS621K60 single Darlington transistor module.
> > 600 Amperes / 1000 Volts

> Holy sh.....er.... geez, how big a heat sink does one of these beasts
> need when running at max rated? Sorry to waste the bandwidth with

It's an either-or, as are most all semiconductors. The current rating
alone tells you that it can dissipate at least .6*200A or 360W, into
some kind of heat sink probably. If it went linear at 500VCE and 600A,
it would be smoke.

3771. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: radiorob@serix.com
Message-ID: <radiorob.861.005C9B6E@serix.com>
Source record: 95286
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

>Tony Said...
>
>> -=Tony=- W6ANV San Francisco, CA
>>
>> ps: I find it strange that the "owner" of the Tempe BA list
>> is not participating in the exchanges here. If he/she is,
>> he has not ID'd as such to my knowledge. I'd like to hear
>> (read) what HE has to say. "From the horses mouth", so to
>> speak. So would others like to read, I presume.
>>
>>

>Well, greetings from "the horses mouth".

>I got such a kick out of reading all of the comments I thought I'd stop by
>and say HI to my fellow BAers.

Dave:

Thanks for replying to Tony's Question!! All I can say after reading your
reply is....."BRAVO".

Now....let's continue having fun with Boatanchors......who cares where the
info comes from.....just use it , enjoy it, and learn from it.

73...ROB.

3772. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33470D3C.4230@crpl.cedar-rapids.lib.ia.us>
Source record: 95287
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
>
> No. An antenna may respond to either magnetic or electric fields
> in its vicinity, or some combination.

According to Faraday's law, a changing magnetic (H) field creates an electric (E) field. This E field, if it is tangential to the surface of a conductor, appears also as an induced emf *in* the conductor (if the conductor is not a perfect short circuit) by virtue of a boundary relation for tangential electric fields. This is the law of electromagnetic induction (Maxwell's equation derived from Faraday, also known as the the transformer induction equation).

The magnetic field, by itself, doesn't induce *anything*. Changing magnetic fields don't induce voltages directly, rather it is the associated E field that is responsible.

This principle is very commonly found in conventional transformers of all kinds, where the magnetic flux is nearly *all* found in the high permeability core, but the windings are physically separated from the core by air and insulation. The flux itself doesn't come in contact with the wire (except for a tiny amount of leakage flux), but the E field does. In a transformer, the only requirement is that the conductor must *enclose* the magnetic flux.

This reasoning also applies to the counter-emf that is induced back into the primary winding of the transformer.

One of the major misunderstandings of electromagnetics is that the magnetic flux itself is *directly* responsible for induced emf. Not true at all.

This reasoning also applies in general also to antennas.

Bill W0IYH

3773. Re: 900 MHz power question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: ZygomaD & Darkezza <do_not@spam.here>
Message-ID: <334715A5.70F9@spam.here>
Source record: 95288

Joel E. Davis wrote:
>
> In article <01bc326d$f99ef6e0$ac1e92d0@lcarlson.northernnet.com> "Les"
<lcarlson@northernnet.comX> writes:
> >From: "Les" <lcarlson@northernnet.comX>
> >Subject: 900 MHz power question.
> >Date: 17 Mar 1997 00:51:37 GMT
> >
> >Hillary commenting on the release of subpoenaed documents:
> > "I'm not going to have some reporters
> > pawing through our papers.
> > We are the president."
> >--
> Get um Hill. Hillary for pres.

Heh...reminds me of a bumper sticker I saw up here in "The Frozen
North":

Impeach Clinton, and neuter her old man!

Cheers :)
--Barney--
kl7hny@qsl.net
Soldotna, Alaska, USA

3774. Re: Diode for wide band RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-05 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.130.016F0FE1@phoenix.net>
Source record: 95289

In article <3346b5a8.259355@news.pacbell.net> leeleduc@pacbell.net (Lee Leduc) writes:
>From: leeleduc@pacbell.net (Lee Leduc)
>Subject: Diode for wide band RF detector?
>Date: Sat, 05 Apr 1997 20:27:48 GMT

>I'm building a FSM to check for low level (a few milliwats) rf for
>frequencies in the 500 Mhz to 1 Ghz range. Could someone recommend a
>diode I could use for a detector at these frequencies? I find that the
>1N34 is not suited for this purpose.

>Thanks.
1n23

3775. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5i6uu0$obg@senator-bedfellow.MIT.EDU>
Source record: 95290
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Tom Rauch wrote:

> If the antenna only responded to magnetic fields, you would hear no
> distant signal at all. If it responded to electric fields, the same
> would be true.

No. An antenna may respond to either magnetic or electric fields
in its vicinity, or some combination. A short dipole is relatively
insensitive to magnetic fields, while a small loop is relatively
insensitive to electric fields. *Radiated* fields have equal energy
in their electric and magnetic fields, but the quasi-static fields
very close to an EMI source are often predominantly one type, so
an antenna that's unresponsive to that type will have a signal to
noise ratio advantage.

Paul Keindnen wrote:
> >jpd@space.mit.edu (John Doty) wrote:
> >Ah, that myth! The idea that man made noise is predominantly
> >electrostatic has been around for a long time.
>
> This is true only in the near field of the noise source within
> lamda/(2pi), on 80 m the limit is 27 m. The closer to the noise source
> you are, the greater the difference between the electric and magnetic
> field, at 0.01 wavelengths the difference is about 20 dB.

If you replace "is true" with "could be true" in the above you're
right. Note however, that the field in the "static" zone within
lambda/(2Pi) of the radiator may be predominantly electric,
predominantly magnetic, or a combination.

Formulated in terms of dipole moments in the "Gaussian" units
commonly used by physicists, the radiation equations for a small
dipole and a small loop are perfectly symmetrical: you just exchange
electric dipole and magnetic dipole moments, and electric and
magnetic fields. Thus, there is no preference in the physics for
a particular dominant field: which will dominate depends on the
particulars of the situation.

Jim (stubstad@ix.netcom.com) wrote:

> the power transfer to antenna due to
> non-propagating magnetic fields decrease as 1/r^3, whereas the electric
> decreases as 1/r^2

The *field strength* (not power transfer) behaves like this when the dominant field in the static zone is magnetic. However, you seem to be assuming that the 1/r^3 behavior means the magnetic field energy drops below the electric field energy. Actually, when they get to be comparable (at about lamda/(2Pi), as Paul said), the slope becomes shallower and they remain comparable through the "induction zone" (out to about lambda) and the "radiation zone" (where they become almost exactly equal).

Power transfer is proportional to the *square* of the field strength, so dipole-dipole or loop-loop power transfer declines like 1/r^6. Loop-dipole or dipole-loop power transfer is smaller in the static zone, but it only declines as 1/r^4. In all cases, the fields in the radiation zone (far from the radiating antenna) decline as 1/r and power transfer declines as 1/r^2.

Jim (stubstad@ix.netcom.com) also wrote:

> A short dipole has an end fire null too,
> but in my practical experience (inadequate balance?) it is not close to
> a shielded magnetic loop null in depth or sharpness.

I think you've hit a real issue: in some cases it is easier to balance a loop antenna than it is to balance a dipole. One common practice that is sometimes not best is to use a multifilar "balun" transformer for balancing an antenna. A conventional transformer with separate windings often achieves better balance, especially if it is wound on a relatively small core. It is harder to get good symmetry with a balun. I once introduced a balun into an already well balanced scientific video system ("just to make sure") and made the balance worse.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

3776. Re: How to link two repeaters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: rdcole@mindspring.com
Message-ID: <33470448.35518170@news.mindspring.com>
Source record: 95291
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 28 Mar 1997 16:43:31 GMT, mac@cis.ksu.edu (Myron A. Calhoun) wrote:

>I've been asked by our local Emergency Preparedness office to try to
>link the 146.07/67 or 146.355/955 repeater in Topeka, Kansas, with the
>147.855/255 repeater in Manhattan, Kansas, (about 50 miles distant).
>
>While I have several IDEAS how one MIGHT got about this, I don't have
>the slightest KNOWLEDGE and wonder if anyone can cite publications or
>give real-life examples of how to link two repeaters?
>
>--Myron.
>--
>## Five boxes preserve our freedoms: soap, ballot, witness, jury, and cartridge
>## PhD EE (Retired prof.) CDL (PTX) W0PBV (913) 532-7353 fax 539-4448 home
>## NRA Life Member and Certified Instructor (Home Firearm Safety, Rifle, Pistol)

Myron,
Their are several ways to link these repeaters. They all rely
upon the controller to be able to perform the needed functions. Most
controllers in use to day are microprocessor controlled and will
handle several types of links.

The Easiest if a Simplex link on a say 70cm. For a more transparent
system you can use a Full Duplex link on 70cm.

I can get into a more detailed explination on the links if you would
like.

Ron Cole
N5HYH

3777. Re: Diode for wide band RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: leeleduc@pacbell.net
Message-ID: <33470c66.154558@news.pacbell.net>
Source record: 95292

Thanks. I used to use HP microwave mixer diodes many years ago for
this. I just couldn't recall the p/n.

Woody White <"eMail "@ my.www.page.Mailto> wrote:

>Woody sez:
>Don't have the number handy, but check out hewlet packard hot carrier
>diodes, maybe # 5082-3304 or 3303?? Old 1N23 or 1N78 may work also.
>
>
>Lee Leduc wrote:
>>
>> I'm building a FSM to check for low level (a few milliwats) rf for
>> frequencies in the 500 Mhz to 1 Ghz range. Could someone recommend a
>> diode I could use for a detector at these frequencies? I find that the
>> 1N34 is not suited for this purpose.
>>
>> Thanks.
>
>--
>de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
>Work: Electron Microscopist/Microanalysist
>Balance: Ham radio "homebrewer", shade tree mechanic,
>'90 Nissan 240SX, wish still had my Mcycle too!
>http://www.geocities.com/capecanaveral/3722
>.

3778. Re: WTB: PLATE MODULATION IRON (TRANS.)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: robjohn@chesco.com
Message-ID: <5i78q1$h56$1@news.chesco.com>
Source record: 95293

n4mxf@aol.com (N4MXF) wrote:

>Hi; I'm looking for a modulation transformer for a kw AM rig.
>My pref. is for multi-tap. The rig runs pr. of 813 @ 2150vdc with
>load imp. of about 4500 ohms. Modulators are 813's at p to p imp. of
>17,000 ohms. Trans should have approx. 2:1 turns ratio. If you have
>anything
>close will consider changes to meet transformer. Call (540) 972-9628 or
>e-mail N4MXF@aol.com. TNX and 73; Bill (N4MXF)

Hi Bill,
You might want to rethink your design. If you are using a common power supply for the RF and modulator sections, a 2:1 turns ratio will only allow 70-75% modulation. I would triode-connect the 813's in the modulator or go with 810's,805's,or811A's and use a ratio of 1.4:1 or so. Just a thought from an old fart who's been there.
Congratulations on being a builder, it's a dying but very rewarding part of the hobby. Hope to hear you on Yayem.
Best 73, Greg K3EWZ

3779. Re: Drawing Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: bcspain@aol.com
Message-ID: <19970406062301.BAA03684@ladder01.news.aol.com>
Source record: 95294

Dale Martin wrote:
>
> This may be an old question, so my apologies upfront.....
>
> Does anyone have any recommendations for software for creating
> schematics and wiring diagrams? I have tried a couple of low-end
> programs and found them too labor intensive and not really suitable.
>
> I'd appreciate anyone's suggestions, recommendations, and/or ideas.
>
> Thanks in advance.
>
> 73,
> --
> Dale Martin
> kg5u@hal-pc.org
> http://www.hal-pc.org/~kg5u

Dale,

There is a cad program called KeyCad by Softkey (available at wal-mart) for about $30 that has a good symbol library. Its a little quirky to learn but works well. If you want to spend a little more money and get up into a real cad program, AutoCad LT costs around $400 and has extensive symbol libraries available. From there you can go all the way and spend around $3500 for AutoCad Release 13. The same libraries that work for this will work for LT. Unless you want to do 3-d work, there's no real reason to buy the big package.

73's

Bryan

3780. Re: Diode for wide band RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <OgAneZACb1RzEwPn@lfheller.demon.co.uk>
Source record: 95295

In article <3346b5a8.259355@news.pacbell.net>, Lee Leduc
<leeleduc@pacbell.net> writes
>I'm building a FSM to check for low level (a few milliwats) rf for
>frequencies in the 500 Mhz to 1 Ghz range. Could someone recommend a
>diode I could use for a detector at these frequencies? I find that the
>1N34 is not suited for this purpose.

Try a Schottky / hot-carrier diode like the 1N5263.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

3781. Re: BA Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: anthonys@ix.netcom.com
Message-ID: <5i7m33$6q1@dfw-ixnews6.ix.netcom.com>
Source record: 95296
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In <01bc418d$428492b0$122e44c6@web1> "Dave - AI7R" <aa7tq@primenet.com>
writes:
>
[snipped redundancy]
>
>Well, greetings from "the horses mouth".
>
>I got such a kick out of reading all of the comments I thought I'd stop by
>and say HI to my fellow BAers.
>
>Since some are interested in "why" there is another list for the BAs it's
>simple. I believe (and I'm allowed that pleasure) that on the Internet the
>mail lists should be free. If it cost to much to run it for free, find
>another way to run it or simply don't. I'd hate to see a trend
>started...although I'm sure it will happen. Now, do I think you need to
>"believe" I'm right? Nope....but I expect the flames anyhow.

Dave, thank you very much for your excellent reprise. Flames? NAW,
for such well based commentary! You bettcha, I'm sure many of us
appreciate your good work in Tempe. Yeah, also the description on the
close liassion between the city fathers and ham radio.

Many words have been voiced on the "boatanchors" issue which now
should be laid to rest. I hope. For those that I have sent of an
apparent offensive nature, I apologize. It's clear that I "assumed"
too much!

What I said brought me two _virulent_ flames by private message and
one public. Disheartening but best ignored in my view. It is the
way with some myopic people.

I sure hope the "proofing" of your Tempe system has worked well.
Take care,

-=Tony=- W6ANV

Balance of Dave's message:
>
>Is it run by the City with the strange looking City Hall...that same City
>that brought you the Super Bowl 1996 and brings you the Fiesta Bowl each
>year? Yep. Do you think that football stuff cost any tax money?
>Hmmmm...I think SB XXX cost us about $200,000.
>
>The reason the "Radio" groups are on our server (we also host the Collins
>and Heath lists) is mainly for testing. We bought a list server software

>package for $2,000 that we needed to learn how to manage - and test. You
>can't test a package without running some live data though it...hence the
>"ham" lists. It worked...we found some bugs (just ask the Collins guys),
>and at this point we think we have them all crushed. We are already
>starting to populate the server with some "city" lists now and we feel good
>about its operation.
>
>Tempe is a big supporter of ham radio - giving us meeting rooms for our
>club, places for VE testing, and recently a classroom for ham classes. We
>are installing a station in the adult center and they donated a 2 meter
>repeater that we maintain on one of the City sites. Don't you wish YOUR
>City was as "ham friendly"? Enough about the host for the list
server. As
>far as tax money...I see any tax money that "we actually get to make
use
>of" as a good thing!! And who wouldn't?
>
>You'll notice that I have not been pushing the subscription to the
Tempe BA
>list...heck, I work for a City, and as a civil servant I'm sworn to
not
>care if you live or die. Just kidding....but my attitude is...if
enough
>people want it it will fly...if not, it won't. Time will tell.
Meanwhile
>it's an option...not a stab at the other list (that I'm a member of by
the
>way - and enjoy)...not an ego boost...but maybe it is the thing that I
can
>offer to my fellow hams.
>
>Let's get back to talking about radios that warm the shack and the
heart!
>
>73
>
>Dave
>AI7R
>ex-WA7GPF ex-AA7TQ

3782. CRETE HOLIDAYS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: MANOS NERANTZULIS <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc4264$cf267c60$e8915cc1@dummy.forthnet.gr>
Source record: 95297

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/4/97 TO 31/10/97.FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT ++30 81 761382.

3783. WHO KNOWS E-MAIL FAX ADDRESS OF WELZ.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: MANOS NERANTZULIS <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc4267$99986f60$e8915cc1@dummy.forthnet.gr>
Source record: 95298

WHO KNOWS E-MAIL FAX ADDRESS OF WELZ.

3784. WTB: IC900/IC901 Band Units

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: Ron Curry <recurry@insighttec.com>
Message-ID: <01bc425b$5c04b200$5ba19ecd@expressp5.insighttec.com>
Source record: 95299
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

I'm interested in the above units or whole radios. Please reply via email.

Thanks,
Ron

--
Ron Curry
KE6WED
recurry@insighttec.com

3785. Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5i7423$bpj@news.Hawaii.Edu>
Source record: 95300

The article regarding using an oscilloscope CRT for lightening detection lead me to write the author and ask if a TV set CRT could also be used. He said yes, the deflection coils would go to N-S and E-W oriented dipoles. Well this now leads me to ask, can one use a TV as an oscil-loscope? It certainly would be crude but it might be fun to convert and use, just the same.
Jeff KH2PZ / KH6

3786. WTB: Motorola Spectra 900mhz mobile radios

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: Ron Curry <recurry@insighttec.com>
Message-ID: <01bc425b$fdad9540$5ba19ecd@expressp5.insighttec.com>
Source record: 95301
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'm an amateur and am converting these for use on the 900mhz ham band. I'm looking for used radios, trade-ins, etc. any model. If you have any to sell or know of any please reply via email with model numbers and asking price.

Thanks you,

Ron

--
Ron Curry
KE6WED
recurry@insighttec.com

3787. Re: WTD: 1N3321 zener diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <5i85na$au0@news.doit.wisc.edu>
Source record: 95302

Ray LaRue <raylarue@gte.net> wrote:

>I'm in need for a 24 volt, 50 watt zener diode, 1N3321 or ECG 5464, for
>the bias on my anplifier. I've called all the local and many of the
>national distributors, with no luck. Anyone got one, or know a good
>source?

Based on my experience with some equipment we used to manufacture, no
one makes 50 Watt Zeners any more. You can replace your 50 watt unit
with a 50+ Watt power transistor and a smaller Zener or just string a
series of smaller voltage Zeners that add up to 24 V.

Jim

Melissa Kepner Jim Adney
mgkepner@facstaff.wisc.edu jim.adney@mpcug.com
Laura Kepner-Adney
Madison, Wisconsin

3788. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970406135400.JAA18749@ladder01.news.aol.com>
Source record: 95303

In article <5i7423$bpj@news.Hawaii.Edu>, jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:

>Well this now leads me to ask, can one use a TV as an oscil-
>loscope? It certainly would be crude but it might be fun to convert
>and use, just the same.
>Jeff KH2PZ / KH6

Boy -- that brings back memories! It certainly is possible. I remember seeing adds back in the 60s for info on converting tvs into "big screen oscilloscopes" in magazines such as Popular Electronics, etc.
I assume they used the horizontal deflection circuits in the set, and applied the signal to the vertical deflection amplifiers. I would think the bandwidth and the sweep capabilities would be limited.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

3789. Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3347b5a6.780709@netnews.worldnet.att.net>
Source record: 95304
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Sat, 5 Apr 1997 13:46:00 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
wrote:

.
>*Some* RFI is short range, just an E field or just an H field, but
>if the source is large enough to form an effective antenna, or is
>connected to wires in such a phase that the Poynting vector is
>synthesized, an EM field, IE ordinary radio wave, will be generated,
>and that can propagate long distances.

Hi Gary,

The E and H fields are effects we measure, they are not the *cause* of
the radiation field.

The radiation field is caused by acceleration of charges. It is
impossible to "synthesize" an EM radiation field.

Thinking the electric and magnetic fields are separate physical
"things" that can be mixed or picked apart when dealing with radiation
is the source of much antenna voodoo.

73 Tom

3790. *** 3 NEW Email Reflectors: Books, Software, Mobile/Portable ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <3347CB4A.5475@primenet.com>
Source record: 95305
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

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Ham-Books is a mailing list (reflector) devoted to the literature
and periodicals of amateur radio:

* publishers
* magazines
* newsletters
* books
* old and "collector" books
* new book announcements

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-books

To be deleted from the mailing list, send email as follows:
TO: mojordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-books

To post items to the reflector, send email as follows:
TO: ham-books@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Software is a mailing list (reflector) devoted to software
of all types used for amateur radio:

* logging
* propagation prediction
* digital modes
* award tracking
* commercial, shareware, freeware
* electronic design and simulation
* amateur software development

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-software

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-software

To post items to the reflector, send email as follows:
TO: ham-software@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

-----

Mobile-Portable is a mailing list (reflector) devoted to mobile
and portable operation of amateur radio (QRP and QRO, HF and VHF+):

* rigs, antennas, tuners
* installation
* batteries
* generators
* solar and alternative energy
* camping/RVs/backpacking
* laptop/palmtop computers
* portable packet
* roving and mountain-topping
* GPS, APRS

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe mobile-portable

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe mobile-portable

To post items to the reflector, send email as follows:
TO: mobile-portable@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

-----

3791. Re: INFO on YEASU 5100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: poseidon@ziplink.net
Message-ID: <3347d416.72062766@news.ziplink.net>
Source record: 95306
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I am planning to buy this radio. It sells for less than $400. Is it
capble of 9600 baud operation with packet?

If it needs to be modified for such operation, has anyone done that
iwth success and is there info avalable anywhere?

thanks you for any reply.
--
\\\|///
\\ - - //
(@ @)
+-----------------oOOo-(_)-oOOo-------------------------------+
| Benedict P. Barszcz amatuer radio callsign: kb2qzv |
| poseidon@ziplink.net linux fan |
+---------------------------Oooo-------------------------------+
oooO ( )
( )) /
\ ((_/
_)

3792. TS-520S conversion for 6M -how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: ernie@netvision.net.il
Message-ID: <3347f7c9.55979455@news.netvision.net.il>
Source record: 95307

Hi
Has anyone done it ? Any IDEAS ?
Thanks in advance de Isaac, 4Z4TL

3793. Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5i91rh$5h1@senator-bedfellow.MIT.EDU>
Source record: 95308
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

William E. Sabin wrote:

> According to Faraday's law, a changing magnetic (H) field creates an
> electric (E) field. This E field, if it is tangential to the surface of
> a conductor, appears also as an induced emf *in* the conductor (if the
> conductor is not a perfect short circuit) by virtue of a boundary
> relation for tangential electric fields. This is the law of
> electromagnetic induction (Maxwell's equation derived from Faraday, also
> known as the the transformer induction equation).
>
> The magnetic field, by itself, doesn't induce *anything*. Changing
> magnetic fields don't induce voltages directly, rather it is the
> associated E field that is responsible.

True, but misleading in this case. The question at hand is whether one can make a difference in pickup of local EMI by selecting a small (compared to lambda/(2Pi)) loop antenna versus a small dipole. Whether you consider the loop response to be due to Curl E or dB/dt is irrelevant, since you get the same answer in either case. The important thing is that the loop does not respond to curl-free electric fields. The field of a small dipole antenna, in the static zone, is nearly curl-free so a loop will be relatively insensitive to it.

> This principle is very commonly found in conventional transformers

A conventional transformer represents the extreme case of two loop antennas coupled in the static zone. Those who believe that there's no difference in static zone pickup between dipoles and loops are invited to attempt to build a working transformer with a dipole in place of one of its windings.

Tom Rauch wrote:

> Thinking the electric and magnetic fields are separate physical
> "things" that can be mixed or picked apart when dealing with radiation
> is the source of much antenna voodoo.

In the static zone (well within lambda/(2Pi) of the field source) one *can* treat the fields as separate entities. This is a "long wavelength" approximation, but remember that Maxwell's equations themselves represent a long wavelength approximation of quantum electrodynamics, which is a long wavelength approximation of electroweak theory, which is... Well, you get the idea.

Farther away, you can indeed get into serious trouble with this approximation. Most types of antennas are bigger than the static zone, so this approximation is not generally useful in antenna design. However, the subject is active antennas, which are normally small enough, and close enough to EMI sources, that this approximation *is* useful.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

3794. Homebrew Antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: cavenerl@nbnet.nb.ca
Message-ID: <3347e330.2976085@news.ascio.net>
Source record: 95309

I'm just getting into ham radio, and I feel that I should learn about the componenets of ham radios before I go on. I want to learn about antennas and hopefully make my own.

I was wondering if someone has schematics (or a list/description) for making a VHF antenna, recieve only, omni etc.

I am looking for something that will recieve between 79 Mhz and 1500 Mhz (ironically the same frequencies which FM is broadcasted over... I suppose you can tell what I plan on using this antenna for).

Also, what are the particular things that make an antenna recieve better signals from farther away, or transmit different frequencies and range.. Does anyone know a good on-line resource, or perhaps a book that I could find at my local Coles Bookstore or Library?

Anyway, if it looks like I have no clue what I am talking about, I don't so don't make fun of me! :)

Thanks everyone, this group is great!


```
+-------------------------------------------------+
|Lance Cavener cavenerl@nbnet.nb.ca |
+-------------------------------------------------+
| "I would never lie. I willfully participated in a |
| campaign of misinformation." - Fox Mulder |
+-------------------------------------------------+
```

3795. Re: NBFM pre-emphasis, how much?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <3348070C.5858@earthlink.net>
Source record: 95310

Wilbert Knol wrote:
>
> Thanks for reading this message.
>
> I am in the process of nutting out a 2m xtal controlled TX strip to be
> used for packet. FM is obtained from a varicap diode across the xtal.
>
> My question is: how much pre-emphasis (dB/octave) should I apply, and
> at what frequency should it start? My books talk about time constants
> (50, 75 and 100us) which presumably define the frequency at which the
> pre-emphasis kicks in. Also, a slope of 6dB/octave is mentioned. Does
> this sound reasonable? Any comments appreciated.

For packet, NONE!!!! You arent worried about it in this application as in
x.25 1200 baud, you only have TWO freqs to consider...1200 and 2200Hz.
For voice applications, 6db/octave is the standard value....the reference
freq is 1000Hz for 0db gain...
For 9600 baud and other FSK, you dont use pre-emphasis either! DIRECT FM
the TX...
>
> Wilbert, ZL2BSJ.
>
> PS: please remove killspam. from Email address before replying.

73
Chris
WB5ITT
Former RF Technical Director-TCAPS;Texas Coastal Amateur Packet Society

3796. Re: Schematic capture program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <3348079F.574B@earthlink.net>
Source record: 95311

Clif wrote:
>
>
> If you need only small schematics got to http://ivex.com/ and get their
> free software. It is limited to 100 pins but works well and the have a
> companion PCB layout software I have but haven't tried yet...

Actually if you register it, you get 220 pin capacity...and its STILL Free!! I have 1.26 now....works great under W3.11 and 3.1...
DONT Forget to get the WIN32s files needed to run it under 3.1x
Chris

3797. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr6.213608.14169@ke4zv.atl.ga.us>
Source record: 95312

In article <19970406135400.JAA18749@ladder01.news.aol.com> commquart@aol.com writes:
>In article <5i7423$bpj@news.Hawaii.Edu>, jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:
>
>>Well this now leads me to ask, can one use a TV as an oscil-
>>loscope? It certainly would be crude but it might be fun to convert
>>and use, just the same.
>>Jeff KH2PZ / KH6
>
>Boy -- that brings back memories! It certainly is possible. I remember
>seeing adds back in the 60s for info on converting tvs into "big screen
>oscilloscopes" in magazines such as Popular Electronics, etc.
>I assume they used the horizontal deflection circuits in the set, and
>applied the signal to the vertical deflection amplifiers. I would think the
>bandwidth and the sweep capabilities would be limited.

The bandwidth is about 6 MHz, and that can be extended to maybe
10 MHz without too much work, but the sweep is the real problem.
You can't deviate very far at all from 15,750 Hz for the horizontal
deflection because the flyback circuit (which makes HV for the CRT)
is resonated at that frequency and is an integral part of the horizontal
deflection system. For a 19 inch set, that gives about 3.26 microseconds
per inch as the sweep rate. That's pretty fast for the sorts of signals
an oscilloscope with a vertical bandwidth of only 6 MHz would normally
observe. It's too fast for most audio work, and ironically it is too
fast for most TV service work where a deflection factor of 5 mS per
division or 20 uS per division would most commonly be used to observe
the vertical and horziontal waveforms respectively.

If you could decouple HV generation from horizontal sweep, as is done
in multisync computer monitors, then you could be more liberal with
your horizontal sweep rates, and produce quite a usable instrument.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

3798. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: Marvin Moss <mmoss@gelac.mar.lmco.com>
Message-ID: <3348148B.735B@gelac.mar.lmco.com>
Source record: 95313

commquart@aol.com wrote:
>
> In article <5i7423$bpj@news.Hawaii.Edu>, jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:
>
> >Well this now leads me to ask, can one use a TV as an oscil-
> >loscope? It certainly would be crude but it might be fun to convert
> >and use, just the same.
> >Jeff KH2PZ / KH6
>
> Boy -- that brings back memories! It certainly is possible. I remember
> seeing adds back in the 60s for info on converting tvs into "big screen
> oscilloscopes" in magazines such as Popular Electronics, etc.
> I assume they used the horizontal deflection circuits in the set, and
> applied the signal to the vertical deflection amplifiers. I would think the
> bandwidth and the sweep capabilities would be limited.
>
> Peter Bertini K1ZJH
> Senior Technical Editor, Communications Quarterly Magazine
> "The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

They fed a signal into the video that was timed and referenced to the
horiz. What you got was a vertical running waveform that you either had
to turn your head 90 degrees to see or turn the TV set 90 degrees (lay
it on its side) in order to see the waveform.. It was also only good for
audio frequency waveforms. I would not consider it today.

Marv

3799. TAD M-1510S 151 handhelds

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: Sander Hurkmans <pe1pcm@dds.nl>
Message-ID: <3348961B.537C@dds.nl>
Source record: 95314

A friend gave me 3 TAD M-1510S 151 Handsets today. They're professional radio's for nautic use. Does someone know where I can get information about these radio's so I can modify them to be used in the 2m amateur-band ?

Sander Hurkmans,
PE1PCM (PE1PCM@DDS.NL)

3800. Re: R2 RECEIVER with DDS L.O.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: Dennis Huff <dhuff@san.rr.com>
Message-ID: <33481A36.4BF7@san.rr.com>
Source record: 95315

jupiter@europa.com wrote:
>
> On a note totally unrelated to DDS's:
>
> I built my own receiver after the Cambell article first came out. It ran
> 80M to 10M using a helical resonator VHF vfo. :) :) No joke.
>
> I then took the vhf signal and divided it down using 74AC74 and gates as
> switches. This signal went to the digital Quad generator using two more
> 74AC74.
> Band was selected by a BCD front panel switch.
>
> On 15M I take the 40M signal and triple it. All this sounds complicated,
> but it did fit into a relatively small box.
>
> I sold the receiver to a friend years ago, and he still claims its his best
> sounding receiver.
>
> Oh, and also, I used a front panel control for tweeking the phasing, so
> that good sideband suppression could be obtained on all bands.
>
> Rob.
>
> ps. one thing that definitely helped in building the rcvr was an abundance
> of mil 1% caps that I put in series parallel or whatever to get the values
> I needed for the diplexer.

Hi again, Rob,

Just an update on my experiences with DDS and an R2 receiver.

At a friend's QTH here in San Diego where I am visiting this week, we
tried my R2 receiver using a DDS as the LO, built up out of a discrete
10-bit DAC, and discrete phase hardware and 16 MHz system clock. We
checked the output spectrum of the DDS on a spectrum analyzer and, at
7050 KHz output (getting close to 1/2 Fclk), we measured spurs only 45
dB down within 2 MHz +/- of the output frequency. When connected up to
drive the mixers in the R2 at the same level as that of my homebrew
colpitts LO, there was no detectable difference in reception noted,
switching rapidly back and forth between the two.
The receiver hears 1uV weakly, with either LO.
We tried listening on the AM BC band, (several transmitters nearby),
and it worked perfectly with the DDS as the LO.
We tried listening with no input selectivity whatsoever (no
preselector), to weak sigs on 40M SSB and CW, and again, could detect by

ear, no discernable difference in signals or noise level between the DDS LO and the analog VFO, driving the R2.
In short, we heard no birdies or other noise covering up weak signals. The DDS did have an internal LPF on the output set to 14.3 MHz. The DDS was originally intended for another non-ham application, and was tunable only by a DTMF keyboard entry, so we could not check operation while changing frequency (no continuous tuning). The DDS was enclosed in its own metal cabinet, with BNC output.

My conclusion is so far that DDS should work fine with the R2. I hope to have my own DDS using an AD9830 (50 MHz clock) running soon at my home QTH.

I am interested in any other inputs from those of you who have had experience using DDS directly as the LO for a receiver. Use my HP e-mail address, not the one shown in this message, which is my son's new e-mail address in San Diego.

73,

Don, W6JL

3801. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5i9bbs$ak2@senator-bedfellow.MIT.EDU>
Source record: 95316
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <3344C55E.2079@concentric.net> "Steve J. Quest" <Squest@concentric.net> writes:
> True, but the computer generated noise seems to be blocked by
> my 8" ferrite rod antenna. :) It also seems to eliminate lightning
> pops, which when my longwire is installed show up as deafening pops and
> crackles. However, my 8" ferrite antenna is not a performer like my
> longwire. Give and take I guess.

A "longwire" is only half an antenna. What's the counterpoise (Earth
ground? Your AC line?)? Unless installed and fed with care, a
longwire is highly susceptible to pickup of common mode EMI from
the AC line. See "Low Noise Antennas" at <http://www.grove.net/~badx/>.

> Does anyone currently sell magnetic antennas? I built mine out
> of theory, nothing much to go on except old textbooks, but the theory is
> simple enough, who needs plans. ;)

AOR and Palomar make them. Pretty pricey. Save your money and build
your own (more fun anyway).

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

3802. Re: Schematic capture program

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: Vince <WA2RSX@worldnet.att.net>
Message-ID: <33482113.34E0@worldnet.att.net>
Source record: 95317

Im looking to simply draw schematics and wiring-interconnection diagrams. PC layout would be nice also, but not an immediate requirement for me.

I have downloaded from ivex.com and must get back to their shareware program for 100 pins. I am not aware of what is meant by "pins". Does that mean a count of pins on IC components or a count on terminal points for all components?

3803. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: nospam@nowhere.com
Message-ID: <nospam.77.001025A5@nowhere.com>
Source record: 95318

>e bandwidth is about 6 MHz, and that can be extended to maybe
>10 MHz without too much work, but the sweep is the real problem.
>You can't deviate very far at all from 15,750 Hz for the horizontal
>deflection because the flyback circuit (which makes HV for the CRT)
>is resonated at that frequency and is an integral part of the horizontal

<text deleted>

>If you could decouple HV generation from horizontal sweep, as is done
>in multisync computer monitors, then you could be more liberal with
>your horizontal sweep rates, and produce quite a usable instrument.

I think the thing to do would be to use *two* yoke coils. Take the existing yoke, leave it connected, but pull if off the crt and secure it up and out of the way. (My understanding is that at least in the older sets, one of the yoke coils is associated with HV generation) Next, take a junk-box yoke that fits the neck of the tube and slide it on.

Now, you're completely isolated from the electronics of the set, and have full control of the sweep. It does mean, however, that you've got to come up with some external drivers for those coils. Also, I imagine you would want to do do something to the video to keep the beam from being modulated.

3804. Morse Code Questions: Timing relationships

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: NOSPAM.pfriedr@azstarnet.com
Message-ID: <NOSPAM.pfriedr.78.0017F053@azstarnet.com>
Source record: 95319

I'd like to tinker with a microcontroller algorithm to decode Morse Code. What I 'd like to know is whether anyone can tell me what the various timing relationships are.

For example: I believe that a dash is three times as long as a dot. In terms of "dot timing", how long is the interval between letters? Words? Is there any additional time between sentences? If an operator is sending, say, 10 wpm, what is the actual length of the dot (in seconds)?

Please email if you can help. Note that my return address has been spam-proofed. Delete the "NOSPAM." from the beginning of my address.

Thanks in advance. Pete

3805. $$$ Give This A Try $$$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-06 00:00:00 UTC
From: colear@netusa1.net
Message-ID: <colear-0604971511150001@206.30.241.41>
Source record: 95320
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Want to make MONEY fast?????

A little while back, I was browsing these news groups, just like you are now, and came across an article similar to this that said you could make thousands of dollars within weeks with only an initial investment of $5.00! So I thought, "Yeah, right, this must be a scam!" as most people probably thought. But also like most people I was curious, so I kept reading. Anyway, it said that you send $1.00 to each of the 5 names and address stated in the article. You then place your own name and address in the list at #5, remove the #1 person, and move everyone up a position, and post the article in at least 200 news groups. (There are more than 18,000 of them). No catch, that was it.

So after thinking it over, and talking to a few people first, I thought about trying it. I figured what do I have to lose except 5 stamps, envelopes, sheets of paper and $5.00, right?

Like most of us I was still a little skeptical and a little worried about the legal aspects of it all. So I checked it out with the US. Post Office (1-800-725-2161) and they confirmed that it is indeed legal.

Then I invested the measly $5.00.................

Well GUESS WHAT!!!.. .Within 7 days, I started getting money in the mail! I was shocked! I still figured it to end soon, and didn't give it another thought. But the money just kept coming in. In my first week, I made about $20.00 to $30.00. By the end of the second week I had made a total of just over $ 1,000.00!!! In the third week I had over $5,000.00 and it was still growing. This is now my fourth week and I have made a total of just over $20,000.00 and it's still coming in......

It's certainly worth the $5.00 and 5 stamps. I spent more than that in one week on the lottery!!!

Let me tell you how this works and most importantly, why it works... also, make sure you print a copy of this article NOW, so you can get the information off of it as you need it. The process is very simple and consists of 3 easy steps:

STEP 1: Get 5 seperate pieces of paper and write the following on each piece of paper, "PLEASE PUT ME ON YOUR MAILING LIST." Now get 5 $1.00 bills and place ONE inside EACH of the 5 pieces of paper so the bill will not be seen through the envelopes to prevent thievery (THIS STEP

IS VERY IMPORTANT!!!). Next, place one paper in each of the 5 envelopes and seal them. You should now have 5 sealed envelopes, each with a piece of paper stating the above phrase and a $1.00 bill inside. What you are doing is creating a service by this. THIS IS PERFECTLY LEGAL!

Mail the 5 envelopes to the following addresses:

1) I. Guest
1800 A Hillcrest Rd.
Columbia Mo, 65203
USA

2) B. Gelsleichter
RR2 Box 272
Tunkhannock, PA 18657
USA

3) J. Hurless
3649 Yorktown Way
Boise, ID 83706
USA

4) C. Lanning
101-1537 Burnaby St.
Vancouver, BC V6G 1X1
CANADA

5) A. Cole
2580 W. State Road 28
Tipton, IN 46072-9787
USA

STEP 2: NOW take the #1 name off the list that you see above, move the other names up (5 becomes 4, 4 becomes 3, etc...) and add YOUR NAME as #5 on the bottom of the list.

STEP 3: Change anything you need to, but try to keep this article as close to original as posible. Now, post you amended article to at least 250 news groups. All you need is 250, but remember the more you post, the more money you make! Don't know HOW to post in the news groups? Well do exactly the following:

FOR NETSCAPE USERS,

1) Click on any new group, like normal. Then click on "To:News", which is in the top left corner of the news group page. This will bring up a message box.

2) Fill in the SUBJECT with a flashy title, like the one I used, something to catch the eye!!!!

3) Now go to the message part of the box a retype this letter exactly as it is here, with the exception of your few changes. (remember to

add your name to #5 and move the rest up.)

4)When you're done typing in the WHOLE letter, click on "FILE" above the send button. Then, "SAVE AS..." DO NOT SEND YOUR ARTICLE UNTIL YOU SAVE IT!!! (so you don't have to retype this 250 times!)

5) Now that you have saved the letter, go ahead and send your first copy! (click the "SEND" button in the top left corner)

6) This is where you post all 250! OK, go to ANY news group article and click the "TO:NEWS" button again. Type in your flashy subject in the "SUBJECT BOX", then to the the message and place your cursor here. Now click on "ATTACHMENT" which is right below the 'SUBJECT BOX". Click on attach file then find your letter wherever you saved it. Click once on your file then click "OPEN" then click "OK". If you did this right, you should see your filename in the "ATTACHMENT BOX" and it will be shaded.

NOW POST AWAY!!!

IF YOU'RE USING INTERNET EXPLORER:

It's just as easy, holding down the left mouse button, highlight this entire article, then press the "CTRL" key and "C" key at the same time to copy this article. Then print the article for your records to have the names of those you will be sending $1.00 to.

NEXT

Go to the news groups and press "POST AN ARTICLE" type in your flashy subject and click the large window below. Press "CTRL" and "V" and the article will appear in the message window. ***BE SURE TO MAKE YOUR ADDRESS CHANGES TO THE 5 NAMES!!*** Now re-highlight the article and re-copy it so you have the changes...then all you have to do for each news group is "CTRL"and "V" and press "POST". It's that easy!!

THAT'S IT! All you have to do is jump to different news groups and ost away, after you get the hang of it, it will take about 30 seconds for each news group! ***REMEMBER, THE MORE NEWS GROUPS YOU POST IN, THE MORE MONEY YOU WILL MAKE!! BUT YOU HAVE TO POST A MINIMUM OF 250***

3806. Yet another PIC16c84 Programmer FREE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: melus@www.esi.us.es
Message-ID: <slrn5kibja.cq3.melus@bart.us.es>
Source record: 95150
Cross-posted to: comp.arch.embedded,rec.radio.amateur.homebrew

On Mon, 7 Apr 1997 16:01:06 GMT, Luis Yanes <melus@www.esi.us.es> wrote:
> I've an PCB layout in postcript of a cheap PIC 16c84 programmer with
> a companion old program from Henk Shaer, that works great with my
> 486DX40/DLC. It must be compatible with the latest windows programmer
> sofware released some weeks ago from some one here.
>
> Other PCB layout formats can be available upon request, but don't ask
> if you are in a hurry!

http://www.esi.us.es/~melus/gwlelec.html

--

73's de Luis

mail: melus@esi.us.es
Ampr: eb7gwl.ampr.org [44.133.41.18]
AX25: EB7GWL@EA7MU.EACA.ESP.EU
http://www.esi.us.es/~melus

3807. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970407165510.16535A-100000@Stratus.CAM.ORG>
Source record: 95151

Those plans were still being advertised in the seventies. When I was
in high school in the mid-seventies, someone at school either ordered
plans or asked me if it was worth ordering. I honestly can't remember
which it was. I guess I'm ready for the QCWA; back then I certainly
had an image of their members as being very old. I'm not as old
as I thought those QCWA members were back then, but I can join in
a couple more months.

Ham Radio magazine ran an article about a "spectrum analyzer" in 1972,
maybe March. It only sweeped the ham bands. It would scan each of
the hf bands individually, but they were displayed at the same time
Or rather, the technique gave that illusion).

What makes it applicable to this thread is that the display was a
converted tv set, which was converted into a limited function
oscilliscope.

I thought it was a neat project at the time, and the application
took advantage of the larger screen of the tv set while accepting
the limitations of the tv set.

Michael VE2BVW

On 6 Apr 1997 commquart@aol.com wrote:

> In article <5i7423$bpj@news.Hawaii.Edu>, jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:
>
> >Well this now leads me to ask, can one use a TV as an oscil-
> >loscope? It certainly would be crude but it might be fun to convert
> >and use, just the same.
> >Jeff KH2PZ / KH6
>
> Boy -- that brings back memories! It certainly is possible. I remember
> seeing adds back in the 60s for info on converting tvs into "big screen
> oscilloscopes" in magazines such as Popular Electronics, etc.
> I assume they used the horizontal deflection circuits in the set, and
> applied the signal to the vertical deflection amplifiers. I would think the
> bandwidth and the sweep capabilities would be limited.
>
> Peter Bertini K1ZJH
> Senior Technical Editor, Communications Quarterly Magazine
> "The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --
>
>

3808. Re: WTD: 1N3321 zener diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <5ibs9c$3a5u@news.doit.wisc.edu>
Source record: 95152

thomas.g.booth@den.mmc.com (Booth, Thomas G) wrote:

>Oops, my New England Semiconductor catalog also lists the 1N3305 thru
>1N3350 series in the DO-5 case too. If NES still makes 'em, the original
>poster would be able to get the "right" part for his rig.

Sorry, I'm not familiar with these by part #. Are these the 1/4" stud
mount? If so, thanks for the info. Glad to hear that there is a
source out there; our people just couldn't find it.

Jim

Melissa Kepner Jim Adney
mgkepner@facstaff.wisc.edu jim.adney@mpcug.com
Laura Kepner-Adney
Madison, Wisconsin

3809. Heathkit Monitor Scope HO-10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: Garth KA7MHN <garth@alinc.com>
Message-ID: <3349D9DE.7939@alinc.com>
Source record: 95153
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Hi and thanks for reading,
I would like to obtain a copy of or purchase original manuals for this scope. Thanks again for your help.
73...Garth KA7MHN

Please reply e-mail thanks

garth@alinc.com

3810. Re: BIG transistors F.S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: ZygomaD & Darkezza <do_not@spam.here>
Message-ID: <3349DE99.5451@spam.here>
Source record: 95154
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

Oh...thanx. The poster replied via email with even more specs...still mighty impressive. I was thinking of getting a couple to make a pulse laser to heat my home, in 2mm wide beams at a time :)
--Barney--
kl7hny@qsl.net
Soldotna, Alaska, USA

3811. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: hugo@infobahnos.com
Message-ID: <33495479.0@news.total.net>
Source record: 95155
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

>On Thu, 03 Apr 1997 16:18:55 -0800, "Steve J. Quest"
><Squest@concentric.net> wrote:
snip
>>Most RF amps use JFETs for the initial gain stage, Bipolars for the rest.
>>
I have a couple of those I homebrewed I'd like to experiment with the
ferrite rod loop you propose in what follows.

snip

>>only produce the turn-on pop. The design is simple, wind a resonant
>>tank (inductor and variable capacitor) onto a very large, high Q ferrite
>>rod, shield in chicken wire, mount in a movable base (very directional,
>>so you need to move it to pick up different stations), connect to a
>>standard RF amp design, which is mounted inside the case, and you're
>>there! The most expensive part is the large hi-Q ferrite rod.......sq
>>

Steve,

Would a ~6" long by ~1/4 ferrite rod taken out of a defunct am recvr
I have on hand (I also have a 2x1/2x1/8" bar), qualify as very large
hi-Q rod in your perspective? Or should one look for something much
larger e.g. 8"+ x 1/2"+ ?

Could you expand on "shield in a chicken wire" expression you used.
Is it only a figure of style that language barier dosen't permit me to
catch right on (native language is french (Quebec)) or have you got
something more specific in mind.

My undestanding of your reply is that everything (the ampli and the
cable) should be as well sheilded as possible, but the ferrite rod
itself should be 'only partly sheilded' through some kind of metalic
screen (of what specific type?) . Is that it?

Thanks for any info.

BTW I appreciate your input to this gr, your sense of humor and some
of the opinions you posted on religious matter.

Altough the essence of the latter should, IMHO, better be left to a
specific ng for those interrested in the specific matter (and I have
couple strong opinions of my own ;)), religious broadcasting being a
SWL reality, the subject ought to be address on its own merit in
relation with its SWL impact.

Hey!, the other day, just for the fun of it, I breadboard myself an xtal radio for SW band and all I could ear was someone vociferating " God WANTS you to do this... God WANTS you to do that..." and so fort (how the h... does he know that!?) and moving around I stumbled on mellow voices chanting their "Hail Mary full of..." That was it! Now I'm left with myself to desing a more selective unit (and I'm no designer!! :(). That's an impact! You see it? ;)

>> Sorry, Mr.
>>TinyTenna, don't mean to horn in on your busines, but.....)

You shouldn't be sorry about that Steve ;). Maybe he should get in touch with Ted. I think they would get along quite well oneanother, at least for the time of an email!. Unless both were the same and sole person, in which case he will get along quite well with himself, but that even, I doubt ;(

H.C.

BTW Ted, this maybe a fairly long reply but ain't a binary file which AAMOF I have never posted on this n.g. nor on any other for the matter. Asking informations on how to treat them when they come ain't posting them. So I don't want to see any of your trash in my mailbox or I'LL SUE YOU! (hehehe)

H. Caron

3812. 6KD6 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: Javier Azofra <j.azofra@redestb.es>
Message-ID: <01bc43a0$7f778960$03e44cc3@pc>
Source record: 95156

Does anybody know the electrical characteristics
of 6KD6 tubes?
From 3 to 30 MHz, if tube is mounted gorunded grid,
what is the input impedance (cathode impedance)?

73 from Javier,EA1AYX
e-mail: j.azofra@redestb.es

3813. FS: 4X3 tube, Socket, Fill XMFR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: w6tg@aol.com
Message-ID: <19970406231200.TAA25289@ladder01.news.aol.com>
Source record: 95321

I have a new unused, except for testing, Eimac 4CX3000A tube, New Socket, and new Peter Dahl Filament XMFR available...never got around to building that " BIG ONE". This can be built grid driven so a 100 watt exciter will drive it till your coax melts (around 6 KW out). OR can be built more sensibly to put out any power level less. Directions and circuit information are available on the "AG6K Website".
$ 1100.00 shipped.
Terry Gaiser - W6TG
tel 805-366-2211
fax 805-363-5011

3814. Re: Homebrew Antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: bcspain@aol.com
Message-ID: <19970407012300.VAA07322@ladder01.news.aol.com>
Source record: 95322

Lance...

>>Does anyone know a good on-line resource, or perhaps a book that I could find at my local Coles Bookstore or Library?

Look for "The ARRL Antenna Book" or the Radio Amateur's Handbook in your local library. Some bookstores carry them too. There are alot of others out there too. Radio Shack may even have some books or know where to get them.

Good luck on you project.

73's
Bryan WB5YIW

3815. Re: Homebrew Antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc4310$5e1c9340$dd1810d1@dale>
Source record: 95323

Lance

I agree with Bryan: Find a copy of the American Radio Relay League's
Antenna
Compendium or Antenna Book.

To my way of thinking, there are three books each ham shack should have:
The ARRL Handbook for Radio Amateurs
The ARRL Operating Manual
The ARRL Antenna Book

Check out http://www.arrl.org/catalog/

Another good book to have is Bill Orr/W6SAI's Radio Handbook--I think it is

still being published...someone correct me, if I am wrong.

A well stocked library should have one or all of these.

73,
--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

BCSpain <bcspain@aol.com> wrote in article
<19970407012300.VAA07322@ladder01.news.aol.com>...
> Lance...
>
> >>Does anyone know a good on-line resource, or perhaps a book that I
could
> find at my local Coles Bookstore or Library?
>
> Look for "The ARRL Antenna Book" or the Radio Amateur's Handbook in your
> local library. Some bookstores carry them too. There are alot of others
> out there too. Radio Shack may even have some books or know where to get
> them.
>
> Good luck on you project.
>
> 73's
> Bryan WB5YIW
>

3816. Re: WTD: 1N3321 zener diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: thomas.g.booth@den.mmc.com
Message-ID: <thomas.g.booth-060497232147@ls-bootht-c.ast.lmco.com>
Source record: 95324

In article <thomas.g.booth-060497230557@ls-bootht-c.ast.lmco.com>, I wrote:

> Jim, I'm not sure that's true...you might want to contact New England
> Semiconductor; the last catalog I have from them (1/96) has a data sheet
> for the 1N2804 thru 1N2846 50 W zeners in a TO-3 package. AFAIK they still
> make 'em.

(snip)

Oops, my New England Semiconductor catalog also lists the 1N3305 thru
1N3350 series in the DO-5 case too. If NES still makes 'em, the original
poster would be able to get the "right" part for his rig.

TGB

\\ The opinions expressed herein are my own. //

3817. Re: WTD: 1N3321 zener diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: thomas.g.booth@den.mmc.com
Message-ID: <thomas.g.booth-060497230557@ls-bootht-c.ast.lmco.com>
Source record: 95325

In article <5i85na$au0@news.doit.wisc.edu>, mgkepner@facstaff.wisc.edu
(Melissa & Jim) wrote:

> Ray LaRue <raylarue@gte.net> wrote:

> >I'm in need for a 24 volt, 50 watt zener diode, 1N3321 or ECG 5464, for
> >the bias on my anplifier. I've called all the local and many of the
> >national distributors, with no luck. Anyone got one, or know a good
> >source?

> Based on my experience with some equipment we used to manufacture, no
> one makes 50 Watt Zeners any more. You can replace your 50 watt unit
> with a 50+ Watt power transistor and a smaller Zener or just string a
> series of smaller voltage Zeners that add up to 24 V.

Jim, I'm not sure that's true...you might want to contact New England
Semiconductor; the last catalog I have from them (1/96) has a data sheet
for the 1N2804 thru 1N2846 50 W zeners in a TO-3 package. AFAIK they still
make 'em.

New England Semiconductor
6 Lake St.
Lawrence, Mass. 01841
(800) 446-1158
(508) 794-1666
(508) 689-0803 [FAX]

TGB

\\ The opinions expressed herein are my own. //

3818. INFO: CRYSTALS FOR KENWOOD TS-520

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: Garth KA7MHN <garth@alinc.com>
Message-ID: <33489489.DC2@alinc.com>
Source record: 95326
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Thanks in advance for your replys,
I am looking for a suppier or retail outlet for purchase of crystals for my TS-520. The freq range from what I understand should be from 4.900 to 5.500 MHz, in a HC-25/u type holder. Any info would be appriciated.
Again thank you for your help.
73...Garth KA7MHN

3819. Address for QRP ML?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: ki3b@aol.com
Message-ID: <19970407100301.GAA06029@ladder01.news.aol.com>
Source record: 95327

Does anyone have the address for the QRP mailing list?

Thanks,

Joe KI3B

3820. Re: Address for QRP ML?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: kmiller@flash.net
Message-ID: <3348d87d.13826894@news.flash.net>
Source record: 95328

On 7 Apr 1997 10:03:24 GMT, ki3b@aol.com (KI3B) wrote:

>Does anyone have the address for the QRP mailing list?

Joe,
Try this web site:

http://qrp.cc.nd.edu/qrp-l/welcome.html

73,
Kerry, WD5ABC

3821. Prophecies of ages

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: ben@light.co.za
Message-ID: <5ianrm$svg@news1.saix.net>
Source record: 95329

You are sincerely invited to visit our non-commercial web site
entitled "Prophecies of the Ages", Based on quotes from major world
religions and famous seers.

This brief but unsolicited invitation is being sent to you, once only,
with the hope of increased harmony among people.

http://www.light.co.za/

(You are also welcome to delete this message even before browsing the web sight.)

Thank you.

3822. Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3348F09D.76EF@crpl.cedar-rapids.lib.ia.us>
Source record: 95330
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
> True, but misleading in this case.

Not misleading at all, but highly relevant.

> Whether you consider the loop response to be due to Curl E or dB/dt
> is irrelevant, since you get the same answer in either case.

Curl E and dB/dT are not two different things. They are exactly equal to each other. In other words they are *identical*. They are in fact *inseparable*.

> The
> important thing is that the loop does not respond to curl-free
> electric fields.

There is no such thing as a curl-free radio wave (noise or otherwise). Loop antennas can be analyzed from the standpoint of electric fields or magnetic fields and there is absolutely no difference. They are equivalent.

>
> remember that Maxwell's equations
> themselves represent a long wavelength approximation of quantum
> electrodynamics, which is a long wavelength approximation of
> electroweak theory, which is... Well, you get the idea.

Quantum mechanics "snow-jobs" are impressive (I guess) but do not contribute to this topic.

Bill W0IYH

3823. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33483c8c.731867@netnews.worldnet.att.net>
Source record: 95331
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On 6 Apr 1997 01:40:16 GMT, jpd@space.mit.edu (John Doty) wrote:

>Tom Rauch wrote:
>
>> If the antenna only responded to magnetic fields, you would hear no
>> distant signal at all. If it responded to electric fields, the same
>> would be true.
>
>No. An antenna may respond to either magnetic or electric fields
>in its vicinity, or some combination. A short dipole is relatively
>insensitive to magnetic fields, while a small loop is relatively
>insensitive to electric fields. *Radiated* fields have equal energy
>in their electric and magnetic fields, but the quasi-static fields
>very close to an EMI source are often predominantly one type, so
>an antenna that's unresponsive to that type will have a signal to
>noise ratio advantage.

Hi John,

Please tell me how to construct an antenna that receives RF signals
but totally rejects either the magnetic or electric field.

73 Tom

3824. Re: Turning off amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3348f352.4827797@netnews.worldnet.att.net>
Source record: 95332

On Thu, 03 Apr 1997 15:27:35 -0800, Tom Taylor <ttaylor@adobe.com>
wrote:

Can a 4-400 be damaged from HV on
>the plate with no filament heating?

NO. It can not be damaged from HV without filament voltage, or
applying HV and drawing current before the tube is warmed up.

Thoriated tungsten tubes are immune from that type of damage.

73 Tom

3825. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33490783.5AE7@crpl.cedar-rapids.lib.ia.us>
Source record: 95333
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Tom Rauch wrote:
>
>
> Hi John,
>
> Please tell me how to construct an antenna that receives RF signals
> but totally rejects either the magnetic or electric field.
>

Right on, Tom. No delete key on this one.

The wave equation for radio waves is derived directly and unambiguously
from Maxwell's two curl equations. They are absolutely inseparable.

The misunderstandings involved here are at the root of some of the
fallacies about rod and loop antennas.

Now if we want to talk about the *polarization* of an antenna, then
there are some interesting concepts about noise reduction.

Bill W0IYH

3826. FS or FT -- Toshiba Laptop

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: mdwatt@usit.net
Message-ID: <334bf593.193967193@news.usit.net>
Source record: 95334
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.amateur.equipment

I have a T1900 Toshiba laptop for sale or trade. 486/20, 4 meg ram,
200MB hd (doublespaced to 385MB), monochrome VGA, quickport
trackball pointing device, 14.4 PCMCIA fax/modem, briefcase style
carrying case.

Charging circuit is going out -- will boot from charged batteries,
but not from AC/DC adapter. After booting, AC/DC adapter can be
used. Won't charge batteries.

All for $300 plus shipping, as is, or would prefer trade for
Oscilloscope, >40MHz dual trace, with 1x/10x probe. Multi-band QRP
equipment also considered.

E-mail interest only, please. Snail address is no good in Callbook,
and I have no phone in my name.

If trade, we'll each ship our own stuff.
72 es 73 de
Marty, KM7W

Jackson, Tennessee e-mail: mdwatt@usit.net
http://www.public.usit.net/mdwatt
"The Curmudgeon's Corner"
NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq
~~~~~~
~~~~~~

3827. FYI: 1277 Links To DX & Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <334904DE.53EB@ix.netcom.com>
Source record: 95335
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc

From Ham 'Accessories to Zones' the DX Reference Guide has expanded to
60 pages and 1277 links. An index is now available for quick clicking to
the subject desired.

The Technical Reference Page now includes links to Amplifier Theory,
SWR, S-Units, dB tables, Antennas and much more.

The origin of '73' and the term 'Ham' are covered along with some
dubious humor and links to a list of 'Famous Hams'.

DXpeditions past and future are summarized and linked.

An extensive search came up with around 40 ham and electronic kits,
components, and circuit boards for homebrew projects.

The Mega-Prefix list covers the weird ones and new UK calls.

Good DX
Rod in San Diego
--
AC6V DX Reference Page
With Over 1277 Links To DX And Ham Radio
http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

3828. Re: Address for QRP ML?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33490626.63B@ix.netcom.com>
Source record: 95336

KI3B wrote:
>
> Does anyone have the address for the QRP mailing list?
>
> Thanks,
>
> Joe KI3B

GM Joe -- the DX Reference Guide now has over 40 mail 'reflectors"
including QRP-L.

You might want to visit the QRP pages as well. These are accessible with
the index. Several QRP links there including QRP Nets, Calling
Frequencies, kits and projects.

73 es Good QRP
Rod
--
AC6V DX Reference Page
With Over 1277 Links To DX And Ham Radio
http://www.netcom.com/~ac6v/index.html
E-Mail: ac6v@ix.netcom.com

3829. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <3349408A.3017@qsl.net>
Source record: 95337
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

I need info on how to build an antenna
that receives only the disrupted
area that the E and H field traverse
as they precess around the radiator.

I'm building a 'vacant field' antenna.
--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee (First and Last callsign!)
OHR-100, Pixie2, Johnson Viking II w/VFO.
mailto:we6w@qsl.net QRP-L member #1068.
http://www.qsl.net/we6w

3830. Re: Diode for wide band RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ib8f7$9d9@hpcvsnz.cv.hp.com>
Source record: 95338

Lee Leduc (leeleduc@pacbell.net) wrote:
: frequencies in the 500 Mhz to 1 Ghz range. Could someone recommend a
: diode I could use for a detector at these frequencies? I find that the

I have some HP HSMS-2850 diodes which are specifically characterized as
zero bias video detector diodes, and designed for low-cost high-volume
applications, in SOT-23 package. With a DC amplifier at the output,
I find I can detect down into the fraction of a millivolt of RF region
with these, at least at 144 and 440MHz...the diodes are characterized
for use well beyond that, though. I just don't need to use them there.
They were discussed in the Dec. 1995 "HP Journal."

--
Cheers,
Tom
tomb@lsid.hp.com

3831. Re: Diode for wide band RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <3349549E.7F39@hevanet.com>
Source record: 95339

Leon Heller wrote:
>
> In article <3346b5a8.259355@news.pacbell.net>, Lee Leduc
> <leeleduc@pacbell.net> writes
> >I'm building a FSM to check for low level (a few milliwats) rf for
> >frequencies in the 500 Mhz to 1 Ghz range. Could someone recommend a
> >diode I could use for a detector at these frequencies? I find that the
> >1N34 is not suited for this purpose.
>
> Try a Schottky / hot-carrier diode like the 1N5263.
>
> Leon
> --
> Leon Heller
> Amateur radio callsign: G1HSM
> Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
> Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)
For best sensitivity, you might try a point-contact diode
like the 1N21. But they're much easier to blow out than the newer
HP diodes.

3832. Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: ronh1@gramercy.ios.com
Message-ID: <5ibmr9$8vl@nnrp2.farm.idt.net>
Source record: 95340

I have acquired a copy of the Hamcomm software and a computer interface for my serial port. However, the serial port has been disabled because I use an internal modem. Any ideas how I can free up the serial port so the interface will work? TIA Ron AK5F

3833. Re: INFO: CRYSTALS FOR KENWOOD TS-520

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ib8rm$9d9@hpcvsnz.cv.hp.com>
Source record: 95341
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Garth KA7MHN (garth@alinc.com) wrote:
: Thanks in advance for your replys,
: I am looking for a suppier or retail outlet for purchase of crystals for
: my TS-520. The freq range from what I understand should be from 4.900 to
: 5.500 MHz, in a HC-25/u type holder. Any info would be appriciated.
: Again thank you for your help.
: 73...Garth KA7MHN

Try JAN Crystals, International Crystal Manufacturing, Bowmar, ... Too many
to list! JAN can be reached at 1-800-JAN-XTAL, and are reasonably economical.
(But custom crystals aren't exactly cheap.)

--
Cheers,
Tom
tomb@lsid.hp.com

3834. Re: FYI: 1277 Links To DX & Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: no.junk.mail@starbase.net
Message-ID: <33495eed.6166339@news.dial.pipex.com>
Source record: 95342
Cross-posted to:
rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,uk.radio.amateur

AC6V <ac6v@ix.netcom.com> wrote (in one of his frequent advertisements
for his Web pages):

>The Mega-Prefix list covers the weird ones and new UK calls.

Yeah ... it's a pity most of the new UK ones are wrong, though.

My prefix (MX0) is omitted altogether. The country listing for other
calls in the M* and the 2* series of prefixes is a load of rubbish.

73 de MX0ADJ

--
Walt Davidson E-mail: walt@dial.pipex.com
walt@enterprise.net
walt.d@virgin.net

3835. Re: BIG transistors F.S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: hill@rowland.org
Message-ID: <5ibn54$25k@fridge-nf0.shore.net>
Source record: 95343
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

ZygomaD & Darkezza at do_not@spam.here says...
>
>Mark C. Olson wrote:
>>
>> Powerex KS621K60 single Darlington transistor module.
>> 600 Amperes / 1000 Volts
>>
>> Have 4 of these units for sale. New
>> $300ea. plus shipping (Newark has them for ~$640 ea.)
>>
>> E-mail for more details
>
> Holy sh.....er.... geez, how big a heat sink does one of these
> beasts need when running at max rated?

Nifty, huh.

Vsat = 1.5V at 250A, H_FE 75 min at 600A, R_th_JC = 0.035 C/W (about 20 to 30x better than a typical big power transistor), S.O.A. allows 600A at 800V for 50us, and Pd = 3500W at 25C case! Hmmm, sounds like water cooling for maximum use to me!

--
Winfield Hill hill@rowland.org
Rowland Institute for Science
Cambridge, MA 02142

3836. Re: helical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: wcovexip@moose.ptialaska.net
Message-ID: <5ibsjcgtd1@news.ptinet.net>
Source record: 95344

A helical antenna will pick up both Vertical and Horizontal polorized signals although there will be some attenutation induced when compared to a Yagi with the correct polorization. Helicals come in Right or Left hand polorization, and either will function in the vertical or horizontal plane. Bruce

Bruce Gordon * Debora Gordon R.N. Bruce's Trading Post
P.O. Box EXI Excursion Inlet South
Juneau, Alaska 99850 Excursion Inlet, Alaska 99850

University of Alaska Remote Weather Data Collection Site
fnbeg@aurora.alaska.edu AL7AQ@KL7HFI * KL7WJ@KL7HFI
wcovexip@ptialaska.net Wards Cove Packing Co.

**** Have bandwidth and connection Will communicate ****

3837. need design for 2m amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: skramer290@aol.com
Message-ID: <19970407224701.SAA16610@ladder01.news.aol.com>
Source record: 95345

looking for a design for hi output amps for 2m and hf tubs are fine

3838. FS: RCA 813 and Penta 4-250 Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: dallen@melpar.esys.com
Message-ID: <5ibb1r$4jn2@fcserv3.fcd.esys.com>
Source record: 95346
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

I have 4 of each of these tubes NIB. Is there any interest?
Thank you,
Dale

3839. Re: FYI: 1277 Links To DX & Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <334998B0.5E0C@ix.netcom.com>
Source record: 95347
Cross-posted to:
rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,uk.radio.amateur

Walt Davidson wrote:
>
> AC6V <ac6v@ix.netcom.com> wrote (in one of his frequent advertisements
> for his Web pages):
>
> >The Mega-Prefix list covers the weird ones and new UK calls.
>
> Yeah ... it's a pity most of the new UK ones are wrong, though.
>
> My prefix (MX0) is omitted altogether. The country listing for other
> calls in the M* and the 2* series of prefixes is a load of rubbish.
>
> 73 de MX0ADJ
>
> --
> Walt Davidson E-mail: walt@dial.pipex.com
> walt@enterprise.net
> walt.d@virgin.net

Hi Walt -- you are the first in 6 months to note this. These were taken
from one of the widely published Ham magazines (name omitted). I would
be most happy to correct them if you can supply the correct information
or tell me where they can be found.

Any help would be appreciated.
73
Rod
--
AC6V DX Reference Page
With Over 1277 Links To DX And Ham Radio
Main Page: http://www.netcom.com/~ac6v/index.html
Index: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

3840. newby needs help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-07 00:00:00 UTC
From: calljeff@aol.com
Message-ID: <19970407190400.PAA01700@ladder01.news.aol.com>
Source record: 95348

Hi All,

My son and I are going for our "No-Code Tech" license. I am wondering what would be a good radio to start with that has the bands allowable for that level.

Thanks,

Jeff

3841. R5/R7 style Black-Box Info Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: earlve3ab@igs.net
Message-ID: <5ic384$nu3$1@nntp.igs.net>
Source record: 95157

I used to own an R5 but I traded it away for something I really needed more but I did a sketch of the circuit board of the black box but I could use a few ideas/schematic. I dont think CushCraft would help me out and I wouldn t want to bother them for this type of venture. Id like to make a black box of my own and use some of these traps and aluminum pieces I have gathered and have been given to me to build my own vertical. I have the torroid forms as well. Id just like to get as concrete a plan as possible b4 I commence. Any-body out there have the schematic/core types,,,73 earl de..earlve3ab@igs.net

3842. Re: TS-520S conversion for 6M -how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: scott <acepilot@mwt.net>
Message-ID: <3349FEEF.55E8@mwt.net>
Source record: 95158

ernie wrote:
>
> Hi
> Has anyone done it ? Any IDEAS ?
> Thanks in advance de Isaac, 4Z4TL

It might be able to be done...the 520S has an AUX position on the band switch. Not sure if the PA tubes can go that high in frequency...if they can, it should only be a matter of putting in crystals to get 6M out of the rig. How about it? Anyone? Sounds like an interesting idea! I once saw an article in the ham magazines about a guy who converted a CB from 27MHz to 50 MHz!
73, Scott

--
Gotta Fly or
Gonna Die !
--Ask me about my
Aeronca Super Chief--

3843. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: zulunancy@geocities.COM
Message-ID: <3349B9D1.54AC@geocities.com>
Source record: 95159

add ham-homebrew

3844. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: David Fowler <dfowler@starlinkdgps.com>
Message-ID: <01bc43d1$1456f400$170408cf@davids>
Source record: 95160

Ron Hellmann <ronh1@gramercy.ios.com> wrote in article
<5ibmr9$8vl@nnrp2.farm.idt.net>...
> I have acquired a copy of the Hamcomm software and a computer
> interface for my serial port. However, the serial port has been
> disabled because I use an internal modem. Any ideas how I can free up
> the serial port so the interface will work? TIA Ron AK5F
>
>
Depends... I assume you have a serial mouse and an internal modem.

The PC normally has two interrupts available for serial ports. One is required for the mouse and one is required for the modem (at least when you using the modem). I have had this problem many times, here are the best solutions I've found...

If you use you modem only in win95, your modem allows you to select interrupts other than 3 or 4, and you have another interrupt available then... Set you modem for COM3 and use the available interrupt (IRQ). I have often used the LPT1 (IRQ 7) or the LPT2 (IRQ5) for the additional serial port with success. Just disable the resource for the LPT port before making the changes. Once you move the modem, re-enable the com port.

The solution I most often use is to buy a bus or PS2 type mouse with an interface card. Set the card to an available IRQ, or steal an LPT IRQ. This frees up the serial port used by the mouse and will allow your modem to work with DOS based programs.

David Fowler KC5ZCM

3845. FS: 4CX3000A, Socket, XMFR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: w6tg@aol.com
Message-ID: <19970408042700.AAA15961@ladder01.news.aol.com>
Source record: 95161

I have a new unused, except for testing, Eimac 4CX3000A tube, New Socket, and new Peter Dahl Filament XMFR available...never got around to building that " BIG ONE". This can be built grid driven so a 100 watt exciter will drive it till your coax melts (around 6 KW out). OR can be built more sensibly to put out any power level less. Directions and circuit information are available on the "AG6K Website".
$ 1100.00 shipped.
Terry Gaiser - W6TG
tel 805-366-2211
fax 805-363-5011

3846. Re: Homemade External VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: jlkolb@sd.cts.com
Message-ID: <860475873.603315@optional.cts.com>
Source record: 95162

John Seboldt (rohrwerk@pcOnline.com) wrote:
: In article <3343B5C4.7349@cemr.wvu.edu>, David McKain
: <mckain@cemr.wvu.edu> wrote:

: > A friend of mine is proposing to me that I can build an external VFO for
: > my Kenwood TS-520S.

: > The chip that he suggested is only about $20 and will oscillate from 0
: > to 40MHz with a sensitivity of
: > less than 0.006Hz.

Must mean a step size of 0.006 Hz here.

: See the R2 RECEIVER thread about DDS VFO problems. You cannot use a DDS
: directly for receiving applications; noise and spurious responses are too
: high. It has to be cleaned up with a PLL after it.

This sounds like a VFO rplacement for the TS-520, so it's only operating
in the region of 4.9 - 5.5 MHz. Wouldn't a AD9008 be reasonably clean
operated this far below it's clock freq?

John Kolb KK6IL jlkolb@cts.com

3847. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <334A1208.133@concentric.net>
Source record: 95163
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
> In article <3344C55E.2079@concentric.net> "Steve J. Quest" <Squest@concentric.net>
writes:
> > True, but the computer generated noise seems to be blocked by
> > my 8" ferrite rod antenna. :) It also seems to eliminate lightning
> > pops, which when my longwire is installed show up as deafening pops and
> > crackles. However, my 8" ferrite antenna is not a performer like my
> > longwire. Give and take I guess.
>
> A "longwire" is only half an antenna. What's the counterpoise (Earth
> ground? Your AC line?)? Unless installed and fed with care, a
> longwire is highly susceptible to pickup of common mode EMI from
> the AC line. See "Low Noise Antennas" at <http://www.grove.net/~badx/

I realize a dipole would be better, but I am limited on space,
and my longwire is strung up on a standoff from my house! Not my first
choice in antenna designs. If ever I buy some land someplace, I'll do
it right, an inverted V antenna! Good for incoming as well as outgoing
RF energies. :)

sq

3848. 80 Meter SSB Kit Now Shipping

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5icn9r$8kc$1@zinger.callamer.com>
Source record: 95164

Dan's Small Parts and Kits is now shipping the Centennial, an 80 Meter SSB Kit.

Check it out at http://www.fix.net/dans.html

Enjoy,,,72,,,Jerry...K

3849. Dan's Small Parts and Kits NPO Capacitor BLOWOUT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5icnda$8kc$2@zinger.callamer.com>
Source record: 95165

Dan's has just posted some NPO Capacitors at BLOWOUT prices.

Check his catalog out at:

http://www.fix.net/dans.html

Enjoy,,,Jerry...K

3850. Re: FYI: 1277 Links To DX & Ham Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: no.junk.mail@starbase.net
Message-ID: <3349f0d0.1773513@news.dial.pipex.com>
Source record: 95166
Cross-posted to:
rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,uk.radio.amateur

AC6V <ac6v@ix.netcom.com> wrote:

>Hi Walt -- you are the first in 6 months to note this. These were taken
>from one of the widely published Ham magazines (name omitted). I would
>be most happy to correct them if you can supply the correct information
>or tell me where they can be found.
>
>Any help would be appreciated.

Hi Rod!

OK ... here goes. My source is the *current* UK amateur license
booklet, published by the Radiocommunications Agency.

G England
GB Special Event Stations anywhere in the UK, Channel Is or Isle of
Man. (Not just England)
GD Isle of Man
GI Northern Ireland
GJ Jersey
GM Scotland
GU Guernsey & Dependencies
GW Wales

2E England (Novices)
2D Isle of Man (Novices)
2I Northern Ireland (Novices)
2J Jersey (Novices)
2M Scotland (Novices)
2U Guernsey & Dependencies (Novices)
2W Wales (Novices)

M England
MD Isle of Man
MI Northern Ireland
MJ Jersey
MM Scotland
MU Guernsey & Dependencies
MW Wales

GX, MX England (Clubs)
GT, MT Isle of Man (Clubs)
GN, MN Northern Ireland (Clubs)
GH, MH Jersey (Clubs)

GS, MS Scotland (Clubs)
GP, MP Guernsey & Dependencies (Clubs)
GC, MC Wales (Clubs)

The meaning of the numeral after the prefix is rather complex, but is related to the License Class. Class A = full privileges, all bands. Class B = no code, for 50 MHz and higher frequency bands only.

1. All calls with one-letter and 2-letter suffixes are Class A.
2. For calls with 3-letter suffixes:
2, 3, 4, 0 after the prefix signify Class A.
1, 6, 7, 8 after the prefix signify Class B.
(At present, there are no 3-letter-suffix callsigns issued containing the numeral 5 and 9)
3. These rules apply to Novices (Class A and B) as well as Full Licenses (Class A and B), but Novices are only allowed to use small sub-bands within the "full" allocations.
4. There have been many "oddities" in respect of GB (Special Event) callsigns, for example GB800, GB100, GB50, GB9, etc. For these calls, it seems "anything goes"! Special Event calls are issued by the RSGB; all others are issued by the Radiocommunications Agency.

Hope this helps.

73 de MX0ADJ (Squarebashers DX Group)

--
Walt Davidson E-mail: walt@dial.pipex.com
walt@enterprise.net
walt.d@virgin.net

3851. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: Steven Mann <Steven_Mann@UNCG.EDU>
Message-ID: <334A40C9.4443@UNCG.EDU>
Source record: 95167
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve J. Quest wrote:
>
> John Doty wrote:
> >
> > In article <3344C55E.2079@concentric.net> "Steve J. Quest" <Squest@concentric.net>
writes:
> > > True, but the computer generated noise seems to be blocked by
> > > my 8" ferrite rod antenna. :) It also seems to eliminate lightning
> > > pops, which when my longwire is installed show up as deafening pops and
> > > crackles. However, my 8" ferrite antenna is not a performer like my
> > > longwire. Give and take I guess.
> >
> > A "longwire" is only half an antenna. What's the counterpoise (Earth
> > ground? Your AC line?)? Unless installed and fed with care, a
> > longwire is highly susceptible to pickup of common mode EMI from
> > the AC line. See "Low Noise Antennas" at <http://www.grove.net/~badx/
>
> I realize a dipole would be better, but I am limited on space,
> and my longwire is strung up on a standoff from my house! Not my first
> choice in antenna designs. If ever I buy some land someplace, I'll do
> it right, an inverted V antenna! Good for incoming as well as outgoing
> RF energies. :)
>
> sq

Are you aware that there is a difference between a random length end fed
wire and a "long wire" antenna?

3852. Modern Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: "Tom V. Pfaffenbach" <tvpfaffe@mail.delcoelect.com>
Message-ID: <334A5959.2419@mail.delcoelect.com>
Source record: 95168

There have been many improvements in electrolytic caps since the days of aluminum FP and WP caps. The bases are solid plastic now, (no rubber vent plug to rot) scribed to crack and release internal pressure if necessary. It is almost never necessary, as current chemistry eliminates much of the former leakage and "forming" current, reducing internal heating and pressure build up. You can also use higher value equalizing resistors if you are hooking up those 450V units in series for a HV DC supply application. Check out the manufacturers specifications in the applications notes presented in the Digi-key, Mouser and Newark catalogs. Lots of neat information there!

73 de K9JDU

3853. Re: TS-520S conversion for 6M -how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5idn92$oba@sf18.dseg.ti.com>
Source record: 95169

In article <3347f7c9.55979455@news.netvision.net.il>, ernie@netvision.net.il says...
>
>Has anyone done it ? Any IDEAS ?
>Thanks in advance de Isaac, 4Z4TL

In theory, it could be done. You'd have to wind your own heterodyne oscillator coils, transmit driver coils, receiver front-end coils, etc. You'd have to determine a new tap point on the PA tank coil. You may have to use different capacitance values in the PA tank. You'd need heterodyne oscillator crystals. Sounds like a lot of work. The PA will definitely work at 6m, and it should put out nearly full power. Still, it would be a lot of work.

If you undertake this project, keep complete and accurate notes. This would make an excellent QST Magazine article.

73 and good luck!

Dean, K5DH

3854. Is it "homebrew" or "homebuilt"?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5idnvu$oba@sf18.dseg.ti.com>
Source record: 95170

This question keeps popping up, and there are many viewpoints on the subject. I personally don't think any one answer is the right one. In fact, the whole issue is probably a waste of time, but, whatever.

In contests sponsored by most of the QRP clubs, a rig is considered "homebrew" if YOU built it, whether it was from a kit or from your junkbox, whether you designed it or not. In the eyes of these QRP clubs and organizations, if you didn't build it, it isn't homebrew.

I personally build rigs from kits, and also from designs that I find in books and magazines. I tend to refer to these rigs as "homebuilt", rather than "homebrew", because I didn't actually design them.

In some cases, I have made significant modifications to someone else's design, but because I was not the original designer, I refer to these rigs as "homebuilt" also.

I'm sure this debate will rage on until we're all ready to scream, but at least I've had the chance to add my two cents' worth.

73 to all, and whatever you do, keep on building!

Dean, K5DH

3855. Space Arts '97

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: "Mark W. Curtiss" <mcurtiss@excite.com>
Message-ID: <334A6F14.45C0@excite.com>
Source record: 95171
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space

Maximov Publications and Leonardo

announce

Space Arts Workshop '97

On April 13, 1997, a select group of artists and scientists from around the world will be gathering in Paris, France to discuss the social and cultural aspects of exploring space.

Seventeen individuals will be presenting their works of art, speaking as artist as space explorers. Among these people, is artist Arthur Woods whose work, "Cosmic Dancer" flew aboard the Mir Space Station. Also speaking will be Richard Kriesche, artist of the first art project in the history of the Russian space flight, to fly aboard the space station Mir (1991).

The event will be broadcast over the Internet via Maximov Publications Special section on the Mir Space Station (http://www.maximov.com/Mir/). You can view the preliminary pages at

http://www.maximov.com/Mir/mirspaceart.html

The space arts meeting is being organized by ars astronautica, Leonardo - the Journal of the International Society of the Arts, Sciences and Technology, Maximov Publications, and the OURS Foundation.

Workshop members will go online to answer questions from users (April 13, 1997 at 4PM to 9PM GMT).

During the event, Amateur Radio Operators around the world will be relaying questions to cosmonauts aboard the Mir Space Station. In order to get the questions to amateur radio operators we are asking for submissions before April 13th.

*** CALL FOR QUESTIONS ***

We are requesting questions for both workshop members and cosmonauts. Please submit your questions to Mark W. Curtiss via email (mcurtiss@excite.com) or via the online form (http://www.maximov.com/Mir/mirspaceartstalk.html). Results for these pages will remain posted at this site for future reference.

Thank you

Mark W. Curtiss
Mir Space Station Web Developer
mcurtiss@excite.com
http://www.maximov.com/Mir/

Space Arts '97 -- http://www.maximov.com/Mir/mirspaceart.html

ars astronautica -- http://www.spaceart.net/
Leonardo (French) -- http://www.cyberworkers.com/Leonardo/
(English) -- http://www-mitpress.mit.edu/Leonardo/home.html
Maximov Publications -- http://www.maximov.com/
OURS Foundation -- http://www.ours.ch/

3856. Re: R2 RECEIVER with DDS L.O.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: Enrico Badella <softstar@pol88a.polito.it>
Message-ID: <334A64F2.42DF@pol88a.polito.it>
Source record: 95172

Hello,

I have just started reading this news group so the question might
be misplaced.

Could you direct me to the source of the R2 + DDS? I suspest it
might be on QST which is quite difficult to find here.

Thanks in advance
eb

3857. Re: TS-520S conversion for 6M -how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <334A2886.1AB2@taxes.net>
Source record: 95173

Kenwood made a matching transverter for the TS-520.
I believe it is the TV-506. You might try tracking down one
of these (or the manual) to see how Kenwood did it.

The '520 finals -- 6146-- will operate at well above 6 meters.
As I recall, the TV-506 used a single 6146, or else a 2E26, and
made only 5 - 10 watts. Whether you could use the '520 tank circuitry
at 6 meters without chopping off the rest of HF is another issue,
and I wouldn't even guess, except that if you have a clean '520
it's too nice a rig to butcher.

3858. HomeBrew Reflector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <334A7EF5.1308@primenet.com>
Source record: 95174

HomeBrew is a mailing list (reflector) devoted to amateur radio
and electronics experimentation and construction:

* building kits
* scratch construction
* radios, antennas, widgets
* design
* accessories
* station construction
* digital, analog, uP
* repair, modification, surplus

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe homebrew

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe homebrew

To post items to the reflector, send email as follows:
TO: homebrew@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

3859. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: rickets@earthlink.net
Message-ID: <334a6610.791225@news.earthlink.net>
Source record: 95175
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Tue, 08 Apr 1997 08:57:45 -0400, Steven Mann <Steven_Mann@UNCG.EDU>
wrote:
>Are you aware that there is a difference between a random length end fed
>wire and a "long wire" antenna?
Not always.
dr

3860. Re: Where To Buy Parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: w0yr@aol.com
Message-ID: <19970408190701.PAA27364@ladder01.news.aol.com>
Source record: 95176

R. F. Parts in California (advertises in both CQ and Qst) sells tube sockets and their latest catalog has the sockets and the chimneys for 4-1000-A. Peter Dahl makes a 7.5 v 21 A transformer and it is top quality. That is such a specialized xfmr that there are hardly any like that around. As for the tank coil, you would do best to wind your own from copper tubing. The B&W coils (850 and 852) will nothold up long if there is any impedance mismatch because of the high circulating currents. You will have much greater efficiency if you wind your own. I have been through two B& W tanks and they were made for not more than 1 k.w. INPUT. Now days people want 1.5 kW OUTPUT which means running 2.5 to 3 kw INPUT. Talk about cooking something!

Good luck.

Mike Lonneke
HA/W0YR Budapest Hungary

3861. I.C. Information

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: John Higgins <kq4ft@totcon.com>
Message-ID: <01bc444e$c8e94580$5b9048ce@tci.totcon.com>
Source record: 95177

Does anyone have an address where I can obtain the pin connections on the 7400 series IC's. Pse E-Mail kq4ft@totcon.com Tnx John H.

3862. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334ADAF2.7C62@ix.netcom.com>
Source record: 95178

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3863. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334AE004.4B94@ix.netcom.com>
Source record: 95179

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3864. Vibrator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: Carl Osborn <carl@sedona.net>
Message-ID: <334ABA6C.57D8@sedona.net>
Source record: 95180

Need 12 volt 4 prong vibrator, Mallory G-859 or Cornell-Dublier 6326 or
equiv. to restore Gonset Twin mobile receiver.
Carl Osborn W6RXP

3865. WTB: YAESU FV-102DM DIGITAL VFO AND FT-102 OPTIONAL AM/FM BOARD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: wb6elm@juno.com
Message-ID: <5iecjk$298@poisson.nosc.mil>
Source record: 95181
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.cb

Hi,
I recently purchased a YAESU FT-102 transceiver. What a fantastic piece of equipment! Now I am seriously looking for the optional AM/FM Module that goes in the bottom of the YAESU FT-102. Also looking for the matching remote FV-102DM Digital VFO for the FT-102.

Rubin
wb6elm@juno.com

3866. Re: Is it "homebrew" or "homebuilt"?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <334AB5FC.449FA181@acsu.buffalo.edu>
Source record: 95182

Dean Hemphill K5DH wrote:
>
> This question keeps popping up, and there are many viewpoints on the
> subject. I personally don't think any one answer is the right one.
> In fact, the whole issue is probably a waste of time, but, whatever.
>
> In contests sponsored by most of the QRP clubs, a rig is considered
> "homebrew" if YOU built it, whether it was from a kit or from your
> junkbox, whether you designed it or not. In the eyes of these QRP
> clubs and organizations, if you didn't build it, it isn't homebrew.
>
> I personally build rigs from kits, and also from designs that I find
> in books and magazines. I tend to refer to these rigs as "homebuilt",
> rather than "homebrew", because I didn't actually design them.
>
> In some cases, I have made significant modifications to someone else's
> design, but because I was not the original designer, I refer to these
> rigs as "homebuilt" also.
>
> I'm sure this debate will rage on until we're all ready to scream, but
> at least I've had the chance to add my two cents' worth.
>
> 73 to all, and whatever you do, keep on building!
>
> Dean, K5DH
You are correct Dean. Most clubs will recognize a rig as being homebrew
if you put it together. The purpose is to promote experimenting and the
improved understanding that could come from the same.

I also feel that if you made the radio from a schematic and produced
your own boards....then that is homebrew.

In the real world that would include very few hams. For better or worse
most people are the "paint by numbers type".

As Jerry Seinfeld once said , "Not that there is anything wrong with
that" :-)

Jim (N2GO)

3867. Re: TS-520S conversion for 6M -how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: bb840@scn.org
Message-ID: <E8C12H.4wK@scn.org>
Source record: 95183

In a previous article, acepilot@mwt.net (scott) says:

>
>ernie wrote:
>>
>> Hi
>> Has anyone done it ? Any IDEAS ?
>> Thanks in advance de Isaac, 4Z4TL
>
>It might be able to be done...the 520S has an AUX position on the band
>switch. Not sure if the PA tubes can go that high in frequency...if they
>can, it should only be a matter of putting in crystals to get 6M out of
>the rig. How about it? Anyone? Sounds like an interesting idea! I
>once saw an article in the ham magazines about a guy who converted a CB
>from 27MHz to 50 MHz!
>73, Scott
>
I don't think it's quite that easy. The AUX position was there to be
able to and one of the WRAC-79 bands, but Kenwood never marketed any kits
to do it. I'm certain that besides a crystal, you need to put in some coils.

73 de KD7MK
--
Jim Aeschliman bb840@scn.org
Black Diamond, Washington KD7MK

3868. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <334AEB53.3626@concentric.net>
Source record: 95184
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

H. Caron wrote:
>
> Steve,
>
> Would a ~6" long by ~1/4 ferrite rod taken out of a defunct am recvr
> I have on hand (I also have a 2x1/2x1/8" bar), qualify as very large
> hi-Q rod in your perspective? Or should one look for something much
> larger e.g. 8"+ x 1/2"+ ?

Bigger is better, but I use an 8" by .5" rod from a very OLD
radio (1960's) and don't know where to get them that size today.

>
> Could you expand on "shield in a chicken wire" expression you used.
> Is it only a figure of style that language barier dosen't permit me to
> catch right on (native language is french (Quebec)) or have you got
> something more specific in mind.

Loose (large opening) Faradays cage. Screen with holes big
enough you can get your thumb through. Wrap around the rod and ground.

>
> My undestanding of your reply is that everything (the ampli and the
> cable) should be as well sheilded as possible, but the ferrite rod
> itself should be 'only partly sheilded' through some kind of metalic
> screen (of what specific type?) . Is that it?

Yup! Be sure to place a variable capacitor parallel to the
inductive winding. You can find the resonant frequency to set your
turns ratio by injecting an RF signal at the frequency you wish to
center, center the variable capacitor, and wind until the drop across
the tank circuit peaks. Simple. :)

>
> Thanks for any info.
>
> BTW I appreciate your input to this gr, your sense of humor and some
> of the opinions you posted on religious matter.

Why thank you! :) I've been told I am the Howard Stern of the
Usenet. I tend to agree. ;) You should hear my radio programs when I
used to do them, wacky! :) Wacky is good, wacky is cool.

>
> Altough the essence of the latter should, IMHO, better be left to a
> specific ng for those interrested in the specific matter (and I have
> couple strong opinions of my own ;)), religious broadcasting being a
> SWL reality, the subject ought to be address on its own merit in
> relation with its SWL impact.

The bands would be quite dead without them I regret.

>
> Hey!, the other day, just for the fun of it, I breadboard myself an
> xtal radio for SW band and all I could ear was someone vociferating "
> God WANTS you to do this... God WANTS you to do that..." and so fort
> (how the h... does he know that!?) and moving around I stumbled on
> mellow voices chanting their "Hail Mary full of..." That was it! Now
> I'm left with myself to desing a more selective unit (and I'm no
> designer!! :(). That's an impact! You see it? ;)

You must be in Quebec where you are close to the eastern catholic
broadcasters. With crystal receivers, the closer the better, no gain.

>
> >> Sorry, Mr.
> >>TinyTenna, don't mean to horn in on your busines, but.....)
>
> You shouldn't be sorry about that Steve ;). Maybe he should get in
> touch with Ted. I think they would get along quite well oneanother, at
> least for the time of an email!. Unless both were the same and sole
> person, in which case he will get along quite well with himself, but
> that even, I doubt ;(

:)

sq

3869. Re: Where To Buy Parts?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <334AF47E.350C@calweb.com>
Source record: 95185

W0YR wrote:
>
> R. F. Parts in California (advertises in both CQ and Qst) sells tube
> sockets and their latest catalog has the sockets and the chimneys for
> 4-1000-A. Peter Dahl makes a 7.5 v 21 A transformer and it is top
> quality. That is such a specialized xfmr that there are hardly any like
> that around. As for the tank coil, you would do best to wind your own
> from copper tubing. The B&W coils (850 and 852) will nothold up long if
> there is any impedance mismatch because of the high circulating currents.
> You will have much greater efficiency if you wind your own. I have been
> through two B& W tanks and they were made for not more than 1 k.w. INPUT.
> Now days people want 1.5 kW OUTPUT which means running 2.5 to 3 kw INPUT.
> Talk about cooking something!
>
> Good luck.
>
> Mike Lonneke
> HA/W0YR Budapest Hungary
You might want to check with Fair Radio as they had some nice 4-1000
fil xfmrs new stock for under 40 dollars on their web site. I bought
one about a month ago and it looks great Triad Magnetek open frame
style and will do either 6.3vac ct or 7.5 vac ct using primary taps

73

Bob, KE6F

3870. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334ADADA.5114@ix.netcom.com>
Source record: 95186

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3871. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334ADAE6.4616@ix.netcom.com>
Source record: 95187

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3872. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334ADACE.5BE4@ix.netcom.com>
Source record: 95188

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3873. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334ADACB.5D53@ix.netcom.com>
Source record: 95189

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3874. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334ADA47.38FB@ix.netcom.com>
Source record: 95190

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3875. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334ADAE2.43C7@ix.netcom.com>
Source record: 95191

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3876. 8122 Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: boyd <boyd@humboldt1.com>
Message-ID: <334AB026.55DE@humboldt1.com>
Source record: 95192

For Trade:

I have 2 NEW TESTED 8122 Tubes from Berle Elect.
in the shipping boxes.

I would like to trade them for 2 3-500Z Eimac tubes,
new or a pair that has full output and not brown.

I would sell them for $200.00

Thank You,

Boyd N6DMF

Reply to: boyd@humboldt1.com

Phone: 707-839-5228

3877. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334ADD6D.7C88@ix.netcom.com>
Source record: 95193

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3878. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334AE075.4DA7@ix.netcom.com>
Source record: 95194

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3879. Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <334AE095.24BD@ix.netcom.com>
Source record: 95195

Need to know which is better. I know that class ab-1 is less efficient
but cleaner. Class C is more efficient but dirtier.
What is better? Have an amp project that I am starting.
It is going to be around 200 watts and use 2 transistors in a
push pull format.
Any help apppriciated.

3880. Re: newby needs help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <334AFC7D.49B8@rollanet.org>
Source record: 95196

calljeff@aol.com wrote:
>
> Hi All,
>
> My son and I are going for our "No-Code Tech" license. I am wondering what would be a good radio to start with that has the bands allowable for that level.
>
> Thanks,
>
> Jeff
depending on your area, a "handie-talkie" is usually the first choice of newcomers.
it is inexpensive, flexible, and usually let's you directly enter a freqency from
the keypad. a nice touch for starters.
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3881. WRONG!! Re: New Glowbugs E-mail list open!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5iecpq$b1i@news1.mnsinc.com>
Source record: 95197
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew

No Bob, this is not right!!

The NEW Glowbugs subscription is entered as follows:

The new server is ready, so everyone start posting to
glowbugs@www.atl.org.
If you aren't subscribed there yet or have had errors trying to do so,
send a message to majordomo@www.atl.org saying subscribe
your_email_address and you will be added to the list. Thanks, Conard
Conard Murray WS4S Glowbugs listowner ws4s@infoave.net

(The one at NCSU was just temporary!)

nospam@mail.net (Robert M. Bratcher Jr.) eloquently wrote:

>Just read this on the Pay Boatanchors list.
>Here is the info:

>Errors-To: listown@jackatak.theporch.com
>Reply-To: ws4s@InfoAve.Net
>Sender: boatanchors@sco.theporch.com
>From: Conard Murray <ws4s@InfoAve.Net>
>To: Multiple recipients of list <boatanchors@sco.theporch.com>
>Subject: New Free Glowbugs site open for business
>Originator: boatanchors@sco.theporch.com
>X-Listprocessor-Version: 6.0 -- ListProcessor by Anastasios Kotsikonas
>X-Comment: Amateur Radio Equipment Using Vacuum Tubes
>Date: Thu, 3 Apr 97 16:29:08 +0000

>Hello All,
>I have gotten permission from Bob, NA4G, to open the floodgates to
>the new
>GB server. If all goes as planned, we will be moving again shortly,
>but we
>will move the subscriber list over to the new machine.
>To subscribe, send a one-line message to:

>majordomo@csres2.cropsci.ncsu.edu

>and put this in the body, making sure to fill in the appropriate
>spaces:

>subscribe glowbugs (myname) (mycall)

>and you will be approved shortly.

>Many thanks to all who have offered server space and to the
>beta-testers and
>especially to Bob and Bob for getting the software and hardware going.
>73,
>de Conard WS4S

> Conard Murray WS4S Glowbugs listowner ws4s@infoave.net
> 217 Dyer Avenue Cookeville, TN 38501 615-526-4093
> Member Arizona ScQRPions QRP-L #993 Friend to anything TCS or
>GRC-19
> <>< Wise men still seek Him ><>
> WIMPS: Qs=000 30m=0 17m=0 12m=0 States=00/00/00

>Robert M. Bratcher Jr.
>E-mail to:
>bratcher@worldnet.att.net
>Record collector, 8mm, super 8, 16 and 35mm Film collector.
>I like old radio's too.
>Collins, Hallicrafters, National & Hammurland are my Favorites!

3882. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5iecps$b1i@news1.mnsinc.com>
Source record: 95198

This reminds me of something fun we did when I was teaching high
school electromincs 20 years ago.

You take a colour TV set (preferably a beaten up old one that nobody
wants!!) and you disconnect the deflection coils on the yoke (around
the CRT neck). They are VERY easy to get to!, and then you connect
them to an audio amplifer just as if they were speakers!
The left channel will go to say the horizontal, and the right channel
to the vertical. Then when you play some music or speech over the
stereo, you get all these interesting red green and blue circles
dancing all over the screen. Really makes a great light show and costs
very little. DIfferent sounds produce different patterns.

Great entertainment for $0.00

Also teaches the kids principles about deflection of electron beams
etc. in a manner that grabs their attention readily!

commquart@aol.com eloquently wrote:

>In article <5i7423$bpj@news.Hawaii.Edu>, jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:

>>Well this now leads me to ask, can one use a TV as an oscil-
>>loscope? It certainly would be crude but it might be fun to convert
>>and use, just the same.
>>Jeff KH2PZ / KH6

>Boy -- that brings back memories! It certainly is possible. I remember
>seeing adds back in the 60s for info on converting tvs into "big screen
>oscilloscopes" in magazines such as Popular Electronics, etc.
>I assume they used the horizontal deflection circuits in the set, and
>applied the signal to the vertical deflection amplifiers. I would think the
>bandwidth and the sweep capabilities would be limited.

>Peter Bertini K1ZJH
>Senior Technical Editor, Communications Quarterly Magazine
>"The Radio Connection," Popular Communications Magazine
> -- proud members of the CQ family --

3883. WTB: Mercury wetted relay for keying rigs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5iehcv$b1i@news1.mnsinc.com>
Source record: 95199
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Needed - mercury wetted relay for cathode keying tube rigs!

What do you have in the junque boxes out there????

Please e-mail me:

bry@mnsinc.com

Thanks & 73 de AF4K Bry

3884. Help: Cobra CB to 10m ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5iecq3$b1i@news1.mnsinc.com>
Source record: 95200

DO NOT HIT "REPLY" to bry@mnsinc.com

Send your reply ONLY to:
wcb@clipper.net

THANKS!

Forwarded request for help:
==========
From: Sharon Biser <wcb@chinook.clipper.net>
Send reply to: wcb@chinook.clipper.net

Well It is not about your page BUT, may be you can help me
to find a page for some answers???
I'm looking for info on a Cobra 77X to put on 10 mtrs
for a beacon and need to know (1) If it can be done (2) witch of
the two crystals need to be changed Etc... ??? May be you could be
so nice and tell me where to get this info???

TNX K7PYS Bill wcb@clipper.net In Oregon

Again THANKS ME>>
==========
DO NOT HIT "REPLY" to bry@mnsinc.com

Send your reply ONLY to:
wcb@clipper.net

THANKS!

3885. Re: R2 RECEIVER with DDS L.O.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000804971544440001@news.europa.com>
Source record: 95201

:
:Hi again, Rob,
:
: Just an update on my experiences with DDS and an R2 receiver.
::LO and the analog VFO, driving the R2.

cut

: In short, we heard no birdies or other noise covering up weak signals.
: The DDS did have an internal LPF on the output set to 14.3 MHz. The
:DDS was originally intended for another non-ham application, and was
:tunable only by a DTMF keyboard entry, so we could not check operation
:while changing frequency (no continuous tuning). The DDS was enclosed
:in its own metal cabinet, with BNC output.

How many bits does the DDS phase accumulator have? If not known, what is
the frequency step resolution of the DDS?

Your results are intriguing. In any case spurs -45db down would severely
compromise the dynamic range of the receiver, even if none are heard in the
audio. But the dynamic range would probably jump all over the db range due
to the unpredicability of the spurs. Thus one test might show 110db
dynamic range, and yet another frequency show 70db, etc.

An analogous situation is the noise floor of a VCO or VFO fed to a mixer.
If there a high noise floor around the desired freq it shows up in the
receive audio as noise when under strong signal conditions. Hence
"noise-limited" results for some dynamic range tests like in QST. I would
expect analogous "spur limited" dynamic range tests when the DDS is used.

Rob.

3886. FS: Hitachi O'scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: b.palmer@ix.netcom.com
Message-ID: <5iehha$g75@dfw-ixnews4.ix.netcom.com>
Source record: 95202
Cross-posted to: rec.radio.amateur.boatachors,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.swap

```
Hitachi V1100A

4 inputs

100 MHz

Excellent condition

owner's manual

Originally cost $2300, will take $750
The scope has too many features to list.
If interested call Fred at: 817-321-5253
```

3887. WTB: transistor, relay

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5iecpo$b1i@news1.mnsinc.com>
Source record: 95203
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

Needed:

Mercury wetted relay

Horizontal Output Transistor from TV

for keying tube xmtrs(!)

500-1000 watts plate transformers.

5-500 watt Modulation transformers.

- please reply via e-mail if you have something suitable...

Best regards - Bry, AF4K / G3XLQ

http://www.mnsinc.com/bry/

3888. Re: Drawing Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5iecpu$b1i@news1.mnsinc.com>
Source record: 95204

Hello. THanks for the informative post. Does this
"KEYCAD" thing have vacuum tube symbols in
its library of symbols???

bcspain@aol.com (BCSpain) eloquently wrote:

>Dale Martin wrote:
>>
>> This may be an old question, so my apologies upfront.....
>>
>> Does anyone have any recommendations for software for creating
>> schematics and wiring diagrams? I have tried a couple of low-end
>> programs and found them too labor intensive and not really suitable.
>>
>> I'd appreciate anyone's suggestions, recommendations, and/or ideas.
>>
>> Thanks in advance.
>>
>> 73,
>> --
>> Dale Martin
>> kg5u@hal-pc.org
>> http://www.hal-pc.org/~kg5u

>Dale,

>There is a cad program called KeyCad by Softkey (available at wal-mart)
>for about $30 that has a good symbol library. Its a little quirky to learn
>but works well. If you want to spend a little more money and get up into a
>real cad program, AutoCad LT costs around $400 and has extensive symbol
>libraries available. From there you can go all the way and spend around
>$3500 for AutoCad Release 13. The same libraries that work for this will
>work for LT. Unless you want to do 3-d work, there's no real reason to buy
>the big package.

>73's

>Bryan

3889. Help Needed With Henry Tempo 2002 Amp ..

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-08 00:00:00 UTC
From: daveb@buffnet.net
Message-ID: <5icf7c$ef6$1@buffnet2.buffnet.net>
Source record: 95205

Hi Folks,

I recently acquired a Tempo 2002 Henry Amp. The amp loads perfectly (L4 link inductor) with the safety cage (internal) off. In fact the link is well above the top of the cage when properly loaded.
L4 does not appear to be the OEM part. It was hand formed (poorly) and is physically too large.

A call to Henry didn't help. No replacement part or dimension drawing is available.

Just to confirm what I thought I formed another link which is smaller overall and now loads in a much better position (physically lower). Problem is with the cage back on the situation is better but not quite right.

I'm hoping some kind soul who owns one of these beasts could provide the dimensions (or a photo with the cover off) of L4. I really do not want to run it with the cover off.

Thanks .....

daveb@buffnet.net

3890. Re: FS or FT -- Toshiba Laptop

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: mdwatt@usit.net
Message-ID: <334de6ff.321326761@news.usit.net>
Source record: 95206
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.amateur.equipment

On Mon, 07 Apr 1997 13:32:33 GMT, mdwatt@usit.net (Marty Watt)
wrote:

>I have a T1900 Toshiba laptop for sale or trade. 486/20, 4 meg ram,
>200MB hd (doublespaced to 385MB), monochrome VGA, quickport
>trackball pointing device, 14.4 PCMCIA fax/modem, briefcase style
>carrying case.
Thanks for the interest, the laptop is gone.

72 es 73 de
Marty, KM7W

____
Jackson, Tennessee e-mail: mdwatt@usit.net
http://www.public.usit.net/mdwatt
"The Curmudgeon's Corner"
NorCal #???? - ARCI #7514 - QRP-L #953 - AK/QRP #098 - Grid EM55oq
~~~~~~
~~~~~~

3891. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: wilder@clark.net
Message-ID: <5ies26$ial@clarknet.clark.net>
Source record: 95207

Tony Zugec (tonyz@rose.hp.com) wrote:
: Claudio Fornaro (fornaro@athena.polito.it) wrote:
: : Hi all,
: : I'd want to build a "home made" radio receiver for AM (or even SW...) by
: : putting
: : together pieces that can be found at home, that is you have not to buy
: : them in an
: : electronic shop.
: : To explain better: I intend to build capacitors (maybe with alluminium
: : sheets and
: : plastic bags), inductors (copper wire), the crystal is a problem... one
: : usually
: : has no galena crystal at home... the loudspeaker maybe is a bigger
: : one...
: : Has anyone ever seen such a project made or has s/he any idea about
: : building it?
: : Thanks in advance.
:
:
:
: If you want to keep the materials under the category of 'stuff around
: the house', you can try using the razor blade and needle technique
: of providing detection.
:
: This is the infamous 'GI foxhole radio' that soldiers used to
: put together to detect AM during the WWII.
:
:
: I dont have the specifics, but articles on these are relatively
: common, I have seen lots over the years. Everything is basically
: the same as a crystal radio except that the razor and pin are
: used instead of the galena or diode.
:
: Good luck!
:
I have heard of (not tried) of sticking two razor blades vertically into
wood and then laying a piece of pencil led across them. I guess the
sharp contact and disimiliar material make a diode.

Back in 1965 boys in my cub scout pack made some "crystal sets" using a
coil, variable capacitor, by-pass capacitor, and earphones. Worked good!
Really lound at the school where we met. I should note that we were
located a mile from a 5 kW AM station and within the 1 volt/meter contour.
I was cheif engineer WNDR Syracuse at the time so know the project would

be a winner. We used 1N21B radar diodes that were laying around the house.

Good luck, 73, Dick Wilder, K3DI wilder@clark.net

3892. Club Home Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: todd@crenshaw.reno.nv.us
Message-ID: <334b1b4d.3483607@news.greatbasin.net>
Source record: 95208

You're invited to check out our clubs recently revised web page
at http://wadg.greatbasin.net

You're also welcome to connect to our packet internet server
via any internet packet gateway at wadg.ampr.org

73'
KB7UYR
Todd Crenshaw, Secretary
The Wide Area Data Group, Inc. Amateur Radio Club
Reno, Nevada

3893. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Bob <rfhaas@sunlink.net>
Message-ID: <334B301A.2A0@sunlink.net>
Source record: 95209

keith a montgomery wrote:
>
> Need to know which is better. I know that class ab-1 is less efficient
> but cleaner. Class C is more efficient but dirtier.
> What is better? Have an amp project that I am starting.
> It is going to be around 200 watts and use 2 transistors in a
> push pull format.
> Any help apppriciated.

Depends upon the application. For AM and SSB, you need a linear amp so
that the sidebands are amplified without distortion. For FM or CW, a
class C amp will suffice.

At any rate, a transistor power amp will require filtering at the output
to control spurious emissions.

3894. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: archer@netgate.net
Message-ID: <334f4051.5198193@nntp.netgate.net>
Source record: 95210

On Tue, 08 Apr 1997 16:52:39 -0700, keith a montgomery
<hunter48@ix.netcom.com> wrote:

>Need to know which is better. I know that class ab-1 is less efficient
>but cleaner. Class C is more efficient but dirtier.
>What is better? Have an amp project that I am starting.
>It is going to be around 200 watts and use 2 transistors in a
>push pull format.
>Any help apppriciated.
The answer is NEITHER. *If* you're doing push-pull, you want class B
or possibly class AB-2, which are well suited to push-pull operation.
If you use Class A or C, it would make more sense to use a power
combiner than to try to use a push-pull configuration.

Class B is more efficient than AB-2, which is more efficient than
AB-1, which is more efficient than A. (but AB-2 is less efficient
than class C), but it is likely to introduce harmonics where the
waveform being amplified crosses over zero volts. A skootch of
forward bias on the two stages drops efficiency somewhat (because the
transistors are both conducting when there is no signal), but it
reduces distortion.)That's AB-2.

However, distortion isn't always a bad thing for RF amplifiers. It
depends a lot on what kinds of modulation you want to amplify, because
you can filter out class C harmonics with a really good filter between
the final PA and the antenna. I can't remember which modulation modes
can tolerate non-linear amplification, but reference to the Radio
Amateurs Handbook should give you more than you want to know about it!
:)

3895. Re: WTD: 1N3321 zener diode

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: thomas.g.booth@den.mmc.com
Message-ID: <thomas.g.booth-080497184610@ls-bootht-c.ast.lmco.com>
Source record: 95211

In article <5ibs9c$3a5u@news.doit.wisc.edu>, mgkepner@facstaff.wisc.edu (Melissa & Jim) wrote:

> TGB wrote:

> >Oops, my New England Semiconductor catalog also lists the 1N3305 thru
> >1N3350 series in the DO-5 case too. If NES still makes 'em, the original
> >poster would be able to get the "right" part for his rig.

> Sorry, I'm not familiar with these by part #. Are these the 1/4" stud
> mount? If so, thanks for the info. Glad to hear that there is a
> source out there; our people just couldn't find it.

Yes, the 1N3305 thru 1N3350 series is the stud mount w/ the 1/4 - 28 thread. Standard polarity is anode to case, and reverse polarity versions are available.

I don't think NES sells direct, and unfortunately I don't know who is the distributor for Wisconsin. Call NES @ their toll-free number to find out.

And you're quite welcome, Jim.

TGB

\\ The opinions expressed herein are my own. //

3896. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc44c8$87c1bc20$6560b6cd@cbx-nt>
Source record: 95212

You can do it, just splice into the Vertical Amp. DO NOT PLAY WITH THE HORIZONTAL. Televisions use the horizontal for their High Voltage circuitry. You can smoke it in a hurry.

Regards

Christopher Cox
KC8FRJ
TRA#4901

Jeffrey Herman <jeffreyh@Hawaii.Edu> wrote in article <5i7423$bpj@news.Hawaii.Edu>...
> The article regarding using an oscilloscope CRT for lightening detection
> lead me to write the author and ask if a TV set CRT could also be used.
> He said yes, the deflection coils would go to N-S and E-W oriented
> dipoles. Well this now leads me to ask, can one use a TV as an oscil-
> loscope? It certainly would be crude but it might be fun to convert
> and use, just the same.
> Jeff KH2PZ / KH6
>

3897. 6 meter transverter WTB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: carll@intrepid.net
Message-ID: <5ifspm$b8l$1@news3.texas.net>
Source record: 95213

I am looking for a 6 meter transverter for my RCI 2970. You got one?
Homebrew is great also...

Carl
WL7AF

3898. Re: CW transceiver made easy?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5ig4mr$qm7@camel3.mindspring.com>
Source record: 95214
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

"Dale R. Parfitt" <par@magg.net> wrote:

>Roy Lewallen wrote:
>>
>> In article <5hmgvm$bih@news1.mnsinc.com>,
>> bry@mnsinc.com (Brian Carling (Radio G3XLQ / AF4K)) wrote:
>>
>> >. . .
>>
>> >ALSO, you can go to -
>> >
>> >http://www.mnsinc.com/bry/hamfiles.htm
>> >
>> >and click on KITS for a huge list of suppliers! Thankfully their are
>> >many many small companies selling such kits these days!
>> >
>> >Homebrewing seems to be very popular now!
>>
>> It also has changed somewhat. Back when people bought an HW-8, followed the
>> step-by-step instructions, poked the components into the holes, and soldered
>> them, they would tell you they were using a "Heath HW-8". Apparently, this would
>> now be a "homebrew" rig.
>>
>> Admittedly, this is slightly more complex than taking a rig out of a box and
>> turning on a switch, and I'm surely in favor of kit building. But is it
>> now "homebrew"?
>>
>> Roy Lewallen, W7EL

>Hi Roy,

>I would call it a KIT. However, I do not believe you have to design the
>rig in order for it to be homebrew. Perhaps it starts being homebrew
>when you layout or make the circuit board and housing- a few mods would
>certainly qualify. Call it what you want- it should be encouraged.

>As an aside- I never met a more genuine group of courteous and
>knowledgeable (sp?) hams than at the Dayton QRP get togethers- old time
>ham radio.

>Dale
>W4OP- another ELNEC user

entire original postings kept.

If you get a package from the grocery store,
and cook it and serve it, was it "heat and serve"
or did you have to mix it up and cook it from raw?

If you made a HW-8 I believe it was Homebrew.
If you made a rig from an ARRL handbook schematic,
That too was homebrew.

If you started with a piece of paper, and a pencil and
designed the whole thing, that was RARE ! ! !

Ciao

73 de WB0NRU

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

3899. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5ig4mu$qm7@camel3.mindspring.com>
Source record: 95215

schultz@cddis.gsfc.nasa.gov (Dan Schultz) wrote:

>In article <5h3qs3$mou@camel4.mindspring.com>, aruder@pipeline.com wrote:

>> >I have discovered a way to xmit music over a
>> >bandspread of =< 100 Hz. Note that is Hertz
>> >not KiloHertz.
>>

>> Since posting the above, I have received 37 replies telling me it
>> can't be done.
>>
>> To most of those I did not replly.
>>
>> Several said it caint be done, but if it looks interesting, send it to
>> me, and I MAY get interested.
>>
>> to all but one of those, I said "the world is full of people who
>> got no idea what is going on, but who know why it won't work.
>>

>Your claim does seem a bit extraordinary, and extraordinary claims require
>extraordinary evidence.

>Certainly there are cases in history where the leading experts dismissed
>something because it was "impossible". Certain physics professors in 1905
>were still writing that the Wright Brothers claim to have made a flying
>machine was fradulent despite the fact that they had demonstrated their
>machine in public in front of thousands of people. The Wright Brothers
>prevailed, because they showed the world that they could actually do it.

>More recently, a group in Utah claimed that they could make hydrogen
>fusion at room temperature in a jar of water. Some scientists dismissed
>the whole thing at once, "knowing" that it was impossible. Others kept
>a more open mind and did not dismiss it immediately, but they still quite
>rightly wanted to see it in action. Unfortunately, none of the cold fusion
>groups to date have been able to show a working cold fusion cell, and those
>who claimed that they had had in fact made some error in their measurements.

>Sometimes a person like Einstein comes along who really does rewrite
>the existing laws of physics, and whose work withstands repeated tests
>over a long period of time, but far far more often the claims of new
>physics turn out to be mistaken after further examination.

>So show me a working demonstration, or explain clearly how your discovery
>works. Show me enough detail so I can figure out where you made your mistake,
>let me examine your apparatus in detail, and if I can't find any mistake

>then, and only then, I might believe that you have uncovered some new
>communications principle. Until then I would not advise any investor to
>put his money behind your discovery, because it does claim to defy well
>known principles of radio communications which have been around for many
>years and which I will not abandon easily. Keeping an open mind is one
>thing, but we still need to see some convincing proof that your claims are
>correct and that the many experts are wrong.

>Dan Schultz N8FGV
>Greenbelt, MD

I did that with something else recently, and the man said, "I don't
need you anymore" and so do all the others I have tried the open
approach with......

ciao

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

3900. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5ig4n1$qm7@camel3.mindspring.com>
Source record: 95216

schultz@cddis.gsfc.nasa.gov (Dan Schultz) wrote:

>In article <5h3qs3$mou@camel4.mindspring.com>, aruder@pipeline.com wrote:

>> >I have discovered a way to xmit music over a
>> >bandspread of =< 100 Hz. Note that is Hertz
>> >not KiloHertz.
>>

>Your claim does seem a bit extraordinary, and extraordinary claims require
>extraordinary evidence.

>Certainly there are cases in history where the leading experts dismissed
>something because it was "impossible". Certain physics professors in 1905
>were still writing that the Wright Brothers claim to have made a flying
>machine was fradulent despite the fact that they had demonstrated their
>machine in public in front of thousands of people.
HOW MANY? i DON'T THINK SO.
> The Wright Brothers
>prevailed, because they showed the world that they could actually do it.
THE WRIGHT BROTHERS DIED BROKE, FROM THIEVES, DIDN'T THEY?

Snip
>Sometimes a person like Einstein comes along who really does rewrite
>the existing laws of physics, and whose work withstands repeated tests
>over a long period of time, but far far more often the claims of new
>physics turn out to be mistaken after further examination.

>So show me a working demonstration, or explain clearly how your discovery
>works.
SHOW ME HOW TO PROTECT IT FROM THIEVES AND YOU GOT A DEAL.
That was the original intent of my posting. I need to find a way to
assure that I will not be told (AGAIN!) that "we don't need you."
after the details are revealed.

> Keeping an open mind is one thing, but we still need to see some convincing
>proof that your claims are correct and that the many experts are wrong.
Snip

>Dan Schultz N8FGV
>Greenbelt, MD

Yah. Right.
Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

3901. Re: 6 Meter Cavity. Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5ig4ng$qm7@camel3.mindspring.com>
Source record: 95217

"MICHAEL FAWBUSH" <mfawbush@usit.net> wrote:

>Does anyone have any documents on how to build a 6 Meter Cavity. 73

>KF4JOZ
>Mike Fawbush
>mfawbush@usit.net
>Morristown, TN

Somebody said something about 55 - gallon oil drums.
Back there just about the time dirt was discovered, we
built duplexers out of coffee cans.

The 2-M dupers were 1 lb cans, and the 6-M dupers
were 3 lb cans. We soldered a nut to the side of the
can and put a tuning wafer inside with a shaft screw
thru the nut on the side of the can.

I believe the plans were found in a magazine at the time.

Don't remember which or when, tho.

Don't give up just because someone else don't know
whatcha talkin' about.

BTW, it may not be tunable, but the hardline duper
mentioned should be more precise from the start.

Gud Luk

73 WB0NRU

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

3902. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <334b9a46.2765867@netnews.worldnet.att.net>
Source record: 95218

Go with AB if you want to work SSB or other amplitude varying modes,
class C for FM, FSK, or CW modes.

On Wed, 09 Apr 1997 07:20:54 GMT, archer@netgate.net (Ross Archer)
wrote:

>The answer is NEITHER. *If* you're doing push-pull, you want class B
>or possibly class AB-2, which are well suited to push-pull operation.
>If you use Class A or C, it would make more sense to use a power
>combiner than to try to use a push-pull configuration.

I don't understand why you believe that Ross. It makes no difference
in circuit complexity or operation if the amp is A,B, or C . That is
only a bias change.

Class C push pull has been around sinnce the early years of radio, as
has class A.

>Class B is more efficient than AB-2, which is more efficient than
>AB-1, which is more efficient than A.

The 2 designates grid current. The 1 indicates NO grid current.

Neither has anything to due directly with efficiency. Only the
conduction angle and waveshape of PA anode , drain, or collector
current controls efficiency controls efficiency.

Class AB is a conduction angle of less than 360 degrees but more than
180 degrees. Class A is 360 degree conduction angle, while C is
anything less than 180 degrees.

The maximum theoretical efficiencies are:

Class C <100%
Class B <78 %
Class A <50%

So a class AB would be anywhere from zero to just under 78 %
efficiency. The class C would be anywhere from zero to 100%.

Transfer characteristics determine distortion in a RF amplifier, NOT
conduction angle. As a general rule class AB and A amplifiers are
cleaner than lower conduction angle PA's, but that is ONLY a general
rule. There are cases where class C PA's can be cleaner than a class A
PA. Even non-linear curves are OK as long as the curve produces an
even- order response near zero zignal conditions.

Any RF PA will become "dirty" if sauration or a non-linear input vs output power operating point is selected.

73 Tom

3903. IC-24AR HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: evincent@mediom.qc.ca
Message-ID: <5ig6t6$a7o$2@wagner.spc.videotron.ca>
Source record: 95219

I have one ICOM IC-24AT and I don't know for what reason the processor will work like an IC-24ET. The range of TX freq. is 144-146 mHz VHF and 430-440 mHz UHF. Originaly this radio will be trnasmit over the US range.

If you have any hint, e-mail me at evincent@mediom.qc.ca

Thank you.

3904. G10 PCB Caracteristics

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: mramos@originet.COM.BR
Message-ID: <199704091439.LAA04987@netra02.origin.com.br>
Source record: 95220

Hi All:

I'm looking for some fiber-glass PCB
caracteristics
such as Tangent Loss (at 1.2 and 2.3GHz) and
Dielectric
Constant (Er?).

Thanks in advance

Marcus Ramos
PY3CRX - GG66QJ
Internet e-mail :<mramos@originet.com.br>
Plain Text e-mail:<py3crx@sp-gw.py2bjo.ampr.org>

3905. Re: TS-520S conversion for 6M -how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: frussle@erols.com
Message-ID: <3351afa2.4969309@news.erols.com>
Source record: 95221

On Sun, 06 Apr 1997 19:22:51 GMT, ernie@netvision.net.il (ernie)
wrote:

>Hi
>Has anyone done it ? Any IDEAS ?
>Thanks in advance de Isaac, 4Z4TL

It was called the TV-506. I've used one at a club station in Drexel
University once. The output power and sensitivity weren't great, so
they followed it with a pream and a power amp.

My suggestion: If you really want sideband on six meters, try the
Ten-Tec kit. There must be a PA driver you can steal from the TS-520
somewhere. If that driver output is anywhere around 14 MHz, you're
set. Just don't try feeding 100 watts in to the Ten-Tec transverter.
It won't work very well for very long.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

3906. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: David White <dwhite@terminus.com>
Message-ID: <334BBF85.10A@terminus.com>
Source record: 95222

Ron Hellmann wrote:
>
> I have acquired a copy of the Hamcomm software and a computer
> interface for my serial port. However, the serial port has been
> disabled because I use an internal modem. Any ideas how I can free up
> the serial port so the interface will work? TIA Ron AK5F
Assuming a PC compatable there are four comm ports COM1-COM4. However 1 and 3 share the same interrupt line, likewise with 2 and 4. If your modem is put on 4 then 2 will be available for your ham equip interface as long as you dont try to use your modem at the same time. So if your modem is on 1 put it on 3, if on 2 put it on 4. Your mouse is probably on one of the ports also. Best leave the mouse alone as you always need that. Help?

3907. RS232-TTL in DB25?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: toms@inconnect.inconnect.com
Message-ID: <5igfoj$nd4$1@news.inconnect.com>
Source record: 95223

I was wondering if anyone has been abe to fit all the necessary components (Level IC) into a single DB25 hood. Other than convience, is there an advantage to this iver installation in a box?

--
Best Regards,

Tom Schaefer
Computer Consultant Unisys A Series & Windows NT: Amateur Radio NY4I

3908. Socket,Chimney,Tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: kb5mer@aol.com
Message-ID: <19970409170901.NAA14482@ladder01.news.aol.com>
Source record: 95224

```
For Sale : New SK-500 Socket For 4-1000 $42.00
New SK-506 Chimney For 4-1000 $68.00
Pull 4-1000A Tube $75.00
JR (512) 267 7385 /267 7467 - kb5mer@aol.com
```

3909. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5iglao$rsk@hpcvsnz.cv.hp.com>
Source record: 95225

Lou or Annette Hinshaw (aruder@pipeline.com) wrote:
: SHOW ME HOW TO PROTECT IT FROM THIEVES AND YOU GOT A DEAL.
: That was the original intent of my posting. I need to find a way to
: assure that I will not be told (AGAIN!) that "we don't need you."
: after the details are revealed.

Patent it. Or for that matter, just file a patent disclosure
before showing the details to anybody. Be careful about it till
the patent is actually issued. Get people to sign non-disclosure
agreements.

Then--talk with someone who's really competent about it. Be really
willing to listen to the feedback they give you. Be sure you can
demonstrate to them through tests they buy into that your ideas
actually do work. Note that their competence and their approval
of the tests are both critical. Many university communications
engineering professors would fit the bill: relative lack of
commercial interest, open-minded, and competent. Don't think
they are not open-minded just because they disagree with you. And
be willing to pay a consulting fee for their services.

Certainly if you are bright enough to create significant
intellectual property, you are bright enough to protect it. You
aren't the first, and won't be the last. If you approach everyone
like they are a thief, it's not very likely you'll make many
allies.

Even companies like Microsoft aren't immune to thievery, but they
are certainly quite succesful in spite of it; if your invention
involves hardware, it's likely easier to protect than software.

This is not to say I have any confidence in your claims.

--
Cheers,
Tom
tomb@lsid.hp.com

3910. Re: WTB: Mercury wetted relay for keying rigs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000904971139300001@news.europa.com>
Source record: 95226
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <5iehcv$b1i@news1.mnsinc.com>, bry@mnsinc.com wrote:

:Needed - mercury wetted relay for cathode keying tube rigs!
:
:What do you have in the junque boxes out there????
:
:Please e-mail me:
:
:bry@mnsinc.com
:
:Thanks & 73 de AF4K Bry

You can use a high voltage NPN for that. I have one in my DX-100 and it works well. Mine is NTE2303 TO-220 horizontal output type. A high voltage mosfet might work also. They have those that go up to 800v and beyond.

With the solid state device, key click is much more controllable. I would assume with a mosfet, with its large gate capacitance, a resistor in series with gate would be all you'd need to control click.

Rob N3FT

3911. Re: 6 Meter Cavity. Help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <5igojdntk1@news8.gte.net>
Source record: 95227

Lou or Annette Hinshaw wrote:
>
> "MICHAEL FAWBUSH" <mfawbush@usit.net> wrote:
>
> >Does anyone have any documents on how to build a 6 Meter Cavity. 73
>
> >KF4JOZ
> >Mike Fawbush
> >mfawbush@usit.net
> >Morristown, TN
>
> Somebody said something about 55 - gallon oil drums.
> Back there just about the time dirt was discovered, we
> built duplexers out of coffee cans.
>
> The 2-M dupers were 1 lb cans, and the 6-M dupers
> were 3 lb cans. We soldered a nut to the side of the
> can and put a tuning wafer inside with a shaft screw
> thru the nut on the side of the can.
>
> I believe the plans were found in a magazine at the time.
>
> Don't remember which or when, tho.
>
> Don't give up just because someone else don't know
> whatcha talkin' about.
>
> BTW, it may not be tunable, but the hardline duper
> mentioned should be more precise from the start.
>
> Gud Luk
>
> 73 WB0NRU
>
> Prolific inventor,
> Lousy Salesman,
> Incompetent businessman.
> (Typical)

Michael,
How do you want to use the cavity? This greatly affects the design
requirements.
73,
Ray, W4BYG

3912. SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: "Brian E. Cauchi" <gcauchi@keyworld.net>
Message-ID: <01bc451e$dbce5840$0101a8c0@gcauchi.keyworld.net>
Source record: 95228
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Hello fellow WEFAX FAX SSTV RTTY enthusiasts.

I've just updated by FTV program - current release is 0.98f
Download it from http://www.geocities.com/SiliconValley/2504

For the first time, I have released the software as full-featured
shareware.

FTV brings innovative digital signal processing and analysis techniques to
your multi-media PC. It can be used to receive images from Weather
Satellites and Terrestrial Facsimile Stations, text transmissions from
radio telex services, as well as Amateur Radio FAX, SSTV and RTTY signals.
It can also transmit Amateur Radio FAX and SSTV (Slow Scan Television). No
external hardware, other than a radio, is required, as all the necessary
signal processing is implemented in software.

FTV uses a SoundCard to decode:-
WEFAX weather photos from weather satellites
FAX wirephotos and meteorological maps (Supports FAX transmission)
SSTV pictures in monochrome and colour (Supports SSTV and SSTV COLOUR
transmission)
Baudot text (RTTY)

Here is a run down of soem of its hot features:

(1) It keeps the demodulated signal in memory, so that the signal can be
analysed again at a different keying rate or polarity! Garbage can be
resampled on the fly, which means that minutes of received signals decoded
at the wrong baud rate or keying polarity are recovered, on the fly, while
still receiving.

(2) Keying rate and polarity are analysed automatically - standard baud
rates are automatically set following analysis (assuming you have
calibrated your system as described in the documentation file
'readme.txt').

(3) Tuning oscilloscope available at all times, without loss of copy.

(4) Program works in real time.

Take a look at my web site for futher details, at:
http://www.geocities.com/SiliconValley/2504

What can I say ? Try it, it's free, and may you have as much fun as I am
having...
And, keep me posted... If you have suggestions, you have got to let me

know!

73's from Brian.

3913. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: orion**@capital.net
Message-ID: <334c085a.23964482@news.capital.net>
Source record: 95229

On Tue, 08 Apr 1997 21:22:42 GMT, bry@mnsinc.com (Brian Carling (Radio G3XLQ / AF4K)) wrote:

>This reminds me of something fun we did when I was teaching high
>school electromincs 20 years ago.

Jeez BRY, I hope you weren't teaching spelling too.

--
73,
Butch N2YMJ
To send mail, delete
the two stars from
my address.

3914. Re: I.C. Information

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Jim Devenport <jdevenport@lanl.gov>
Message-ID: <334BC872.35E8@lanl.gov>
Source record: 95230

Try the following link I found within 20 seconds of initiating a web
search on "7400":

http://www.xs4all.nl/~falstaff/7400.html

John Higgins wrote:
>
> Does anyone have an address where I can obtain the pin connections on the
> 7400 series IC's. Pse E-Mail kq4ft@totcon.com Tnx John H.

--
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |
|My views rarely (if ever) reflect those of my employers|
http://nis-www.lanl.gov/~jdport/

3915. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: dmoisan@shore.net
Message-ID: <334be466.20873408@news.shore.net>
Source record: 95231

"Christopher Cox" <cobox@netexp.net> wrote:

>You can do it, just splice into the Vertical Amp. DO NOT PLAY WITH THE
>HORIZONTAL. Televisions use the horizontal for their High Voltage
>circuitry. You can smoke it in a hurry.
Get around that by replacing the yoke with another from a junked set
of the same size. Leave the original yoke connected, but off the CRT.
Put the new yoke on the CRT and connect its windings to the circuit of
your choice.

I saw this in Elementary Electronics some 20 years ago; you may still
find copies at a hamfest; the same publisher also reprinted this
article at least a few dozen times. The article only dealt with the
then-very-common B&W TVs; I think it *should* work with color but I'm
not real sure.

If it does work, another possibility for play would be to connect the
RGB inputs into the CRT board (which are relatively low-voltage) into
the circuits of your choice. Hey, look, Z-Axis modulation in *three*
colors! :)

Dave

| David Moisan, N1KGH Email: dmoisan@shore.net |
| WWW: http://www.shore.net/~dmoisan n1kgh@amsat.org |
| Invisible Disabilities Page: |
| http://www.shore.net/~dmoisan/invisible_disability.html |
| GE Superradio FAQ: |
| http://www1.shore.net/~dmoisan/faqs/superradio/gesr_faq.html |

3916. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ih5tv$3mj@hpcvsnz.cv.hp.com>
Source record: 95232

Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
: In article <19970406135400.JAA18749@ladder01.news.aol.com> commquart@aol.com writes:
: >In article <5i7423$bpj@news.Hawaii.Edu>, jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:
: >
: >>Well this now leads me to ask, can one use a TV as an oscil-
: >>loscope? It certainly would be crude but it might be fun to convert
: >>and use, just the same.
: >>Jeff KH2PZ / KH6
: >
: >Boy -- that brings back memories! It certainly is possible. I remember
: >seeing adds back in the 60s for info on converting tvs into "big screen
: >oscilloscopes" in magazines such as Popular Electronics, etc.
: >I assume they used the horizontal deflection circuits in the set, and
: >applied the signal to the vertical deflection amplifiers. I would think the
: >bandwidth and the sweep capabilities would be limited.

: The bandwidth is about 6 MHz, and that can be extended to maybe
: 10 MHz without too much work, but the sweep is the real problem.
: You can't deviate very far at all from 15,750 Hz for the horizontal
: deflection because the flyback circuit (which makes HV for the CRT)
: is resonated at that frequency and is an integral part of the horizontal
: deflection system. For a 19 inch set, that gives about 3.26 microseconds
: per inch as the sweep rate. That's pretty fast for the sorts of signals
: an oscilloscope with a vertical bandwidth of only 6 MHz would normally
: observe. It's too fast for most audio work, and ironically it is too
: fast for most TV service work where a deflection factor of 5 mS per
: division or 20 uS per division would most commonly be used to observe
: the vertical and horziontal waveforms respectively.

6MHz bandwidth for the vertical deflection??? Yeah, rrrright. Maybe for
the video, which is intensity modulation, but I'd have a heck of a time
getting much info out of looking at an intensity-modulated straight line.

These days, the way I'd turn a TV set into a scope is to digitize the
signal of interest and store it in memory and generate a raster-scan
image of it. You could probably make a 20MHz scope this way from not
very many parts. You could use something like an old Amiga computer
to handle the video for you, since it's capable of outputting
interlaced NTSC-scan-rate signals; or if you don't need too much
vertical resolution, something like a Commodore 64 could do.

Cheers,
Tom
tomb@lsid.hp.com

3917. Re: 6KD6 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <5igqel$o6u$1@news8.gte.net>
Source record: 95233

Javier Azofra wrote:
>
> Does anybody know the electrical characteristics
> of 6KD6 tubes?
> From 3 to 30 MHz, if tube is mounted gorunded grid,
> what is the input impedance (cathode impedance)?
>
> 73 from Javier,EA1AYX
> e-mail: j.azofra@redestb.es

Javier,
Try http://linux.cec.army.mil/cgi-bin/tube I found it there.
73,
Ray, W4BYG

3918. Re: Need help..Ts440 power?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Michael Ruther <Ruther@alliedsignal.com>
Message-ID: <334BE96A.716D@alliedsignal.com>
Source record: 95234

George wrote:
>
> Hi
> My 440 decided that it would overheat will I was talking. Well when it
> cooled off I turned it back on and nothing happened, it is drawing 20 amps
> , the supply heats up and no lights or output. I checked the fuse and I
> have power to the radio. Anyone got any good ideas beside the sledge
> hammer?
>
> 73's george

hi george
wild guess is the finals are shorted. I have never had my 440 overheat except sending weafax. if the heat sinks get warm now,and the fan on the ps50 runs.
check the power supply current and voltage.if it is above an amp on recieve there is a short.
mike aa7qa

3919. FST: Power diodes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <5igr0m$o6u$2@news8.gte.net>
Source record: 95235

I have about 100 each 1N1457 and the complement 1N1457R, flanged power diodes. They are good pull-outs from high voltage stacks, rated 400PIV @ 25 amps. For sale or trade, make offer.
73,
Ray, W4BYG

3920. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5ih8ht$e7e@library.airnews.net>
Source record: 95236
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

DOS programs are OK, but since there are Win95 programs
available to perform the same functions (and auto-install too)
I'll stick with them.

Ken K5MBV

3921. Re: helical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Paul Graham <paulg@imaxx.net>
Message-ID: <334C1A24.4949@imaxx.net>
Source record: 95237

JERRY JOHNSON wrote:
>
> does anybody know if a helical antenna will pick up a vert. > transmitted signal,if so how effective?
> jerry

A Helical antenna is a circularly polarized antenna.

Circular polarization comes in too "senses" Clockwise (CW) and Anti-Clockwise (CCW).

A circularly polarized antenna will respond to signals of ANY polarization - except circularly polaized signals having the oposite sense.

The loss between linear (horiz. or vert.) and circular is 3 dB (only 1/2 'S' unit).

Linearly polarized singals frequently rotate form vert. to horiz. - I have measured as much as 235 deg. or rotation at 145 MHz.

Therefor: At times a helical antenna will work better for receiving signals that were transmitted with linear polarization.

73,

Paul

3922. Metal Working and Homebrew Ham Projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5ig4cb$593@lana.zippo.com>
Source record: 95238

Metal working is a big part of my Ham radio homebrew activities. This my be in part due to most of my home brew is done above 400 MHz. I maintain a web page that may be of interest to some of you. Take a look.

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

3923. Keyer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Jetleb@netcom.ca
Message-ID: <334C81E7.31E0@netcom.ca>
Source record: 95239

If anyone is interested, I have built a home-brew keyer (and key for that matter) that I used for my 5WPM test. It was done under windows95, but can be converted to other formats. The unit is based on a microcontroller and doesn't have any real bells and whistles, but it does automatically adapt to the type of key you are using and whether you are right or left handed. I could have done more with it (I didn't use 6 I/O pins), but I only had a week to go before my test and I didn't have a key or keyer, so I was desparate and in a rush. It costs about $15 to $20 to build. Give me a shout if you are interested.

Just to warn anyone interested; the file is about 5Mb long, including all embedded photos and autosketch drawings. It's about 2.4Mb long in ZIP format. I can convert it to other formats (Win3.1, MSDOS text file, etc), but you might have to sacrifice the pictures and/or diagrams.

Matthias Jetleb VA3-MWJ

3924. Re: RS232-TTL in DB25?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: cjdumar@westelcom.com
Message-ID: <5ih0il$l4@news.emi.com>
Source record: 95240

On 1997-04-09 toms@inconnect.inconnect.com(ThomasSchaefer) said:
:Newsgroups: rec.radio.amateur.homebrew
:I was wondering if anyone has been abe to fit all the necessary
:components (Level IC) into a single DB25 hood. Other than convience,
:is there an advantage to this iver installation in a box?
:--
:Best Regards,
:Tom Schaefer
:Computer Consultant Unisys A Series & Windows NT: Amateur Radio NY4I
yes you can but it will have to be done with surface mount parts. but
that is not the biggest problem. If you use one of the rs-232 lines for
powering the device make sure not to exceed the amount of current that the
line can provide safely. Also, if you choose to power the thing off the
rs-232 line use a small bridge rectifier before the actual device. This
will keep the positive positive and the negative negative dispite the level
on the pin you use

Charlie, KA2VCS (ka2vcs@kd2aj)
E-mail: cjdumar@westelcom.com

Net-Tamer V 1.08X - Test Drive

3925. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <334C5E68.5A7E@rollanet.org>
Source record: 95241

David Fowler wrote:
>
> Ron Hellmann <ronh1@gramercy.ios.com> wrote in article
> <5ibmr9$8vl@nnrp2.farm.idt.net>...
> > I have acquired a copy of the Hamcomm software and a computer
> > interface for my serial port. However, the serial port has been
> > disabled because I use an internal modem. Any ideas how I can free up
> > the serial port so the interface will work? TIA Ron AK5F
> >
> >
> Depends... I assume you have a serial mouse and an internal modem.
>
> The PC normally has two interrupts available for serial ports. One is
> required for the mouse and one is required for the modem (at least when you
> using the modem). I have had this problem many times, here are the best
> solutions I've found...
>
> If you use you modem only in win95, your modem allows you to select
> interrupts other than 3 or 4, and you have another interrupt available
> then... Set you modem for COM3 and use the available interrupt (IRQ). I
> have often used the LPT1 (IRQ 7) or the LPT2 (IRQ5) for the additional
> serial port with success. Just disable the resource for the LPT port
> before making the changes. Once you move the modem, re-enable the com
> port.
>
> The solution I most often use is to buy a bus or PS2 type mouse with an
> interface card. Set the card to an available IRQ, or steal an LPT IRQ.
> This frees up the serial port used by the mouse and will allow your modem
> to work with DOS based programs.
>
a less involved solution would be to enable the disabled port under a
new
address. com4 to be precise. while this does not allow simultaneous
use
of com2 and com4, the likelyhood of this need is low. either enable the
port from the 1.motherboard jumper, 2.card jumper, 3.cmos setting.
this works well if you do NOT plan to use the com4 port and the modem on
com2 at the same time.
com1=3f8
com2=2f8
com3=3e8
com4=2e8
incase the jumpers specify hex addresses rather than logical port names
--

A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3926. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5ihns1$jrn@mtinsc04.worldnet.att.net>
Source record: 95242

I second this approach... I am running a serial mouse on com1, modem on com2, and the second (DB-25) as com 4. W95 shows conflict, but I just don't use the modem while I am using the serial port. Did a similar thing when I was running W3.1 on the old 486 - Except the int modem was com 4 and the available serial prot was com2.

Woody

David White wrote:
>
> Ron Hellmann wrote:
> >
> > I have acquired a copy of the Hamcomm software and a computer
> > interface for my serial port. However, the serial port has been
> > disabled because I use an internal modem. Any ideas how I can free up
> > the serial port so the interface will work? TIA Ron AK5F
> Assuming a PC compatable there are four comm ports COM1-COM4. However 1
> and 3 share the same interrupt line, likewise with 2 and 4. If your
> modem is put on 4 then 2 will be available for your ham equip interface
> as long as you dont try to use your modem at the same time. So if your
> modem is on 1 put it on 3, if on 2 put it on 4. Your mouse is probably
> on one of the ports also. Best leave the mouse alone as you always need
> that. Help?

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

3927. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Roy Keeley <rkeeley@dibbs.net>
Message-ID: <334C694D.69D1@dibbs.net>
Source record: 95243
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Brian E. Cauchi wrote:
>
> Hello fellow WEFAX FAX SSTV RTTY enthusiasts.
>
> I've just updated by FTV program - current release is 0.98f
> Download it from http://www.geocities.com/SiliconValley/2504
>
> For the first time, I have released the software as full-featured
> shareware.
>
> FTV brings innovative digital signal processing and analysis techniques to
> your multi-media PC. It can be used to receive images from Weather
> Satellites and Terrestrial Facsimile Stations, text transmissions from
> radio telex services, as well as Amateur Radio FAX, SSTV and RTTY signals.
> It can also transmit Amateur Radio FAX and SSTV (Slow Scan Television). No
> external hardware, other than a radio, is required, as all the necessary
> signal processing is implemented in software.
>
> FTV uses a SoundCard to decode:-
> WEFAX weather photos from weather satellites
> FAX wirephotos and meteorological maps (Supports FAX transmission)
> SSTV pictures in monochrome and colour (Supports SSTV and SSTV COLOUR
> transmission)
> Baudot text (RTTY)
>
> Here is a run down of soem of its hot features:
>
> (1) It keeps the demodulated signal in memory, so that the signal can be
> analysed again at a different keying rate or polarity! Garbage can be
> resampled on the fly, which means that minutes of received signals decoded
> at the wrong baud rate or keying polarity are recovered, on the fly, while
> still receiving.
>
> (2) Keying rate and polarity are analysed automatically - standard baud
> rates are automatically set following analysis (assuming you have
> calibrated your system as described in the documentation file
> 'readme.txt').
>
> (3) Tuning oscilloscope available at all times, without loss of copy.
>
> (4) Program works in real time.
>

> Take a look at my web site for futher details, at:
> http://www.geocities.com/SiliconValley/2504
>
I went there and got a msg saying file not there. Sighhhhh....

--
73's

Roy KC4IMC

rkeeley@dibbs.net
kc4imc@maf.wa4wbi.ampr.org
Snail Mail = 10675 Salt Aire Rd, E., Theodore, AL 36582, USA

3928. Re: Home made crystal(?) radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: "Tony T. Hwang" <oolong@netcom.ca>
Message-ID: <5iha22$f55@tor-nn1-hb0.netcom.ca>
Source record: 95244

In article <5h232k$18b$1@excalibur.flash.net>,
Tim Hynde <hynde@flash.net> wrote:

>Rolf Mathson <rmathiso@ix.netcom.com> writes: > AC6V wrote:
>> >
>> > Claudio Fornaro wrote:
>> > >
>> > > Hi all,
>> > > I'd want to build a "home made" radio receiver for AM (or even SW...)
>> <snip>
>> > > usually
>> > > has no galena crystal at home...
>> <snip>
>> > Hi Claudio -- an admirable project. For the crystal detector -- try a
>> > small whisker wire on a razor blade. It works -- I remember doing this
>> > as a boy experimenting with xtal radios.
>>
>> The "gotcha" on using a razor blade for the detector is it had to be a
>> "Blue Blade" (Gillette, if I recall.) These were coated (anodized?)
>> with a material that would behave as a rectifier. The connection could
>> be made via a wire wraped around a sharpened pencil lead. They probably
>> don't make these blades any longer :(
>>
>> Regards,
>> Rolf
>
>
>Better yet use a 1n914 diode available EVERYWHERE for less than 2 bits!
>
>Tim, ka8ddz

Or carborandum mineral rock pieces.
Tony
VE6CGX

3929. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: Ed Lang <elang@cstone.net>
Message-ID: <334C4F72.4593@cstone.net>
Source record: 95245
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Ken Durham wrote:
>
> DOS programs are OK, but since there are Win95 programs
> available to perform the same functions (and auto-install too)
> I'll stick with them.
>
> Ken K5MBV

Ken or someone

Please post a few of the Win95 software packages locations so I can look
at them. I am just getting back into radio after a perion of QRT.

Thanks

--

Ed Lang - KC4YLX
elang@cstone.net

3930. Re: WRONG!! Re: New Glowbugs E-mail list open!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5ifgva$io3@news.Hawaii.Edu>
Source record: 95246
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.misc,rec.radio.amateur.homebrew

Brian Carling (Radio G3XLQ / AF4K) <bry@mnsinc.com> wrote:
>No Bob, this is not right!!
>
>The NEW Glowbugs subscription is entered as follows:
>
>The new server is ready, so everyone start posting to
>glowbugs@www.atl.org.
>If you aren't subscribed there yet or have had errors trying to do so,
>send a message to majordomo@www.atl.org saying subscribe
>your_email_address and you will be added to the list.

That won't work, either. The command line should read:
subscribe glowbugs your_email_address
(you need to state the listname).

For those not aware, Glowbugs is an email list devoted to homebrewing
with tubes. It's an active list that has regenerated quite an interest
in building. I think the book on regen receivers has been rewritten
due to the activity on there!

Jeff KH2PZ (first GB list owner)

3931. WTB: 4X150A or 7034

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-09 00:00:00 UTC
From: franklin@net-link.net
Message-ID: <334b12bd.4554930@nntp.net-link.net>
Source record: 95247

I am looking for a new, even new in the box..... 4X150A or 7034,,,,,,
would like an Eimac..... anyone got one for sale??

Gary K8BKB

franklin@net-link.net

3932. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: mbv@flash.net
Message-ID: <5ihofv$aq4@library.airnews.net>
Source record: 95100
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

>Please post a few of the Win95 software packages locations so I can look
>at them. I am just getting back into radio after a perion of QRT.
~~~~~~
Ed,

The K2TL homepage: http://members.aol.com/jkktl/ham.htm has the
program WxSat which uses your soundcard to decode the Polar Orbiters
and Meteosats then displays the WAV file as a BMP. An excellent
compilation of SSTV programs is found at http://www.qsl.net/n9ngf/
Some of the programs are DOS and some are Win95. There are
descriptions and shareware to be downloaded directly from the site.
I'd have to do a search to find some other sources and my
ISP server is running s..l..ooo..ww.. tonight. Just search using
Webcrawler or Yahoo to find SSTV software, RTTY software, and
Wxsat links.

73 Ken K5MBV
~~~~~~

3933. Re: Morse Code Questions: Timing relationships

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: "Dale R. Parfitt" <par@magg.net>
Message-ID: <334C6751.66EF@magg.net>
Source record: 95101

pfriedr wrote:
>
> I'd like to tinker with a microcontroller algorithm to decode Morse Code. What
> I 'd like to know is whether anyone can tell me what the various timing
> relationships are.
>
> For example: I believe that a dash is three times as long as a dot. In
> terms of "dot timing", how long is the interval between letters? Words? Is
> there any additional time between sentences? If an operator is sending, say,
> 10 wpm, what is the actual length of the dot (in seconds)?
>
> Please email if you can help. Note that my return address has been
> spam-proofed. Delete the "NOSPAM." from the beginning of my address.
>
> Thanks in advance. Petedash/dot ratio=3. spacing between elements (dots &dashes)= 1 dot
space.
Spacing between characters (letters, numbers etc)= 3 dots=a dash.
Spacing between words= 5 dots. When I say 5 dots I mean 5dot lengths w/
NO space between. 10 WPM consists of (theoretically) ten 5 character
words.
With that said, why reinvent the wheel. This exercise was accomplished
with discrete TTL as early as 1975 by Petit in QST, and hundreds of
times since. Even the ability to track different speeds is an elemental
exercise.

Dale
W4OP

3934. Re: NBFM pre-emphasis, how much?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: "Tony T. Hwang" <oolong@netcom.ca>
Message-ID: <5ihgh1$m3p@tor-nn1-hb0.netcom.ca>
Source record: 95102

In article <3348070C.5858@earthlink.net>,
"Christopher W. (Chris) Boone" <cboone@earthlink.net> wrote:

>Wilbert Knol wrote:
>>
>> Thanks for reading this message.
>>
>> I am in the process of nutting out a 2m xtal controlled TX strip to be
>> used for packet. FM is obtained from a varicap diode across the xtal.
>>
>> My question is: how much pre-emphasis (dB/octave) should I apply, and
>> at what frequency should it start? My books talk about time constants
>> (50, 75 and 100us) which presumably define the frequency at which the
>> pre-emphasis kicks in. Also, a slope of 6dB/octave is mentioned. Does
>> this sound reasonable? Any comments appreciated.
>
>For packet, NONE!!!! You arent worried about it in this application as in
>x.25 1200 baud, you only have TWO freqs to consider...1200 and 2200Hz.
>For voice applications, 6db/octave is the standard value....the reference
>freq is 1000Hz for 0db gain...
>For 9600 baud and other FSK, you dont use pre-emphasis either! DIRECT FM
>the TX...
>>
>> Wilbert, ZL2BSJ.
>>
>> PS: please remove killspam. from Email address before replying.
>
>73
>Chris
>WB5ITT
>Former RF Technical Director-TCAPS;Texas Coastal Amateur Packet Society

Amen. That is for audio application.(Hi-Fi?)
73
Tony, VE6CGX

3935. Re: Diode for wide band RF detector?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: ptay@interlog.com
Message-ID: <5iiile$i9v@news.interlog.com>
Source record: 95103

In article <3346b5a8.259355@news.pacbell.net>,
leeleduc@pacbell.net (Lee Leduc) wrote:
>I'm building a FSM to check for low level (a few milliwats) rf for
>frequencies in the 500 Mhz to 1 Ghz range. Could someone recommend a
>diode I could use for a detector at these frequencies? I find that
the
>1N34 is not suited for this purpose.
>
>Thanks.

Lots of part # suggestions in other replies. Consider surface mount types if you can, as they'll be easier to use at high frequencies. You might also consider adding a DC 'tickler' bias of the diode through a suitable resistor and/or inductor. This can make the detector more sensitive. You may need to experiment with temp. comp. on the bias.

Paul Taylor

3936. Re: Drawing Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: ptay@interlog.com
Message-ID: <5iiith$i9v@news.interlog.com>
Source record: 95104

In article <19970406062301.BAA03684@ladder01.news.aol.com>,
bcspain@aol.com (BCSpain) wrote:
>Dale Martin wrote:
>>
>> This may be an old question, so my apologies upfront.....
>>
>> Does anyone have any recommendations for software for creating
>> schematics and wiring diagrams? I have tried a couple of low-end
>> programs and found them too labor intensive and not really
suitable.
>>
>> I'd appreciate anyone's suggestions, recommendations, and/or ideas.
>>
>> Thanks in advance.
>>
>> 73,
>> --
>> Dale Martin
>> kg5u@hal-pc.org
>> http://www.hal-pc.org/~kg5u

NTE is a company known mainly for replacement semiconductors. They are
also now marketing PCB and schematic Windows software for $99 per
package. Thes packages have a 320-pin limit, but are upgradeable, for
a price of course.
Paul Taylor

3937. HOW TO?? - VHF VCO Circuit -- HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: bryan@conquest.co.nz
Message-ID: <5iij03$s1$1@fep4.clear.net.nz>
Source record: 95105

Hi there. Thanks for taking the time to read this.

I have been trying to create a simple VHF VCO for a PLL circuit which will cover a decent bandwidth.

So far the best I can do is around 15MHz (say from 142MHz to 157 MHz). I SHOULD be able to do a LOT better.

The circuit I have been trying is a colpits oscilator using a parallel LC resonant approach. I am using BB204 varactor diodes. The biggerst problem appears to be that the oscilator quit at around 2 thirds capacatance - this is only about 15 to 20pf !

Of course I can make the osc. run at that level but only by increasing other L's or C's which brings the whole thing down the band - I still don't get more that 20 MHz band width out of the thing....

I am at the point of giving up!

Does anyone have a circuit which they knows works?? The frquency range of interest is 130 to 160MHz... The wider the better.

Any help or directions to references much appreciated.

73 de ZL1HIT (Bryan)

P.S: Please respond (at least with Cc) to my email address as I don't get a chance to check the newsgroups very often. Thanks.

3938. List Of Stamp Applications [970410]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: cjNOSPAM@hth.com
Message-ID: <334c2eca.13441228@news.buller.se>
Source record: 95106
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
Since the L.O.S.A is getting bigger I only post the index of
applications to the Usenet groups and you can download the
complete L.O.S.A from the following places...

WWW:

http://www.hth.com/losa.htm

FTP:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

1.0 Whats is L.O.S.A all about ?
--------------------------------

I started to compile L.O.S.A because I know there are lots of great
ideas and many problems that are solved with the BASIC Stamp and the
main purpose of this list is to get an idea of what other people are
using their BASIC Stamps for and maybe get some inspiration or hints.

1.1 How can I contribute to this list ?
---------------------------------------

If you have done something (big or small) with the BASIC Stamp that
you are willing to tell others please use the form given below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Visit the following Web site and fill in the contribution form...

http://www.hth.com/losa.htm

1.2 List of contributions
-------------------------

> = Indicates a new or updated application since last time.

# 001 Robo-Cat
# 002 Logic Rudder
# 003 Interfacing MAX186 8 channel 12bit A/D
# 004 Scrolling LED Sign
# 005 Tone Decoder
# 006 Pager
# 007 HexWalker Mobile Robot
# 008 Robo Bug
# 009 EXPBOT Robot controlled by Stamp
```

010 Andrews Ever Evolving Lego Robot
011 Factory Monitoring System
012 Wave to the Cats/Desk Temperature
013 Gamer's Die Roller
014 Stamp II Serial I/O
015 Voice and CW Fox Hunt Transmitter IDer
016 Lift (elevator) Controller
017 Paging with the Stamp
018 Switching Sytem
019 Door Entry Card Reader
020 Telephone Card Reader
021 DTMF Decoder
022 Ion chamber radiation monitor
023 Barn Monitor
024 Dallas one-wire interface
025 Sculpture control
026 Commercial clothes dryer controler
027 Morse Code Keyer
028 Traffic Light Controller
029 Automotive Lamp Control
030 Single Switch Scanning Device for Disabled
031 Bell timer for school bell control
032 RIMS controller for beer making
033 Stamp 1 and ISD 25XX Sound Chip Application
034 Camera Wireless Controller
035 Simple Battery Check using the BS2-IC
036 Photocell MIDI Controller
037 DCF-Clock
038 Radio-controlled Digital Clock
039 Weather Station I
040 Private Aid To Navigation
041 Stamp II in Space
042 MAT32 long integer math routines
043 Distinctive Ring Detector
044 Extended Stamp Memory
045 Debate Stoplite
046 Digital nametag
047 ST506 Disk Seeking Demo Controller
048 Robot: Multi-Stamps Communicate via Shared Memory
049 NiMH Battery Charger/Conditioner
050 555 Timer as A/D Converter
051 Bits of Light
052 Process Control
053 Near Space Capsule
054 PIC Debugger
055 DS1820 Temp Sensor
056 Air muscle hexapod robot
057 Lights
058 Caller-ID Interface
059 Wind speed and wind direction measurement device

060 Calibrated Dust Feeder for Air Cleaner Tests
061 Use of a Serial EEPROM as a Lookup Table
062 Displaying Quantities on a 200 mV Panel Meter
063 Programmable Proportional Air Valve
064 Basic Stamp machine control application
065 Compass Interface for Navigation
066 Truck + ? identification
067 Meteoreological Station
068 Stamp Controls Electronic Tester for flex circuits
069 Game Timer
070 Photoghrapic light meter
071 Data System Remote Control on unmanned aircraft
072 Speaking Instructor
073 Small Moblie Robot
074 R/C helicopter altitude control unit
># 075 Automobile Rally Odometer Interface to Laptop
># 076 LCD drivers
># 077 Stamp I / PC Interface Demo
># 078 Stamp Photo Meter
># 079 Stiquito(TM) 97 HexaPod Robot
># 080 XRaCS DTMF Radio X10 Control with Voice Response
># 081 Interfacing the Basic Stamp 2 with I2C Devices

Regards,

/Christer

[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]

-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-

3939. Re: Electrolytic Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: ptay@interlog.com
Message-ID: <5iij83$i9v@news.interlog.com>
Source record: 95107

In article <334423C4.615D@lightspeed.net>,
Dan Cox <village1@lightspeed.net> wrote:
>John Lockhart wrote:
>
> I bought some surplus 470 uF 450 VDC Rubycon electrolytic
> capacitors recently and have a couple of questions on using
> them.
>
> I don't see a vent hole/plug - do they vent up ("blow their top)
> or down?
>
> I'm amazed at their small size (about 1 3/4" H by 1 1/4" Diam).
> Is this a typical package size for 470 uF at 450 V nowadays??
> (want to leave room for replacement in future)
>
> Thanks for your help. I don't want to build them into a project/
> repair incorrectly.
>
> 73,
>
> John W0DC

Newer 'lytics are getting smaller and smaller. These sound like they might be for photo-flash use. If you can see the top of the can and it has a cross scored into it, then it vents up. Any hole in the 'rubber' on the bottom may mean that it vents down.

Paul Taylor

3940. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: kodis@kodis.jagunet.com
Message-ID: <slrn5kpjq9.s4f.kodis@kodis.jagunet.com>
Source record: 95108
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Previously, regarding some soundcard demodulator, tkrempa wrote:

>it sucks, brian....its been done ...and better...

Thanks for the product review. This would be more helpful if you
could specify were it's been done, which products you find are better,
and why. Care to try a follow-up?

-- John Kodis.

3941. Re: HOW TO?? - VHF VCO Circuit -- HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: tom.twist@hydro.com
Message-ID: <5iil6v$f4h@vkhdsu01.hda.hydro.com>
Source record: 95109

bryan@conquest.co.nz (Bryan Rentoul) wrote:

>Hi there. Thanks for taking the time to read this.

>I have been trying to create a simple VHF VCO for a PLL circuit which
>will cover a decent bandwidth.

<snip>

>Does anyone have a circuit which they knows works?? The frquency range
>of interest is 130 to 160MHz... The wider the better.

Bryan

Mini-Circuits has a VCO module POS-200 covering 100 - 200 MHz, priced
$11.95. Supply voltage is 12V, and tuning voltage 1 - 16V.

Tom
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

3942. Ham Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: John Fleenor <johnf@cyberramp.net>
Message-ID: <334CFF04.1052@cyberramp.net>
Source record: 95110

http://www.cyberramp.net/~johnf

3943. Vacuum variable capacitor source?

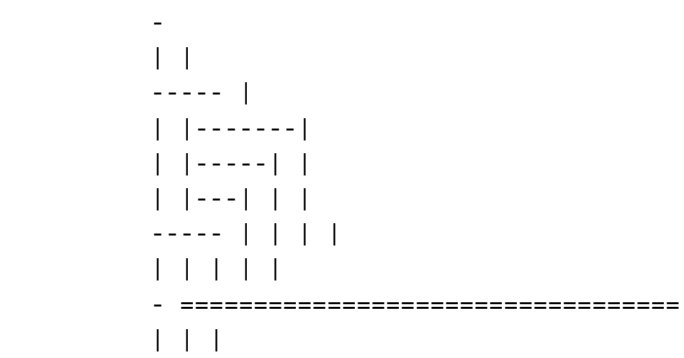
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: Bill Schaff <schaff@iiiv.tn.cornell.edu>
Message-ID: <5iivcu$pi0@newsstand.cit.cornell.edu>
Source record: 95111

I need to purchase a vacuum variable cap (5-500pF) from a vendor that accepts purchase orders. Any ides?

3944. DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: debey@deltabeta.com
Message-ID: <334cc991.1676153@isdnhost>
Source record: 95112
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.arch.embedded,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

Somewhat surprisingly, I am not able to find a source for DB15 High Density connectors, like what are used for VGA connectors, that can be soldered onto a PCB with right angle pins.



Any help in finding a DB15 High Density that can be connected to a PCB at right angles would be much appreciated.

Thanks, Henry

3945. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: "James P. Meyer" <jimbob@acpub.duke.edu>
Message-ID: <Pine.SOL.3.91.970410115715.793B-100000@godzilla1.acpub.duke.edu>
Source record: 95113
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.arch.embedded,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

On Thu, 10 Apr 1997, Henry C. DeBey wrote:

> Somewhat surprisingly, I am not able to find a source for DB15 High
> Density connectors, like what are used for VGA connectors, that can be
> soldered onto a PCB with right angle pins.

Digi-Key, 1-800-344-4539, part number A2091-ND (Amp) or 815RF-ND
(NorComp).

Jim

3946. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: Cedric Roberts <crob@hoclim.demon.co.uk>
Message-ID: <vtgwPBAmIRTzEw6b@hoclim.demon.co.uk>
Source record: 95114
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

In article <5ihofv$aq4@library.airnews.net>, Ken Durham <mbv@flash.net>
writes
>
>>Please post a few of the Win95 software packages locations so I can look
>>at them. I am just getting back into radio after a perion of QRT.
>~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
> Ed,
>
> The K2TL homepage: http://members.aol.com/jkktl/ham.htm has the
>program WxSat which uses your soundcard to decode the Polar Orbiters
>and Meteosats then displays the WAV file as a BMP. An excellent
>compilation of SSTV programs is found at http://www.qsl.net/n9ngf/
>Some of the programs are DOS and some are Win95. There are
>descriptions and shareware to be downloaded directly from the site.
> I'd have to do a search to find some other sources and my
>ISP server is running s..l..ooo..ww.. tonight. Just search using
>Webcrawler or Yahoo to find SSTV software, RTTY software, and
>Wxsat links.
>
>73 Ken K5MBV
To all of you radio amateurs out there ! A plea for help from
someone bogged down at the moment.
I have obtained the wxsat software which works perfectly with
prepared .wav or .bmp files. I have also obtained a sound card (Idema
sound card series Schubert which is a 16bit ES1868 card) This has been
set up with port 220H, interrupt 10 [to avoid clashes with network card
set to 5] and DMA 1. It is set for wave file processing at 11.025kHz,
mono, 8 bit
No matter how I try I cannot produce a .wav file from the system
even though the input (into the audio plug on the card) produces sound
from the monitor speakers. I can also play CD's via the CD player,
but....NO .wav file at all. I have tried live signals, and recorded
signals all to no avail. I have even tried to contact ESS technologies
in the States by e-mail but have had the message returned with this
address unknown. So at the moment I am having to suck my thumb, mainly
since I am neither a radio amateur or a computer "literate". The
setting up of the system was done for me as I am essentially an amateur
climatologist (retired).
So, can any of you boffins out there throw any light on my
problems and even suggest what I can do to get a .wav signal. Have I
got a duff sound card ??
Thanks for any help or guidance,

--
Cedric Roberts

3947. How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: Brad Moersfelder <bmoers@qgraph.com>
Message-ID: <334D39FD.2BAB@qgraph.com>
Source record: 95115
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

What happens when you tap, ie. make a direct connection to the center conductor of a quarter wave coaxial resonator? How do you model the result in PSPICE given a transmission line element? Would the tap be just an ideal transformer? If so, how would you determine the turns ratio from the physical tap location?

Thanks for considering these questions.
Brad

3948. 8 Conductor Mic Cable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <334d15a6.16115544@news.erols.com>
Source record: 95116

Would appreciate any suggestions as to where to purchase 8 conductor mic cable such as used by Yaesu - and others. Would rather have non coiled type but could get by with coiled variety.

Many thanks for your thoughts.

73/Jim/AC4CZ

3949. FS: Teflon Wire #18,20,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: dallen@melpar.esys.com
Message-ID: <5iisl9$gha10@fcserv3.fcd.esys.com>
Source record: 95117
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

I have acquired #20 plus some additional colors of the other sizes. Current availability is:

Size Color Price/ft.

18 2,9 .10

20 1,4,7 .10

22 0,2,3,4,6,7,9 .07

24 0,5,7 .07

26 2,6 .07

Limit is 100ft./size/color for each order. Shipping is $3.00 for any amount.

Please reply to home e-mail at: radiodale@dclink.com

Thank you,
Dale

3950. WTB: MODULATION TRANSFORMER (500 W+)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19970410192800.PAA17462@ladder01.news.aol.com>
Source record: 95118

Hi; I"m looking to purchase a modulation transformer capable of delivering at least 500 watts of audio power to a pair of 813 finals. Load imp. of secondary should be 4500 to 5000 ohms. If you have such a beast please drop me a note with details. Tnx and 73, Bill N4MXF@aol.com

3951. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: "James P. Meyer" <jimbob@acpub.duke.edu>
Message-ID: <Pine.SOL.3.91.970410152821.793F-100000@godzilla1.acpub.duke.edu>
Source record: 95119
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Thu, 10 Apr 1997, Brad Moersfelder wrote:

> What happens when you tap, ie. make a direct connection to the center
> conductor of a quarter wave coaxial resonator? How do you model
> the result in PSPICE given a transmission line element? Would
> the tap be just an ideal transformer? If so, how would you
> determine the turns ratio from the physical tap location?

If the transmission line model does what you want it to when you
use it as an un-tapped quarter wave resonator, (big if), then all you
have to do to make a tapped resonator is to put two transmission lines in
series with the tap being between the two. The total length of the two
being the same as the un-tapped resonator and the ratio of the two
setting the tapped percentage.

Jim

3952. Re: Metal Working and Homebrew Ham Projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: donrm@sr.hp.com
Message-ID: <5ijgl7$805@canyon.sr.hp.com>
Source record: 95120

George Carlson (geotek@comwerx.net) wrote:

> Houston Home Metal Shop Club
> http://www.comwerx.net/biz/geotek/hmsc/index.htm

This is super! It makes me want to go out and buy a lathe, shaper,
milling machine, etc... Check out this excellent site if you have
any interest in mechanics whatsoever.

Geez, as if I need another hobby.

73 from K6LTS
Don Montgomery
donrm@sr.hp.com

3953. LapLink Cable. What is in it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: martin@osuunx.ucc.okstate.edu
Message-ID: <5ijlli$153@news.cis.okstate.edu>
Source record: 95121
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

I am going to need to capture the printer output of a P.C. with another P.C. Somebody suggested a LapLink cable which sounds like an excellent idea on the surface. What is in one of these cables? I understand that the old P.C. parallel ports only had 4 inputs since they weren't really designed to ever receive signals except for the strobes.

Does the LapLink cable have some logic in it that shifts four bits over so that one can receive bytes in two-nibble operations or exactly what is happening? I will have control over the software on the receiving P.C., but the sender will have to think it is sending to a printer. It's a lo-o-ong story.

One good thing is that I don't need a bidirectional data path. The data will flow in one direction only.

Martin McCormick WB5AGZ Stillwater, OK 36.7N97.4W
OSU Center for Computing and Information Services Data Communications Group

3954. FS: Kenwood YK-455C-1 500Hz Filter , Lower priced.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <334c2180.546659@news.interbusiness.it>
Source record: 95122
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Specially dedicated to TS-140/680, but VG also for lot of others KW
rtx.I sell it tested OK, like new for $ 70 shipped to your door.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

3955. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <334D3CAD.38CA@hevanet.com>
Source record: 95123
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Brad Moersfelder wrote:
>
> What happens when you tap, ie. make a direct connection to the center
> conductor of a quarter wave coaxial resonator? How do you model
> the result in PSPICE given a transmission line element? Would
> the tap be just an ideal transformer? If so, how would you
> determine the turns ratio from the physical tap location?
>
> Thanks for considering these questions.
> Brad
Chop the resonator into two pieces at the tap point. attach the feed
at that point. The transmission line model takes care of the rest.
miker

3956. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: jf30@dial.pipex.com
Message-ID: <334d42af.36375323@news.dial.pipex.com>
Source record: 95124
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

mbv@flash.net (Ken Durham) wrote:

> The K2TL homepage: http://members.aol.com/jkktl/ham.htm has the
>program WxSat which uses your soundcard to decode the Polar Orbiters
>and Meteosats then displays the WAV file as a BMP.

An Excellent program.
Now if only Christian Bock could add RTTY to WxSat that would be
perfect!

Phil L.

3957. Updated Web Page

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <334D490F.168@primenet.com>
Source record: 95125

Just completed major updates to my web page:
http://www.qsl.net/k7on

Please set a bookmark!

73, Brian K7ON xKE7GH

3958. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5ik4pjeqk1@nnrp01.primenet.com>
Source record: 95126
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve J. Quest <Squest@concentric.net> wrote:
: H. Caron wrote:
: >
: > Could you expand on "shield in a chicken wire" expression you used.
: > Is it only a figure of style that language barier dosen't permit me to
: > catch right on (native language is french (Quebec)) or have you got
: > something more specific in mind.
:
: Loose (large opening) Faradays cage. Screen with holes big
: enough you can get your thumb through. Wrap around the rod and ground.

Aha! But there is such a thing. In the October 1938 issue of
Electronics, there is an article by Stanford Goldman entitled "A Shielded
Loop for Noise Reduction in Broadcast Reception" (pp. 20-22). This is an
electic field antenna (ferrites were yet to be used in common practice),
wound on a wooden frame inside a cylinder covered with what looks like
either window screen or hardware cloth. There's also one in which the
antenna loop is between two concentric metal screens. This is an inter-
esting article for those of you engaged in this thread.

I gotta go.

Regards,

Chris

,----------------------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _______,--------------'
_ |/
oo\ Chris Trask / N7ZWY
(__)\ _ Principal Engineer
\ \ .' `. ATG Design Services
\ \ / \ P.O. Box 25240
\ '" \ Tempe, Arizona 85285-5240
. ( ) \
'-|)__| :. \
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com

Graphics by Loek Frederiks

3959. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: Tom Taylor <ttaylor@adobe.com>
Message-ID: <334D7CFB.7FE0@adobe.com>
Source record: 95127

Tom Bruhns wrote:
>
> Gary Coffman (gary@ke4zv.atl.ga.us) wrote:
> : In article <19970406135400.JAA18749@ladder01.news.aol.com> commquart@aol.com writes:
> : >In article <5i7423$bpj@news.Hawaii.Edu>, jeffreyh@Hawaii.Edu (Jeffrey Herman) writes:
> : >
> : >>Well this now leads me to ask, can one use a TV as an oscil-
> : >>loscope? It certainly would be crude but it might be fun to convert
> : >>and use, just the same.
> : >>Jeff KH2PZ / KH6
> : >
> : >Boy -- that brings back memories! It certainly is possible. I remember
> : >seeing adds back in the 60s for info on converting tvs into "big screen
> : >oscilloscopes" in magazines such as Popular Electronics, etc.
> : >I assume they used the horizontal deflection circuits in the set, and
> : >applied the signal to the vertical deflection amplifiers. I would think the
> : >bandwidth and the sweep capabilities would be limited.
>
> : The bandwidth is about 6 MHz, and that can be extended to maybe
> : 10 MHz without too much work, but the sweep is the real problem.
> : You can't deviate very far at all from 15,750 Hz for the horizontal
> : deflection because the flyback circuit (which makes HV for the CRT)
> : is resonated at that frequency and is an integral part of the horizontal
> : deflection system. For a 19 inch set, that gives about 3.26 microseconds
> : per inch as the sweep rate. That's pretty fast for the sorts of signals
> : an oscilloscope with a vertical bandwidth of only 6 MHz would normally
> : observe. It's too fast for most audio work, and ironically it is too
> : fast for most TV service work where a deflection factor of 5 mS per
> : division or 20 uS per division would most commonly be used to observe
> : the vertical and horziontal waveforms respectively.
>

I made four or five of these TV oscilloscopes in high school. Normally,
I would disconnect
the two horizontal wires to the yoke and tape them off (so they're not
connected to
anything). Then I'd disconnect the vertical wires going to the yoke and
connect them
to the horizontal winding of the yoke. Then I'd connect my stereo to
the vertical
winding of the yoke. The TV's vertical control now controls the sweep
rate. The
sweep was absolutely perfect for viewing speech and music :-)

Of all the TV's I converted, only one needed an extra yoke to connect the horizontal
output to. Of the other converted TV's, none of them "smoked." In fact, I still use
one of the converted TV's in the garage as a regular TV. Of course, I had to convert
it back :-)

Tom, N7TM

3960. Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: Russell Chandler <rhchan@tsquare.com>
Message-ID: <Pine.LNX.3.95.970410181503.28017A-100000@tsquare.com>
Source record: 95128

A project I am planning to build calls for the following
Capacitors:

0.047 uF Polypropylene (dipped Mylar), 50 V
0.22 uF Polypropylene (dipped Mylar), 50 V

Any ideas on a source for the above. Acceptable substitutions?

Russell

3961. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: Demolition Man <nospam.demoman@rollanet.org>
Message-ID: <334DADA1.7B16@rollanet.org>
Source record: 95129
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

John Kodis wrote:
>
> Previously, regarding some soundcard demodulator, tkrempa wrote:
>
> >it sucks, brian....its been done ...and better...
>
> Thanks for the product review. This would be more helpful if you
> could specify were it's been done, which products you find are better,
> and why. Care to try a follow-up?
>
> -- John Kodis.

i must have missed this program. i've got a fairly decent morse decoder
for my sbAWE32 but would like that other stuff up there in the subject
line
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

3962. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: jlundgre@delta1.deltanet.com
Message-ID: <5ijpr7khq3@news07.deltanet.com>
Source record: 95130
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.arch.embedded,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

Henry C. DeBey (debey@deltabeta.com) wrote:
: Somewhat surprisingly, I am not able to find a source for DB15 High
: Density connectors, like what are used for VGA connectors, that can be
: soldered onto a PCB with right angle pins.

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: Any help in finding a DB15 High Density that can be connected to a PCB
: at right angles would be much appreciated.

: Thanks, Henry

Maybe you could scrounge a few from scrap VGA boards???

--

```
#=====================================================================#
| U s e t h e E M A I L a d d r e s s i n t h i s .S I G |
| John Lundgren - Elec Tech - Info Tech Svcs. | lundgrej@mail. |
| Rancho Santiago Community College District | rancho.cc.ca.us |
| 17th St at Bristol \ Santa Ana, CA 92706 | http://www.rancho|
| My opinions are my own, and not my employer's. | .cc.ca.us |
! You MAY NOT use my email address for unsolicited Email or lists! !
#======P=G=P==k=e=y==a=v=a=i=l=a=b=l=e==u=p=o=n==r=e=q=u=e=s=t======#
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3963. Re: Morse Code Questions: Timing relationships

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: scdeyoreo@aol.com
Message-ID: <19970410230901.TAA02246@ladder01.news.aol.com>
Source record: 95131

> I'd like to tinker with a microcontroller algorithm to decode Morse Code. What
> I 'd like to know is whether anyone can tell me what the various timing
> relationships are.
>
Good luck!! I've made a couple, and tho they work fine under good conditions, NOTHING beats the human brain and ear for picking that tone out of the noise
and discrimanating between tones. You can PPL your input circuit, AGC your lervels, but performance still comes nowhere a trained person. Learn and practice your code.

scdeyoreo@aol.com

3964. Re: LapLink Cable. What is in it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: miker <mreiney@hevanet.com>
Message-ID: <334D723C.45EA@hevanet.com>
Source record: 95132
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Martin McCormick wrote:
>
> I am going to need to capture the printer output of a P.C. with
> another P.C. Somebody suggested a LapLink cable which sounds like an
> excellent idea on the surface. What is in one of these cables? I
> understand that the old P.C. parallel ports only had 4 inputs since they
> weren't really designed to ever receive signals except for the strobes.
>
> Does the LapLink cable have some logic in it that shifts four
> bits over so that one can receive bytes in two-nibble operations or
> exactly what is happening? I will have control over the software on the
> receiving P.C., but the sender will have to think it is sending to a
> printer. It's a lo-o-ong story.
>
> One good thing is that I don't need a bidirectional data path.
> The data will flow in one direction only.
>
> Martin McCormick WB5AGZ Stillwater, OK 36.7N97.4W
> OSU Center for Computing and Information Services Data Communications Group

If you have DOS 6.2, type "help interlnk". The notes section has the
pinouts for a laplink cable. It's just wire. There was a program
called
Flying Dutchman. Their cable had 100 ohm resistors at the source end
of each signal. Should work over longer distances than the standard
laplink cable.

The laplink software splits the
bytes up to nibbles then reassembles it at the other end.
Sounds like your problem of sending a file with a print command without
intervention is a lot more complicated.

There are shareware programs that can capture printer output to a file,
but you'd have to manually send the file.
Can't help much without much more detail of the problem.
miker

3965. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: "'Grif' w. keith griffith" <kgriffit@wolfenet.com>
Message-ID: <334D8994.296D@wolfenet.com>
Source record: 95133

Tom Bruhns wrote:
>
> Lou or Annette Hinshaw (aruder@pipeline.com) wrote:
> : SHOW ME HOW TO PROTECT IT FROM THIEVES AND YOU GOT A DEAL.
> : That was the original intent
> Cheers,
> Tom
> tomb@lsid.hp.com
snip/hack

You might (Lou or Annette) check Don Lancasters books or home page for some interesting reading on how to control your property and the steps to develop and market it. It shouldn't be a really big deal to be able to devise a black box rf modulator/antenna, followed by an rx demodulator/antenna, and let the folks look at the spectrum with an analyzer while piping some music or audio in, and looking at the resultant demodulated audio out.,,, or even if you used a wire link, let them put a narrow bandpass filter at the freq of your choice in the data link and pump their audio thru the unit and look at the distortion figgures. At least, while not the definitive proof of function,,, it'd work good enough to get you in the door you're looking for.

3966. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: hugo@infobahnos.com
Message-ID: <334d6b7f.0@news.total.net>
Source record: 95134
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.arch.embedded,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

debey@deltabeta.com (Henry C. DeBey) wrote:

>Somewhat surprisingly, I am not able to find a source for DB15 High
>Density connectors, like what are used for VGA connectors, that can be
>soldered onto a PCB with right angle pins.

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>Any help in finding a DB15 High Density that can be connected to a PCB
>at right angles would be much appreciated.

>Thanks, Henry

>

Henry,

Mouser Electronics seams to have what your'e after. On page 124 of
their feb '97 cat, they show right angle pcb D-sub (plugs and
receptacles, $1-3 range) and many pages of other type. D'be surprise
you wouldn't find what you need there.

These people are very cooperative and offer a heck of a good service,
even for us, north of the border.

(800)346-6873
open 7am-9pm week days
8am-5pm weekends

http://www.mouser.com
email sales@mouser.com

Good luck, H.C.

3967. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: hugo@infobahnos.com
Message-ID: <334d6bc0.0@news.total.net>
Source record: 95135
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steven Mann <Steven_Mann@UNCG.EDU> wrote:

>Steve J. Quest wrote:
>>
>> choice in antenna designs. If ever I buy some land someplace, I'll do
>> it right, an inverted V antenna! Good for incoming as well as outgoing
>> RF energies. :)
>>
>> sq

>Are you aware that there is a difference between a random length end fed
>wire and a "long wire" antenna?

YEA Steve Qwest, are you aware of that?
(just couldn't resist, hehehe!)
H.C.

3968. Looking for Informations ...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: darwin@tindrum.tng.oche.de
Message-ID: <6UbbAVypZpB@p0000118.tindrum.oche.de>
Source record: 95136

Hello!

I'm a new ham (just for a few days DB3AP) and very intrested to make
expriments. So I would be very intrested in building an own TX or,
eventually, for the beginning just a reciever.
But I don't no any source for plans and descriptions ...

Is there any WEB-Site to look on ...?

Mni THX fer HELP!

by Paul Aschenborn
Voice,ISDN : + 49 241 69793 - Fax on demand -
FIDONet : Paul Aschenborn@2:2452/117.16
Internet: DARWIN@tindrum.tng.oche.de
CallSign: DB3AP
-----> This mail will be finished in a few bytes <-----

3969. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-10 00:00:00 UTC
From: robjohn@chesco.com
Message-ID: <5ihiui$or0$1@news.chesco.com>
Source record: 95248

keith a montgomery <hunter48@ix.netcom.com> wrote:

>Need to know which is better. I know that class ab-1 is less efficient
>but cleaner. Class C is more efficient but dirtier.
>What is better? Have an amp project that I am starting.
>It is going to be around 200 watts and use 2 transistors in a
>push pull format.
>Any help apppriciated.

The big question is will this amp be for linear service. AB1 can be
linear, class C cannot. Class C is useful for CW or FM and in the case
where the final is modulated in AM service. It need not be dirtier if
well designed. A well designed class AB1 amp will work well in linear
operation for any mode although as you say efficiency will be less.
Greg K3EWZ

3970. Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: Peter_Simpson@3mail.3com.COM
Message-ID: <85256476.0053C94E.00@hqoutbound.ops.3com.com>
Source record: 95050

Peter Simpson@3COM
04/11/97 07:16 AM

What I do is to use an external modem and an RS232 ABCD switch. This lets me select modem/TNC/radio/whatever, and since I seldom use two at the same time it works quite well. I also have a second port that hardly ever gets used, for plugging in something else.

Peter, KA1AXY

3971. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5im4ig$jhc@hpcvsnz.cv.hp.com>
Source record: 95051

Tom Taylor (ttaylor@adobe.com) wrote:
: Tom Bruhns wrote:

No I didn't. Tom T. deleted all that I had written, and left only what Gary had replied to what Jeff wrote. I'd just as soon not be associated so closely with any claims that the vertical deflection bandwidth of a normal TV could be anywhere close to 6MHz.

Cheers,
Tom

3972. Re: Signetics FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580001104971100450001@news.europa.com>
Source record: 95052

In article <5ikbiofpb1@news.chesco.com>, robjohn@chesco.com (Johnsons) wrote:

:Howdy,
: I need specs. , source, or sub. for a Signetics FET marked SD215DE. It
:has 4 leads, but not sure if it's a JFET or dual gate. Any help would
:be appreciated.
:
: Thanks, Greg K3EWZ

Siliconix data book says that it is a single pole single throw analog
switch, in other words an enhancement mode single gate DMOS fet. 1-source
2-drain 3-gate
4-substrate, 1 starting c.c. on bottom view of can from tab.

Rdson = 45ohm, Vbrds = 20v, ton max = 2ns, WOW, thats fast!!!

I have a source here for SD305's, another very old Signetics part from
early 70's. I've never been able to find it in any old databooks. If you
get any databooks and see it, please email me. What I know:

SD305 is an enhancement mode dual gate MOSFET. Thus no drain-source
current flows until both gates are biased positive to several volts, unlike
normal dual gate mosfets where current flows all the time unless gates
biased negative.

I figured they used these as logic gates, but I've used them as commutation
mixers.

Rob

3973. Re: helical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: netking@dircon.co.uk
Message-ID: <5im6jldbp1@newsserver.dircon.co.uk>
Source record: 95053

In article <33454D2C.736F@MSG.TI.COM>, JERRY JOHNSON <MMP2@MSG.TI.COM> wrote:
>does anybody know if a helical antenna will pick up a
>vert. transmitted signal,if so how effective?
>jerry
>
There are two types of helical antenna. The one commonly used
at microwaves is the axial mode helix, which radiates/recieves in
the direction of the helix axis, and has either left
or right hand circular polarisation, and either sense will pick up
a vertical transmission with -3dB loss compared with a
circular polarised transmission. Of course, if your helical
antenna has a gain of 18dB, you still have 15dB gain effective.
They are indeed useful when the plane of polarisation is unknown
since it does not matter (the gain is invariant with rotation about
the axis in the ideal case, in practice it may vary due to slight non
circularity of polarisation). Polarisation shifts can happen
in transmission through the ionosphere, or through built-up areas due to
reflection and diffraction, or earth-space due to uncontrolled orientation
of satellites or space vehicles; hence the helical circular polarised
antenna is common in space applications.
The other type is the normal mode helix. This is used at lower
frequencies, when the radiation is normal to the axis. This type
is commonly used in compact "rubber duck" antenna for hand portables
and vehicles; the helix reduces the length required for quarter or
higher multiples of quarter wave resonance. Your original
message did not specify which type of helical antenna. If the
normal mode antenna, this is linearly polarised and should be
oriented with the axis aligned with the vertical in the same way
you would use a whip or dipole.
==========
Colin Seymour G4NNA
http://www.users.dircon.co.uk/~netking/
1Mb/s 2.45 GHz spread spectrum modems: http://www.crl.co.uk
(web site out of date, please call for details)

3974. Re: Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5im85h$ggl@sf18.dseg.ti.com>
Source record: 95054

Antique Electronic Supply, Tempe, AZ, (602) 820-5411

P/N C-RD047-600, 0.047 uF @ 600 VDC, polypropylene film, $1.30 each
P/N C-RD22-600, 0.22 uF @ 600 VDC, polypropylene film, $2.45 each

Mouser Electronics, Mansfield, TX, (800) 346-6873

P/N 1431-2473K, 0.047 uF @ 250 VDC, polypropylene, $0.45 each
P/N 1431-2224K, 0.22 uF @ 250 VDC, polypropylene, $0.62 each

Hope this helps...

73 de K5DH

In article <Pine.LNX.3.95.970410181503.28017A-100000@tsquare.com>,
rhchan@tsquare.com says...
>
>A project I am planning to build calls for the following
>Capacitors:
>
> 0.047 uF Polypropylene (dipped Mylar), 50 V
> 0.22 uF Polypropylene (dipped Mylar), 50 V
>
>Any ideas on a source for the above. Acceptable substitutions?
>
> Russell

3975. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: "Jim Shaffer, Jr." <jshaffer@mail.csrlink.net>
Message-ID: <01bc45fd$97ef0e00$LocalHost@default>
Source record: 95055
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

Roy Keeley <rkeeley@dibbs.net> wrote in article
<334C694D.69D1@dibbs.net>...
> > Take a look at my web site for futher details, at:
> > http://www.geocities.com/SiliconValley/2504
> >
> I went there and got a msg saying file not there. Sighhhhh....

Keep trying! GeoCities has evidently been having some serious problems lately. Last night I couldn't even get to my own page the first time I tried. The problem seemed to come and go every few minutes, or less.

--
"I don't want the world -- I just want your half."
--T.M.B.G.

3976. Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: donrm@sr.hp.com
Message-ID: <5im0m2$st0@canyon.sr.hp.com>
Source record: 95056

Anyone have any new ideas on lettering/labeling the panels of your home-brew projects? So far, I've tried the following:

1. Dry transfer (Datak, Letraset, etc) with clear Krylon overcoat. Disadvantage is they can be scratched off, take a lot of patience, and the medium has a guaranteed shelf life only about five years.

2. Labeling tape (ugh!), but clear KROY labeling tape doesn't look too bad. Great for a one-time kluge. KROY Type 80 has a variety of fonts available and can be mixed on same label. Have to find someone with the labeling machine, however as it's too expensive for hobby use.

3. 3M (Scotch) system - lay labeling artwork over photosensitized film or thin (almost foil-like) anodized sheet. Run thru ozalid machine; develop. Look great, several colors, but too expensive.

4. Wordprocessor/overhead foil/laser printer. Works good, variety only limited by your imagination (graphics, etc.) but requires some experimentation and you have to have the equipment. (laser printer, computer, software, etc.) Disadvantage is how to affix the foil to the panel so it doesn't show adhesions to the panel surface.

5. Silkscreen - messy and might not be worth a 'one-shot' project; you can get very professional results and wear resistance.

6. I once tried a variation of #3 above. I spread negative photoresist on an anodized panel, exposed it to my artwork film, developed the panel and etched the lettering thru the developed photoresist "windows" with NaOH (solution of Drano, actually). Wound up with a black anodized panel with aluminum colored lettering. Looked great, but a lot of work.

7. Leroy lettering with india ink on a clean panel; coat with clear Krylon. Lots of fonts available, but haven't seen a Leroy lettering set in 20 years.

So...anyone have any other favorite method/idea?

73 and keep that soldering iron hot...

Don Montgomery K6LTS
donrm@sr.hp.com

3977. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <334e37a1.2648795@netnews.worldnet.att.net>
Source record: 95057
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On 10 Apr 1997 18:40:03 -0700, Christopher Trask <ctrask@primenet.com>
wrote:

>Steve J. Quest <Squest@concentric.net> wrote:
>: H. Caron wrote:
>: >
>: > Could you expand on "shield in a chicken wire" expression you used.
>: > Is it only a figure of style that language barier dosen't permit me to
>: > catch right on (native language is french (Quebec)) or have you got
>: > something more specific in mind.
>:
>: Loose (large opening) Faradays cage. Screen with holes big
>: enough you can get your thumb through. Wrap around the rod and ground.
>
> Aha! But there is such a thing. In the October 1938 issue of
>Electronics, there is an article by Stanford Goldman entitled "A Shielded
>Loop for Noise Reduction in Broadcast Reception" (pp. 20-22). This is an
>electic field antenna (ferrites were yet to be used in common practice),
>wound on a wooden frame inside a cylinder covered with what looks like
>either window screen or hardware cloth. There's also one in which the
>antenna loop is between two concentric metal screens. This is an inter-
>esting article for those of you engaged in this thread.

But the problem is the shield does not shield the antenna from time
varying electric fields. If it did, the antenna would receive no
signals at all.

The shield can modify direct coupling via capacitance, but that effect
is almost always so small with a small loop antenna the shield is a
waste of time.

The only case I can think of where a shield would improve things is
the case of a small loop mounted very near an undesired source of
strong electric fields, and where the loop itself is not symmetrically
placed, or where the amplifier the loop drives is sensitive to common
mode high impedance sources.

In most cases the "Faraday shield" just physically holds the antenna
in place. :-)

73 Tom

3978. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <334ED244.26AA@concentric.net>
Source record: 95058
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Tom Rauch wrote:
>
> But the problem is the shield does not shield the antenna from time
> varying electric fields. If it did, the antenna would receive no
> signals at all.

The shield attenuates (reduces greatly) the electrostatic component of the EM wave. The magnetic component travels freely through the cage. Most noise signals are stronger in electrostatic than magnetic due to how they are generated. Broadcast signals typically have much higher magnetic component since they are launched off a resonant "tuned" radiating element (antenna) while the "noise" from your fluorescent lamp, fan motor, computer, etc., is launched off an untuned, non-resonant radiating element (power cord, wires, etc.)

Shielded magnetic antennas will also nul strong stations in opposite polarity to where it is turned, thus you can blank a station on the same frequency (jammer) that happens to be in a different location geographically from the source you wish to receive. This is the upside, the downside is that shielded magnetic antennas are highly directional, and unless you point it in the direction the signal is coming from, it won't receive the signal at all. With a partial Faraday shield, and by adding a bit of a whip antenna to the device, you can give it less directional characteristics to "find" your station by adjusting until the signal outweighs the noise (best of both worlds). This is how I use mine. I have a "tail" outside the Faraday shield which allows all signals into the resonant loopstick tank so I can find (albeit weakly) the signal I want, then zero in on it, thus having the magnetically induced signal outweigh any noise the "whip" will pull in (high signal to low noise ratio).

sq

3979. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5imd7v$q5j@apple.telalink.net>
Source record: 95059

donrm@sr.hp.com (Don Montgomery) wrote:
>Anyone have any new ideas on lettering/labeling the panels of your home-
>brew projects? So far, I've tried the following:

A quick and reasonably (though not perfect) method I've used on some quick projects.. is to print the labels on a laser printer, stick them in place (maybe with a dab of super-glue), then cover the whole panel with see-through shipping tape. Fast, easy, and looks fairly good. You could, in theory, print on a dot-matrix too, though it wouldn't look quite as good.

73 Doug

3980. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5im968$7ei$1@nadine.teleport.com>
Source record: 95060
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Thu, 10 Apr 1997, Brad Moersfelder wrote:

>> What happens when you tap, ie. make a direct connection to the center
>> conductor of a quarter wave coaxial resonator? How do you model
>> the result in PSPICE given a transmission line element? Would
>> the tap be just an ideal transformer? If so, how would you
>> determine the turns ratio from the physical tap location?

<Pine.SOL.3.91.970410152821.793F-100000@godzilla1.acpub.duke.edu>,
"James P. Meyer" <jimbob@acpub.duke.edu> wrote:

>If the transmission line model does what you want it to when you
>use it as an un-tapped quarter wave resonator, (big if), then all you
>have to do to make a tapped resonator is to put two transmission lines in
>*series* with the tap being between the two. The total length of the two
>being the same as the un-tapped resonator and the ratio of the two
>setting the tapped percentage.

miker <mreiney@hevanet.com> wrote:

>Chop the resonator into two pieces at the tap point. attach the feed
>at that point. The transmission line model takes care of the rest.
>miker

Neither of these solutions accounts for the coupling between the lower and
upper parts of the resonator. I don't have a ready solution, but I don't
think two transmission lines in series with the tap between will be an
accurate representation either.

Roy Lewallen

3981. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: Steve <semann@nr.infi.net>
Message-ID: <334F03C8.52C0@nr.infi.net>
Source record: 95061
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve J. Quest wrote:
>
> H. Caron wrote:
> >
> > Steven Mann <Steven_Mann@UNCG.EDU> wrote:
> >
> > >Steve J. Quest wrote:
> > >>
> > >> choice in antenna designs. If ever I buy some land someplace, I'll do
> > >> it right, an inverted V antenna! Good for incoming as well as outgoing
> > >> RF energies. :)
> > >>
> > >> sq
> >
> > >Are you aware that there is a difference between a random length end fed
> > >wire and a "long wire" antenna?
> >
> > YEA Steve Qwest, are you aware of that?
> > (just couldn't resist, hehehe!)
> > H.C.
>
> Actually, there is not always that much of a difference......sq

The term "long" in long wire antenna usually refers to being long in terms of a half wave length. (Refs: Radio Handbook, 20th edition, pp 28-2 to 28-7 and The ARRL Antenna Book, 13th edition, Chapter 5, "Long Wire Antennas").

These references show several different forms of long wire antennas and point out that they exhibit gain over a dipole and often seem more effective in reception than yagi style beams according to users.

I've used several random length end fed wires over the years both for receiving and transmitting but I've never used any of the long wire forms as I've never had the space.

So as you can see if you check the literature, there are reasons for specifying a difference between a random length wire and a long wire.

3982. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: "John C. Fakan" <usscod@kellnet.com>
Message-ID: <334F147C.73C4@kellnet.com>
Source record: 95062

Tom Bruhns wrote:
>
> Gary Coffman (gary@ke4zv.atl.ga.us) wrote:

<snip>
> : The bandwidth is about 6 MHz, and that can be extended to maybe
> : 10 MHz without too much work, but the sweep is the real problem.
<snip>
>
> 6MHz bandwidth for the vertical deflection??? Yeah, rrrright. Maybe for
> the video, which is intensity modulation, but I'd have a heck of a time
> getting much info out of looking at an intensity-modulated straight line.
>
> These days, the way I'd turn a TV set into a scope is to digitize the
> signal of interest and store it in memory and generate a raster-scan
> image of it. You could probably make a 20MHz scope this way from not
> very many parts. You could use something like an old Amiga computer
> to handle the video for you, since it's capable of outputting
> interlaced NTSC-scan-rate signals; or if you don't need too much
> vertical resolution, something like a Commodore 64 could do.
>
> ------
> Cheers,
> Tom
> tomb@lsid.hp.com

I recall studying a few published circuits years ago that sampled
(rather than digitized) repetitive signals and then raster-scanned
them for display. I never built one because the concept seemed too
limited for the effort involved. One such design was intended as a
science fair project.

Regards,
John
jfakan@aol.com

3983. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <334ECB66.1ACC@concentric.net>
Source record: 95063
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

H. Caron wrote:
>
> Steven Mann <Steven_Mann@UNCG.EDU> wrote:
>
> >Steve J. Quest wrote:
> >>
> >> choice in antenna designs. If ever I buy some land someplace, I'll do
> >> it right, an inverted V antenna! Good for incoming as well as outgoing
> >> RF energies. :)
> >>
> >> sq
>
> >Are you aware that there is a difference between a random length end fed
> >wire and a "long wire" antenna?
>
> YEA Steve Qwest, are you aware of that?
> (just couldn't resist, hehehe!)
> H.C.

Actually, there is not always that much of a difference......sq

3984. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: shearer@pluto.njcc.com
Message-ID: <334EBE6B.49F5@pluto.njcc.com>
Source record: 95064

<snip>
> Anyone have any new ideas on lettering/labeling the panels of your home-
> brew projects? So far, I've tried the following:<snip> :) a very nice list.
> So...anyone have any other favorite method/idea?<snip>

chisel and or ETCH.
results in grooves.

if desired,
pigment and or clear-coat the grooves.

3985. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: "James P. Meyer" <jimbob@acpub.duke.edu>
Message-ID: <Pine.SOL.3.91.970411191826.21071C-100000@godzilla2.acpub.duke.edu>
Source record: 95065
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

On Fri, 11 Apr 1997, Roy Lewallen wrote:

> >have to do to make a tapped resonator is to put two transmission lines in
> >*series* with the tap being between the two. The total length of the two
>
> >Chop the resonator into two pieces at the tap point. attach the feed
> >at that point. The transmission line model takes care of the rest.
> >miker
>
> Neither of these solutions accounts for the coupling between the lower and
> upper parts of the resonator.

I'm not convinced that there is any coupling between the top and
bottom that doesn't pass through the middle. If that's the case, then
two sections in series *should* show all the coupling effects needed.

I'll try some virtual (simulated) experiments and report back.

Jim

3986. Auctions was:FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: Woody <rafman@kerrlake.com>
Message-ID: <334EAB35.4CE1@kerrlake.com>
Source record: 95066
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Burt Fisher, world renowned crap bag, Clinton lover, is at it
again. Burt, how about siting a source for your article? I know
you didn't write it all yourself. Fact is, that copyrighted
material is not supposed to be modified and you are supposed to
cite the source!

As far as LMDS, it operates in 28-30 GHz range. It works in
full rain and it has been working in Brighton Beach NY for
the last 5 years as a pilot. I worked on it for 4 years and
they do not need towers, rooftops work fine! 49 channels
in 20 MHz HDTV channels. Recieve antenna is a 6" square flat
panel. See Cellularvision.com for more details.

As far as seizing ham towers, who is kidding who? There
would be nothing of the sort. I feel like Burt might have
edited that in there. There would be no seizure.
Why add to the article Burt? Does it serve your purpose?
Your purpose was to make it sound like they are coming for
all amateur spectrum. Not yet! The fact about towers and
zoning is something I have first hand experience in. I have
built over 100 towers throughout the Northeast. You can
still construct them, but you might have to allow co-location
which is when several carriers locate on one tower.

Burt, you really are scum, just like that scum that lives
in the Whitehouse. No wonder why you would put up a picture
posing with him on your webpage! You are both twisted liars!

Burt Fisher <burtfisher@geocities.com>wrote:
> FCC Expected to Unveil Plans For Two Airwave Auctions
>
> WASHINGTON -- Federal regulators are expected this week
> to set plans for two long-awaited auctions of valuable airwaves,
> including one for an emerging wireless technology that could bring new
> competition to the local-telephone and cable-television businesses.
> Wireless operators, long-distance phone companies, electric
> utilities and telecommunications entrepreneurs are eager to bid for
> licenses to use huge chunks of the amateur radio spectrum to transmit
> voices, pictures and data.
> Wireless Auction
> Up for grabs: Licenses to use most of the amateur radio
> megahertz of electromagnetic spectrum in each of nearly 500 markets
> nationwide. Repeater frequencies are much in demand by those with the
> following: Uses: Transmitting voices, pictures and data via small, flat

> antennas that can rest on a windowsill. Expected bidders: All sorts of
> telecommunications companies -- but Baby Bells and cable operators will
> be barred from bidding on licenses in their home territories.
> "While the auctions for PCS frequencies were very specific
> about how the frequencies could be used, rules governing LMDS usage are
> more liberal and for a bigger chunk of amateur radio bandwidth," said
> Michael Sprayberry, director ofwireless strategy for MCI Communications
> Corp.
> New Radio Service
> The auction rules have been delayed in recent weeks because FCC
> commissioners couldn't agree on what amateur radio spectrum would be
> available.
> The technology operates with small, flat antennas that
> communicate with larger antennas mounted on towers. It has tended to
> work poorly in heavy rains and fog, but industry officials say they are
> working to fix the problem. Operators also could run into resistance
> from cities that increasingly are blocking the construction of new
> antenna towers. However ham towers could be seized as the FCC has
> decided that the amateur radio service no longer serves the public
> necessity.

--
=-=
Woody - KA2RAF/4 - I'm the NRA, not the ARRL | Buggs Island Lake:
The BuckHorn WoodWorx of Buggs Island | Virginia's best fishing
"A mind's a terrible thing to waste, provided you had one to start with"
"There are 5 boxes to Freedom: Ballot, Witness, Jury, Soap & Cartridge"
=-=

3987. FS: Big Amp. Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: Phil Clements <philk5pc@connect.net>
Message-ID: <334E3C16.2BA@connect.net>
Source record: 95067

R.F. rated doorknob caps. Chokes, coils, vacuum variables (mint, ceramic)
and power supply components. Several converted R.F. generators with 8877
tubes, One brand new R.F. generator (R.F. Power Products HFS1000G)
H.B. pair of 4-400A amp, 80-10m. Dallas, TX area. Will have most of this
equipment at the Belton swapfest April 19th. Bring a little money and
a BIG truck!
(((73)))
Phil, K5PC

3988. Signetics FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: robjohn@chesco.com
Message-ID: <5ikbiofpb1@news.chesco.com>
Source record: 95137

Howdy,
I need specs. , source, or sub. for a Signetics FET marked SD215DE. It has 4 leads, but not sure if it's a JFET or dual gate. Any help would be appreciated.

Thanks, Greg K3EWZ

3989. amateur pager???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: kimyh0@aminet.co.kr
Message-ID: <5ilq7remm1@hiline.hyundai.net>
Source record: 95138

Hello, Any one out there.
I heard that Kantronics KPC-9612 can send pager signal to modified
commercial pagers in 2m frequency.

If you have some experience or know-how about that pls send me a mail.

Kim, Yong Han

DS1ILH

Seoul, Korea

3990. Re: Signetics FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: robjohn@chesco.com
Message-ID: <5ikgee$js7$1@news.chesco.com>
Source record: 95139

'scuse me, that's Siliconix not Signetics. I think it's actually Temic
now.
Greg K3EWZ

3991. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: Philip N Butterfield <phil@bugsley.demon.co.uk>
Message-ID: <4VLSVAAIldTzEwaZ@bugsley.demon.co.uk>
Source record: 95140

In article <5ibmr9$8vl@nnrp2.farm.idt.net>, Ron Hellmann
<ronh1@gramercy.ios.com> writes
>I have acquired a copy of the Hamcomm software and a computer
>interface for my serial port. However, the serial port has been
>disabled because I use an internal modem. Any ideas how I can free up
>the serial port so the interface will work? TIA Ron AK5F
>
To many of those who have replied to this I have a question :-

What do you do if you have the following requirements:-

1. Serial Mouse
2. Internal modem card
3. External packet TNC
4. Serial communications to your transceiver.

I have the first 3 already but cannot leave the packet TNC operating
when I log onto the internet (an iritation if I am logging the DX
cluster) but how do I get the PC to link to my transceiver as well?

73 de phil G4AAQ

--
Philip N Butterfield

3992. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <334E09BD.334B@concentric.net>
Source record: 95141
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Christopher Trask wrote:
>
> Aha! But there is such a thing. In the October 1938 issue of
> Electronics, there is an article by Stanford Goldman entitled "A Shielded
> Loop for Noise Reduction in Broadcast Reception" (pp. 20-22). This is an
> electic field antenna (ferrites were yet to be used in common practice),
> wound on a wooden frame inside a cylinder covered with what looks like
> either window screen or hardware cloth. There's also one in which the
> antenna loop is between two concentric metal screens. This is an
> interesting article for those of you engaged in this thread.

Darn, I missed that article. I was too young back then to
be able to read. ;) In fact, it came out a year before my MOTHER was
born! :) How the hell did you find this? You routinely read OLD
magazines? Actually, the concept is sound, I'm not suprised that I
am not the only one to come up with the idea. Now I wonder how I am
going to find such an old magazine? Libraries microfilm magazines, but
do they have them going back that far? Somehow I don't think so.....sq

(now the question arises, why did the idea die into obscurity? It is
not like electrical noise got LESS as time marched forward!)

3993. Re: amateur pager???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: GARDNERH <GARDNERH@prodigy.net>
Message-ID: <01bc464d$d2c3ba80$1fa6edcc@#gardnerh>
Source record: 95142

To the best of my knowledge the 9612 can emulate POCSAG pager formats but no others. There are a lot of pagers around. I know that Communications Specialists has a hoard of 450 mHz tone and voice pagers for about $30 in nearly new condition. For a couple of dollars extra they'll include a new battery and charger.
de W6AXM

kim yh <kimyh0@aminet.co.kr> wrote in article
<5ilq7remm1@hiline.hyundai.net>...
> Hello, Any one out there.
> I heard that Kantronics KPC-9612 can send pager signal to modified
> commercial pagers in 2m frequency.

3994. Multi band J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: Napoleon <napoleon@whackyland.com>
Message-ID: <334DE56D.2D8A@whackyland.com>
Source record: 95143

A few years ago I saw plans for a tri-band J-pole antenna and foolishly
did not copy them.
If any of you gents has a set could you buzz me a set?

Contact: craigv "at" sprintmail.com <<<<<trick to fool spammers, easy
to figure out!

73's
Craig
N0VHP

3995. REXON RV-100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: maillet@ensm-douai.fr
Message-ID: <5iksl2$no_002@pcdma.ensm-douai.fr>
Source record: 95144

y want to build external microphone and not use padle in tranceiver.
plaese help me to connect correctly ,and whith carracteristique do use.
my portable tranceiver is REXON RV-100 (2 M)
one jack to hearphone and one jack to microphone
where is a PTT ?

tnx fer advise. F5TSW.

3996. New Ham Radio Page and Aviation links

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: szastoup@prairie.nodak.edu
Message-ID: <5ikadllmu1@daily-planet.nodak.edu>
Source record: 95145
Cross-posted to: rec.aviation.ultralight,rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,sci.electronics.basics,sci.electronics.cad,sci.electronics.design,sci.electronics.equipment,sci.electronics.misc

Hello. I have just created a ham radio page. Please stop by and feel free to give suggestions. I have to make a page for hams and to be very useful to them. I plan on compiling a skywarn handbook and spotter guide. Also have some aviation links included. Tnx es 73s's

Scott

http://www.geocities.com/CapeCanaveral/3952

3997. FS: Tubes, some new, some used, whatever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: "John F. Haase" <TheHossMan@worldnet.att.net>
Message-ID: <5ildqc$iua@mtinsc03.worldnet.att.net>
Source record: 95146

```
Qty Boxed Price Qty Min Price Qty 8-Pin, etc.
Price
1 1G3/1B3 $4 1 2AD6 $3 5 1G3GT/
1 2AS2 $4 1 2D21 $3 1B3GT $3
2 3A3/3B2 $4 1 3HQ5 $3 1 1K3 $3
1 5U4BG $4 1 4DT6A $3 1 5Y3GT $3
1 5Y3GT $4 1 4HM6 $3 2 6AS7G $3
1 6AG5 $4 2 4JC6 $3 1 6BK4 $3
1 6AH6 $4 1 4JD6 $3 2 6BQ6/
2 6AK5 $4 1 4KT6 $3 6CU6 $3
1 6AK6 $4 1 5AQ5 $3 3 6D6 $3
2 6AN5 $4 1 6AF4 $3 2 6V6 $3
1 6AU4GTA $4 1 6AH6 $3 1 6Z10 $3
1 6AU6GTA $4 1 6AL5 $3 1 12AY3 $3
1 6AV6 $4 1 6AN5 $3 1 12D4 $3
1 6AX8 $4 4 6AQ5 $3 1 12DQ6B $3
1 6AY3 $4 1 6AS5 $3 4 12SN7GT $3
2 6BA6 $4 1 6AW8 $3 1 12SQ7 $3
2 6BC5 $4 1 6BA6 $3 1 12V6GT $3
2 6BF5 $4 1 6BH6 $3 1 17BE3 $3
2 *6BH6 $4 2 6BQ7 $3 1 17BF11 $3
2 6BK7B $4 1 6BZ6 $3 2 17JZ8 $3
1 6BN6 $4 1 6C4 $3 1 21JZ6 $3
1 6BQ7 $4 1 6CG7 $3 1 25L6GT $3
3 6CB6A/ 1 6CL8 $3 1 38HE7 $3
6CF6 $4 2 6CQ8 $3 2 50L6 $3
4 6CL6 $4 1 6CZ5 $3 1 OD3 $3
2 6CL8A $4 1 6DE6 $3 1 6528 $3
2 6CW4 $4 1 6EA5 $3 1 75 $5
1 6CZ5 $4 2 6EB8 $3 2 829B $8
1 6D4 $4 1 6ER5 $3
2 6EA5 $4 1 6GH8 $3
8 6EB8 $4 1 6GM6 $3 Qty Metal
1 6EH7 $4 1 6HB7 $3 1 6AC7 $3
1 6FQ7 $4 1 6J6 $3 3 6AG7 $3
1 6FV8 $4 2 6KE8 $3 1 6C5 $3
1 6GF7A $4 1 6T8 $3 1 6J5 $3
1 6GH8A $4 2 6X4 $3 1 6L7 $3
1 6GM6 $4 3 8FQ7/
3 6J4 $4 8CG7 $3
1 6J6 $4 1 8JV8 $3
2 6JE6A $4 1 10LZ8 $3
3 6K7 $4 1 12FX5 $3
1 6KE8 $4 3 OA5 $3
```

```
3 6SJ7 $4 2 OB2 $3
1 6W4GT $4 2 5654 $3
1 7F8 $4 1 5696 $3
1 8EM5 $4 1 5726 $3
1 12AL5 $4 2 5749 $3
1 12BH7A $4 1 5750 $3
1 12DT5 $4 3 5814 $3
1 35L6GT $4 1 6136 $3
2 OB2WA $4 1 6189 $3
1 OC2 $4 1 6197 $3
1 OG3 $4 1 6201 $3
2 5651WA $4 1 747 $3
1 5749 $4
4 5763 $4
1 6112 $4
1 6977 $4
1 S-5018 $4
(silicon rectifier)
```

3998. FS Teflon wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: jskalski@acsu.buffalo.edu
Message-ID: <334E3FD5.6F4FC35F@acsu.buffalo.edu>
Source record: 95147

I have 22 and 24 AWG teflon insulated ,silver plated, stranded hookup wire in 500' metal and 1000'plastic spools.

I also have assortments of 22 and 24 AWG stranded,silver plated,teflon insulated wire.

10(50') spools or total of 500' of 22 and 24 gauge silver plated, stranded TFE insulated wire in 10 different colors.
This is called a "superpak" and I include 5 feet of TFE insulated mini coax.

Cost including shipping (continental US)

superpak $44 (by 2 day mail)
500' spools $25 (shipping included)
1000' spools $48 (shipping included)

Note on larger quantities that is 4 cents per foot for the wire !

If interested contact me at jskalski@acsu.buffalo.edu

73,

Jim (N2GO)

3999. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: mbv@ti.com
Message-ID: <5ili6f$76d@dsk92.itg.ti.com>
Source record: 95148
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

,
>but....NO .wav file at all. I have tried live signals, and recorded
>signals all to no avail. I have even tried to contact ESS technologies
>in the States by e-mail but have had the message returned with this
>address unknown. So at the moment I am having to suck my thumb, mainly
> Thanks for any help or guidance,
>--
>Cedric Roberts
~~~~~~~~~~~~~~~~~~~~~~~~~
Cedrick, When you say that you have the WxSat software, I
assume that you are talking about the Windows program. Are
you running Win95? If so you should be able to enable the
soundcard control panel from the tray. See if the WAV block
is disabled or if the WAV volume is turned all the way down.
Ken K5MBV
~~~~~~~~~~~~~~~~~~~~~~~~~

4000. Re: Morse Code Questions: Timing relationships

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-11 00:00:00 UTC
From: webster@godzilla.gsfc.nasa.gov
Message-ID: <5iljqh$6ep@post.gsfc.nasa.gov>
Source record: 95149

One good place for details on software implementations for cw decoding
is as RSGB book called Amateur Radio Software. I believe that this is
available through the ARRL. A few notes:
1. The book deals with actual code in basic (!) and machine language for
various compuers circa 1985 (Vic20, C64 class machines). The machine
resources may be similar enough to microcontrollers that code translation
may be all that is needed.
2. Developing a machine-language program for this kind of realtime process is
a good way to start developing the necessary skills for realtime signal analysis
and decoding in general regardless of whether you read cw by ear (a skill which
I encourage).
3. The modern discipline of Digital Signal Analysis is not represented in the
book.

Will Webster WB2TNC

4001. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: "Joseph A. Legris" <jlegris@sympatico.ca>
Message-ID: <33504BBA.41B8@sympatico.ca>
Source record: 95000
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen wrote:

> Neither of these solutions accounts for the coupling between the lower and
> upper parts of the resonator. I don't have a ready solution, but I don't
> think two transmission lines in series with the tap between will be an
> accurate representation either.
>
> Roy Lewallen

Forgive my ignorance, but aside from the waves flowing up and down the line (in the ideal case) is there any other coupling between the transmission lines?

4002. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: "John C. Fakan" <usscod@kellnet.com>
Message-ID: <33503EDF.59EB@kellnet.com>
Source record: 95001

Tom Wagner wrote:
>
> desmith@telalink.net (Doug Smith) wrote:
>
> >donrm@sr.hp.com (Don Montgomery) wrote:
> >>Anyone have any new ideas on lettering/labeling the panels of your home-
> >>brew projects? So far, I've tried the following:
>
> >A quick and reasonably (though not perfect) method I've used on some
> >quick projects.. is to print the labels on a laser printer, stick
> >them in place (maybe with a dab of super-glue), then cover the whole
> >panel with see-through shipping tape. Fast, easy, and looks fairly
> >good. You could, in theory, print on a dot-matrix too, though it
> >wouldn't look quite as good.
>
> >73 Doug
>
> I had the same idea -- but I use a color printer. It's
> nicer than plain black print.

For the see-through covering I find the *Crystal CLEAR* product from
MANCO works very well and is available in 4-inch widths.

John

4003. MOTORLA UHF DUPLEXER & CAVITY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Arthur Garabedian <westernmobiletel@worldnet.att.net>
Message-ID: <33504B29.4F26@worldnet.att.net>
Source record: 95002
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

MOTOROLA DUPLEXERS TFE6030-A (4 cavity notch) 10" X 5" X 1.2"
with 3 BNC connectors, ant., trans., rec. $50
Motorola TFE-6050-B Cavity filter, 3 section 5-1/2" X 2" X 2 1/4"
with 2 ea. BNC cables. Motorola TFE 6050B. $20
Regards, ARTHUR KC6KUK . . .

4004. Re: Homebrew Antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Bill C <wrc@tir.com>
Message-ID: <335024EE.461@tir.com>
Source record: 95003

When you find one of those books look for a design known as a "discone" antenna. I have not used one, but they are supposed to be very "broadbanded".. meaning they will cover several octaves. This seems to be what you want. You want to cover the low vhf to the upper uhf spectrum. By the way.. FM is popular at these higher frequencies, but any mode will work there (and does).

Antennas are possibly the commonly homebrewed ham equipment. Welcome to ham radio and I hope you enjoy it for years to come.

73,

Bill KU8H
--

Good judgement comes from experience.
Experience comes from bad judgement.

4005. Re: Morse Code Questions: Timing relationships

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Bill C <wrc@tir.com>
Message-ID: <3350283B.2057@tir.com>
Source record: 95004

Pete,

You have some direction already, so I'll just caution about those
"timing" issues. The big trick to having a machine copy the code as sent
by a human fist is that the human fist varies its timing!! Those timinbg
specs are tagets that only machines can hit consistently. Maybe *YOU*
can be the first to solve this problem. Best of luck to you.

73,

Bill KU8H

--

Good judgement comes from experience.
Experience comes from bad judgement.

4006. DX-40 TRANSFORMER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: k4cnw@aol.com
Message-ID: <19970412002100.UAA00449@ladder01.news.aol.com>
Source record: 95068

NEED DX-40 POWER XFORMER. ANY LEADS APPRECIATED. ANYONE REWINDING
XFORMERS NOW-A-DAYS? E-MAIL K4CNW@AOL.COM

THANKS,

JACK

4007. how do i join?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: dawizard@travelin.com
Message-ID: <5indnj$4a7@lal.interserv.com>
Source record: 95069

how do i join?

4008. Longwire or Randomwire? (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <334F593D.3B00@concentric.net>
Source record: 95070
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve wrote:
>
> > Actually, there is not always that much of a difference......sq
>
> The term "long" in long wire antenna usually refers to being long in
> terms of a half wave length. (Refs: Radio Handbook, 20th edition, pp
> 28-2 to 28-7 and The ARRL Antenna Book, 13th edition, Chapter 5, "Long
> Wire Antennas").

Does this mean that you must either add wire or remove wire as
you change bands? ;) As I said, there isn't always that much of a
difference. I don't consider my antenna to be a random length antenna,
it is on the long side of my house, and is cut to half wavelength for
the 30 meter band (10 Mhz). The longwire is 48.5 feet long, therefore
it is a longwire for the 30 meter band, and a random wire for all other
bands.

> I've used several random length end fed wires over the years both for
> receiving and transmitting but I've never used any of the long wire
> forms as I've never had the space.

I think you have! :) You just didn't use them at the right
frequency. All random wire antennas are longwires if you find the
right spot on your all-band radio. ;) Like I said, there isn't much
of a difference.

> So as you can see if you check the literature, there are reasons for
> specifying a difference between a random length wire and a long wire.

As I hope you can see there are reasons for specifying frequency
as even a "1 foot chunk of wire" is a longwire for 486 Mhz.....sq

4009. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <334f4511.0@cheese.pcug.org.au>
Source record: 95071

donrm@sr.hp.com (Don Montgomery) wrote:
>
>Anyone have any new ideas on lettering/labeling the panels of your home-
>brew projects?

It's hardly new, it's not fancy, but it's cheap. I hand write labels on small strips of paper (4-5mm wide). Then I use 12mm wide clear adhesive tape to stick them to the front panel. When stuck on a smooth surface, the result can last for years.

73,

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

4010. Re: BIG transistors F.S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: jlundgre@delta1.deltanet.com
Message-ID: <5imoib$1a0$4@news07.deltanet.com>
Source record: 95072
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics.components,sci.electronics.equipment

Winfield Hill (hill@rowland.org) wrote:
: ZygomaD & Darkezza at do_not@spam.here says...
: >
: >Mark C. Olson wrote:
: >>
: >> Powerex KS621K60 single Darlington transistor module.
: >> 600 Amperes / 1000 Volts
: >>
: >> Have 4 of these units for sale. New
: >> $300ea. plus shipping (Newark has them for ~$640 ea.)
: >>
: >> E-mail for more details
: >
: > Holy sh.....er.... geez, how big a heat sink does one of these
: > beasts need when running at max rated?

: Nifty, huh.

: Vsat = 1.5V at 250A, H_FE 75 min at 600A, R_th_JC = 0.035 C/W (about
: 20 to 30x better than a typical big power transistor), S.O.A. allows
: 600A at 800V for 50us, and Pd = 3500W at 25C case! Hmmm, sounds like
: water cooling for maximum use to me!

: --
: Winfield Hill hill@rowland.org
: Rowland Institute for Science
: Cambridge, MA 02142

WHEW! Don't post this to the rec.audio newsgroups, they find out and
their amplifiers will never be the same!

I thought the old 2N1016B doorknobs that I had in my junkbox were heavy
duty. They're peanuts compared to these monsters. Mine look nice, tho..
Gold plated. (AKA JANCCSX 2N1016B FIIN 5961-893-9563)

--

4011. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <GPBipGAAczTzEwcT@ifwtech.demon.co.uk>
Source record: 95073
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Roy Lewallen wrote:
>>Chop the resonator into two pieces at the tap point. attach the feed
>>at that point. The transmission line model takes care of the rest.
>>miker
>
>Neither of these solutions accounts for the coupling between the lower and
>upper parts of the resonator. I don't have a ready solution, but I don't
>think two transmission lines in series with the tap between will be an
>accurate representation either.

If two separate lines in series is not an accurate representation, that would imply that there's some longitudinal coupling between the upper and lower parts of a single TEM-mode resonator - which is a contradiction in terms.

Excuse the convoluted logic, but I beleieve it means that the model with two lines in series is essentially correct. There will be some fringing fields at the tap point, but I don't think those are important.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

4012. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <33564b89.1019585516@news.sci.fi>
Source record: 95074
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

"Steve J. Quest" <Squest@concentric.net> wrote:

>Tom Rauch wrote:
>>
>> But the problem is the shield does not shield the antenna from time
>> varying electric fields. If it did, the antenna would receive no
>> signals at all.
>
> The shield attenuates (reduces greatly) the electrostatic
>component of the EM wave. The magnetic component travels freely through
>the cage. Most noise signals are stronger in electrostatic than magnetic
>due to how they are generated. Broadcast signals typically have much
>higher magnetic component since they are launched off a resonant "tuned"
>radiating element (antenna) while the "noise" from your fluorescent
>lamp, fan motor, computer, etc., is launched off an untuned, non-resonant
>radiating element (power cord, wires, etc.)

This is not quite accurate, since in the far field (as with the
broadcast transmitter) the relationship between the electric field E
and the magnetic field H is constant

E
--- = Z0 = 120 pi = 377 ohms
H

This is true in the _far_ field regardless the signal was radiated by
a resonant electric dipole, from a random wire or even from a magnetic
loop.

However in the near field (usually much less than a wavelength from
the _noise_ source), the relation between the electric and magnetic
field is much more complex and depends of the type of the noise
source. In this case you might benefit from antennas that pick up
predominately either field. However, if you are in the far field from
the noise source (say, more than a wavelength) the relationship
between the E and H fields is again 377 ohms and there is no benefit
from using an antenna that predominately picks up only the other field
(directivity is a separate issue).

On LF and MF there can be benefits for using a magnetic loop, since
there can be quite a lot of noise sources within the near field. On HF
and VHF the near field is so small that there simply are not room for
a lot of noise sources :-)

Paul OH3LWR

4013. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: tomwagner@mindspring.com
Message-ID: <5inrq4$o62@camel3.mindspring.com>
Source record: 95075

desmith@telalink.net (Doug Smith) wrote:

>donrm@sr.hp.com (Don Montgomery) wrote:
>>Anyone have any new ideas on lettering/labeling the panels of your home-
>>brew projects? So far, I've tried the following:

>A quick and reasonably (though not perfect) method I've used on some
>quick projects.. is to print the labels on a laser printer, stick
>them in place (maybe with a dab of super-glue), then cover the whole
>panel with see-through shipping tape. Fast, easy, and looks fairly
>good. You could, in theory, print on a dot-matrix too, though it
>wouldn't look quite as good.

>73 Doug

I had the same idea -- but I use a color printer. It's
nicer than plain black print.

4014. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Trevor Day <trev@southwestuk.demon.co.uk>
Message-ID: <EyrccBAXB3TzEw+f@southwestuk.demon.co.uk>
Source record: 95076

In article <5im0m2$st0@canyon.sr.hp.com>, Don Montgomery
<donrm@sr.hp.com> writes
>
>Anyone have any new ideas on lettering/labeling the panels of your home-
>brew projects? So far, I've tried the following:
Snip

I have used letraset covered by a couple of coats of clear vinyl spray
on all of my projects for the past 20 years or so and have had no
trouble with wear. My preference is for white letraset on a black
background. Thanks for the other ideas!
--
Trevor Day G3ZYY
trev@southwestuk.demon.co.uk

4015. FS: TELREX TB6EM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: snider96@aol.com
Message-ID: <19970412125700.IAA12133@ladder01.news.aol.com>
Source record: 95077

Used, but in excellent shape, a mil-spec, 6 element and 10 db gain, tri
band antenna. SPECS: 26 ft boom/ 3.5" dia., 7500 volt traps, 8000 watt
balun and weighs 100lbs. $500 FIRM and you pay motor freight. Thanks
Leon Snider, KE4GG
205-681-8699
fax 205-681-8607
email: snider96@aol.com

4016. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr12.132209.8292@ke4zv.atl.ga.us>
Source record: 95078
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <334ED244.26AA@concentric.net> "Steve J. Quest" <Squest@concentric.net> writes:
>Tom Rauch wrote:
>>
>> But the problem is the shield does not shield the antenna from time
>> varying electric fields. If it did, the antenna would receive no
>> signals at all.
>
> The shield attenuates (reduces greatly) the electrostatic
>component of the EM wave. The magnetic component travels freely through
>the cage. Most noise signals are stronger in electrostatic than magnetic
>due to how they are generated. Broadcast signals typically have much
>higher magnetic component since they are launched off a resonant "tuned"
>radiating element (antenna) while the "noise" from your fluorescent
>lamp, fan motor, computer, etc., is launched off an untuned, non-resonant
>radiating element (power cord, wires, etc.)

There is *no* electrostatic component to an electromagnetic wave. The electric and magnetic field components of the EM wave are *dynamic*, and intimately coupled to each other. Bill Sabin did a very good explanation of this in another post. You can't have an EM wave without both the electric and the magnetic field. The energy of the wave is transferred back and forth between the electric and magnetic field components of the wave continously because one continuously generates the other as they travel through space. That's what allows an EM wave to propagate through space. And since energy must be conserved, the electric and magnetic field components *must* be of equal strength (though at different times as the energy oscillates back and forth between the electric and magnetic field vectors). If you attenuate *one* field vector, you attenuate the other as well because the total wave only has one energy.

The only time this is not exactly true is in the *near* field of the radiating source. In the near field, less than 5 wavelengths from the source, the EM field hasn't fully established, and the signal can be treated as partially separate electric and magnetic induction fields. And *those* fields don't have to be of equal strength. That's the case for noise generated *very* near the receiving antenna.

A *partial* shield can then have some effect in differentiating the fields from far sources as compared to near sources. But if the shielding is *complete* for either field, no EM signal will be received. That's why the shielded loop antenna must have a *break* in the shield.

> Shielded magnetic antennas will also nul strong stations in
>opposite polarity to where it is turned, thus you can blank a station on
>the same frequency (jammer) that happens to be in a different location
>geographically from the source you wish to receive. This is the upside,
>the downside is that shielded magnetic antennas are highly directional,
>and unless you point it in the direction the signal is coming from, it
>won't receive the signal at all.

Well, the idea is basically right, but your terminology is wrong. It
is the pattern of the antenna which results in both the null and
the peak. It has nothing to do with signal *polarity*. That's a separate
issue. And the shield has no effect on pattern, so this directionality
exists whether the loop is shielded or not.

>With a partial Faraday shield, and by
>adding a bit of a whip antenna to the device, you can give it less
>directional characteristics to "find" your station by adjusting until
>the signal outweighs the noise (best of both worlds). This is how I
>use mine. I have a "tail" outside the Faraday shield which allows all
>signals into the resonant loopstick tank so I can find (albeit weakly)
>the signal I want, then zero in on it, thus having the magnetically
>induced signal outweigh any noise the "whip" will pull in (high signal
>to low noise ratio).

Actually, what a loop (shielded or not) and whip do (when properly
combined) is change the antenna pattern from bidirectional to cardioid,
IE sharply unidirectional. That will reject noise and interference from
all directions except the signal direction. This will have the effect of
improving the SNR of the desired signal. Improperly combined, the two
antennas will lose directionality, and *degrade* the SNR of the received
signal.

Note that the whip and loop must be physically small with respect
to a wavelength for this to work. If they grow to be an appreciable
fraction of a wavelength, then polarity raises its ugly head as an
issue which must also be considered. Polarity can be exploited for
other things, such as diversity reception, but it will have the effect
of degrading the cardioid pattern of a loop and whip combination.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

4017. Re: NBFM pre-emphasis, how much?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Christopher Cox <cobox@netexp.net>
Message-ID: <01bc4741$7d45bd20$7760b6cd@cbx-nt>
Source record: 95079

Let me know how you do! I need a SMALL 2m packet xmtr for my High Powered
Rockets telemetry!

Christopher Cox
KC8FRJ
TRA#4901

Tony T. Hwang <oolong@netcom.ca> wrote in article
<5ihgh1$m3p@tor-nn1-hb0.netcom.ca>...
> In article <3348070C.5858@earthlink.net>,
> "Christopher W. (Chris) Boone" <cboone@earthlink.net> wrote:
>
> >Wilbert Knol wrote:
> >>
> >> Thanks for reading this message.
> >>
> >> I am in the process of nutting out a 2m xtal controlled TX strip to be
> >> used for packet. FM is obtained from a varicap diode across the xtal.
> >>
<<SNIP>>

4018. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.138.001ED5F1@phoenix.net>
Source record: 95080

In article <4VLSVAAlldTzEwaZ@bugsley.demon.co.uk> Philip N Butterfield
<phil@bugsley.demon.co.uk> writes:
>From: Philip N Butterfield <phil@bugsley.demon.co.uk>
>Subject: Re: Serial Port Conundrum
>Date: Fri, 11 Apr 1997 07:25:41 +0100

>In article <5ibmr9$8vl@nnrp2.farm.idt.net>, Ron Hellmann
><ronh1@gramercy.ios.com> writes
>>I have acquired a copy of the Hamcomm software and a computer
>>interface for my serial port. However, the serial port has been
>>disabled because I use an internal modem. Any ideas how I can free up
>>the serial port so the interface will work? TIA Ron AK5F
>>
>To many of those who have replied to this I have a question :-

>What do you do if you have the following requirements:-

>1. Serial Mouse
>2. Internal modem card
>3. External packet TNC
>4. Serial communications to your transceiver.

>I have the first 3 already but cannot leave the packet TNC operating
>when I log onto the internet (an iritation if I am logging the DX
>cluster) but how do I get the PC to link to my transceiver as well?

>73 de phil G4AAQ

>--
>Philip N Butterfield
I use three different computers.

4019. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Bob Hutson <bhutson@wchat.on.ca>
Message-ID: <334FB38A.3E84@wchat.on.ca>
Source record: 95081

I work for Lockheed Martin here in Canada...
When we build "one off" type equipment
we use Fascal 700 media (clear,sticky on back,with backing
you peel off)
we put it throught the HP plotter using drafting permanent
water based pens (several colours).
After the stuff dries...about 30 seconds..
Peel and apply to surface (trick here)
Use windex on surface and on back of peeled off media
(on the sticky side only), don't get it on the ink side.
This gives you a chance to move it around a bit for final
location.
Then roll out all the water and Windex carefully with a
rubber roller like they use to roll down arborite.
After it completely dries...24 hrs
Spray on Acrylic laquer...two coats don't let it run.
Use this as a drilling template after it's all dry!
Works great...looks VERY professional.
Use as Many colours as you want.
We use black for all the control points with little
crosses where we are going to drill, and BIG Blue lettering
because it stands out nicely.
This all comes from your CAD prog by the way.
You can even do diagonals etc.
Hope this helps...
73's
Bob

4020. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <334FA99B.4D4B@kfa-juelich.de>
Source record: 95082

shearer@pluto.njcc.com wrote:
>
> <snip>
> > Anyone have any new ideas on lettering/labeling the panels of your home-
> > brew projects? So far, I've tried the following:<snip> :) a very nice list.
> > So...anyone have any other favorite method/idea?<snip>
>
> chisel and or ETCH.
> results in grooves.
>
> if desired,
> pigment and or clear-coat the grooves.
This is an excellent method able to make very professional looking
panels. Etching can be done with the same materials as you are using
for the PCBs.
In the past some companies did make panels this way (some may still
do it!) Conversely, I have had silk screened panels on expensive stuff
and the wear and tear eventually wore off the markings so there was no
idea what the setting of a knob was. An etched panels is likely to
outlast all of us and may get battered but it will remain easy to read.

It is easy to fill the etched lettering neatly with ordinary colored
paint, using different colors for different functional groupings. Nice
effects can be achieved by various methods of preparing an aluminum
panel, by scratch brushing, sanding only in a single direction, or
etching overall before beginning the patterning. One precaution is
keeping the metal rather smooth (only FINE scratches) as the
photoresist may not flow to the bottom of a scratch; you then get an
ugly defect.
(One trick, lighjt sanding AFTER etching in the lettering.)

Ferric cloride works well on Al or brass. I do not know about the
ammonium persulphate.

Bob

4021. Re: how do i join?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <334FB07A.573D@ix.netcom.com>
Source record: 95083

dawizard@travelin.com wrote:
>
> how do i join?

Howdy dawizard, Not sure of your question but you need not join this
newsgroup -- just mark it in your browser and it will appear each time
you bring up your news group.

There is however a Homebrew mail list. Details on this and many other
"Mail Lists" can be found at URL:

http://pw2.netcom.com/~ac6v/pageae.html

Good Luck
Rod in San Diego

--
AC6V DX Reference Page
With Over 1277 Links To DX And Ham Radio
Main Page: http://www.netcom.com/~ac6v/index.html
Index: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

4022. Re: I.C. Information

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <334F1E17.F9B@cam.org>
Source record: 95084

John Higgins wrote:
>
> Does anyone have an address where I can obtain the pin connections on the
> 7400 series IC's. Pse E-Mail kq4ft@totcon.com Tnx John H.

Go to my page in the Electronics section there is a bunch
of addresses for components specs.

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

4023. Re: Looking for Informations ...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <334FB337.1F43@ix.netcom.com>
Source record: 95085

Paul Aschenborn wrote:
>
> Hello!
>
> I'm a new ham (just for a few days DB3AP) and very intrested to make
> expriments. So I would be very intrested in building an own TX or,
> eventually, for the beginning just a reciever.
> But I don't no any source for plans and descriptions ...
>
> Is there any WEB-Site to look on ...?
>
> Mni THX fer HELP!
>

Good Morning Paul -- You might try the Ham Radio Kits Page at URL:

http://pw2.netcom.com/~ac6v/pageay.html

Several kits for receivers and transmitters there.

Also the ARRL has publications for homebrewing equipment. Goto URL:

http://www.arrl.org/catalog/
73
Rod in San Diego

--
AC6V DX Reference Page
With Over 1277 Links To DX And Ham Radio
Main Page: http://www.netcom.com/~ac6v/index.html
Index: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

4024. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <334FB11D.54D4@staffnet.com>
Source record: 95086

David White wrote:
>
> Ron Hellmann wrote:
> >
> > I have acquired a copy of the Hamcomm software and a computer
> > interface for my serial port. However, the serial port has been
> > disabled because I use an internal modem. Any ideas how I can free up
> > the serial port so the interface will work? TIA Ron AK5F
> Assuming a PC compatable there are four comm ports COM1-COM4. However 1
> and 3 share the same interrupt line, likewise with 2 and 4. If your
> modem is put on 4 then 2 will be available for your ham equip interface
> as long as you dont try to use your modem at the same time. So if your
> modem is on 1 put it on 3, if on 2 put it on 4. Your mouse is probably
> on one of the ports also. Best leave the mouse alone as you always need
> that. Help?

Some of the newer modems also permit you to select other IRQs so you can run the modem and the serial port at the same time if desired. You can also purchase serial cards that permit selection of non-standard IRQs. Just be sure your software can also use the desired IRQ.

4025. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <334FB1C6.D10@staffnet.com>
Source record: 95087

Philip N Butterfield wrote:
>
> In article <5ibmr9$8vl@nnrp2.farm.idt.net>, Ron Hellmann
> <ronh1@gramercy.ios.com> writes
> >I have acquired a copy of the Hamcomm software and a computer
> >interface for my serial port. However, the serial port has been
> >disabled because I use an internal modem. Any ideas how I can free up
> >the serial port so the interface will work? TIA Ron AK5F
> >
> To many of those who have replied to this I have a question :-
>
> What do you do if you have the following requirements:-
>
> 1. Serial Mouse
> 2. Internal modem card
> 3. External packet TNC
> 4. Serial communications to your transceiver.
>
> I have the first 3 already but cannot leave the packet TNC operating
> when I log onto the internet (an iritation if I am logging the DX
> cluster) but how do I get the PC to link to my transceiver as well?
>
> 73 de phil G4AAQ
>
> --
> Philip N Butterfield
Use a newer serial card that can select non-standard IRQs.

4026. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Roy Keeley <rkeeley@dibbs.net>
Message-ID: <334FC1DD.6EA0@dibbs.net>
Source record: 95088
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve J. Quest wrote:
>
> Christopher Trask wrote:
> >
> > Aha! But there is such a thing. In the October 1938 issue of
> > Electronics, there is an article by Stanford Goldman entitled "A Shielded
> > Loop for Noise Reduction in Broadcast Reception" (pp. 20-22). This is an
> > electic field antenna (ferrites were yet to be used in common practice),
> > wound on a wooden frame inside a cylinder covered with what looks like
> > either window screen or hardware cloth. There's also one in which the
> > antenna loop is between two concentric metal screens. This is an
> > interesting article for those of you engaged in this thread.
>
> Darn, I missed that article. I was too young back then to
> be able to read. ;) In fact, it came out a year before my MOTHER was
> born! :) How the hell did you find this? You routinely read OLD
> magazines? Actually, the concept is sound, I'm not suprised that I
> am not the only one to come up with the idea. Now I wonder how I am
> going to find such an old magazine? Libraries microfilm magazines, but
> do they have them going back that far? Somehow I don't think so.....sq
>
You have to Inter Library Loan or ILL as we call it. Go to your libraian
and tell them what you need, they order the microfilm and yu go to
library to read it, usually the machines have a way to print out the
article. It MAY cost a few dollars, and it does cost a whole bunch of
time, but I find it worth it. Good luck....

--
73's

Roy KC4IMC

rkeeley@dibbs.net
kc4imc@maf.wa4wbi.ampr.org
Snail Mail = 10675 Salt Aire Rd, E., Theodore, AL 36582, USA

4027. F.S. - Tubes, radios, books & much more...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970412173100.NAA29713@ladder01.news.aol.com>
Source record: 95089

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #322-T.

4028. Lithium ion batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5iohe4lqp1@nadine.teleport.com>
Source record: 95090

The rechargeable lithium ion battery pack for my notebook computer just went toes-up. The multi-chip smart charger circuitry seems to have gone west, but the battery capacity was pretty badly diminished before it went so it's not worthwhile for me to mess with. But I may be able to salvage some of the cells.

Does anyone know the charging requirements for these beasties? Can a person get by at constant-current or constant-voltage charging, or are they fussy and require special charging circuitry like NiMH and rechargeable alkalines? I don't need an optimum method (since as they are, thery're no good to me anyway), but would like some general info if anyone has any.

Thanks,

Roy Lewallen, W7EL

4029. Audio/electronics for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: believer@telepath.com
Message-ID: <5ioibq$mru@usenet81.supernews.com>
Source record: 95091

For sale only:

Pro-Audio recording gear:
British-made "ACES"-brand 24-track 2" recorder with remote, 15/30 ips with vari-speed, sold new for $19,000.00. Also ACES 32-input in-line mixer, 24 groups, 5-band switchable EQ, 5 sends per channel, extensive routing options, patchbay, etc., sold new for $13,500.00. All manuals, wiring harnesses, and lots of spare parts included. Both units are one-owner. I'll sell both for $10,000.00.

For sale or trade:

PATCH BAYS:
19" rack-mount patch-bays, with heavy-duty long-frame mil-spec Switchcraft/ADC 1/4" jacks. Front panel is black phenolic with designation strips, attached to a metal reinforcing frame. Jacks are switching type, and may be wired in a variety of ways such as normaled, semi-normaled, etc. They are wired to a "punch-block" which is mounted on the back of the frame, and connections may be made to the punch-block, or directly to the jacks. I have:
Quantity: 3 Number of jacks: 48 Approx. list price: $150.00
I sell these for $40.00
Quantity: 4 Number of jacks: 72 Approx. list price: $60.00
I sell these for $60.00
Quantity: 3 Number of jacks: 96 Approx. list price: $250.00
I sell these for $80.00

I also have:
POWER SUPPLIES
These are "Sola" brand 117VAC in, 15VDC out bi-polar power supplies, highly filtered and regulated, PC-board mount (but easily adapted), and were used in medical heart-monitoring equipment. You can find them listed in the Allied Electronics catalog. I have:
Quantity: 4 SOLA#84-15-2135 Rated at: 350MA
Allied price: $220.00
I'd like $20.00 each
Quantity: 7 SOLA#84-15-2120 Rated at: 200MA
Allied price: $154.00
I'd like $15.00 each

I also have 2 Tektronix Model 620 X-Y display monitors, with 10X12 cm screens, suitable for analog display data such as ultrasonic detection systems, volume & vibration analysis, auger probes, and biophysical systems as well as computer and data transmission systems. I don't know what they cost new, but they are real nice, and I'd let them go cheap.

Make an offer--I'll horse trade!!

dave
e-mail me at: believer@telepath.com

4030. crete holidays

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: MANOS NERANTZULIS <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc476f$d4ea5440$f8915cc1@dummy.forthnet.gr>
Source record: 95092

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/4/97 TO 31/10/97.FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT ++30 81 761382.

4031. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <334fd969.24560263@news.erols.com>
Source record: 95093

On Sat, 12 Apr 1997 09:14:03 CST, jedent@phoenix.net (Joel E. Davis)
wrote:

>
>In article <4VLSVAAlldTzEwaZ@bugsley.demon.co.uk> Philip N Butterfield
<phil@bugsley.demon.co.uk> writes:
>>From: Philip N Butterfield <phil@bugsley.demon.co.uk>
>>Subject: Re: Serial Port Conundrum
>>Date: Fri, 11 Apr 1997 07:25:41 +0100
>
>>In article <5ibmr9$8vl@nnrp2.farm.idt.net>, Ron Hellmann
>><ronh1@gramercy.ios.com> writes
>>>I have acquired a copy of the Hamcomm software and a computer
>>>interface for my serial port. However, the serial port has been
>>>disabled because I use an internal modem. Any ideas how I can free up
>>>the serial port so the interface will work? TIA Ron AK5F
>>>
>>To many of those who have replied to this I have a question :-
>
>>What do you do if you have the following requirements:-
>
>>1. Serial Mouse
>>2. Internal modem card
>>3. External packet TNC
>>4. Serial communications to your transceiver.
>
>>I have the first 3 already but cannot leave the packet TNC operating
>>when I log onto the internet (an iritation if I am logging the DX
>>cluster) but how do I get the PC to link to my transceiver as well?
****
*
Phil it sounds like you have an IRC problem. It is possible that the
TNC and modem are on the same IRC. This can be checked from within
Windows or several diagnostic other programs.

I have the following - Comm 1 -- IRQ 4 = -- Mouse
Comm 2 -- IRQ 5 = -- TNC
Comm 3 -- IRQ 3 = -- Wx data via VHF
Comm 4 -- IRQ 4 = -- External Modem

I am not sure about the internal modem but it must opeate with IRC as
do other deveices. Check and see what they are and are working
together.

Hope this is some help.

73/Jim/AC4CZ
++
>>73 de phil G4AAQ
>
>>--
>>Philip N Butterfield
>I use three different computers.

4032. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: jsutton@erols.com
Message-ID: <334fdc47.25294720@news.erols.com>
Source record: 95094

On Sat, 12 Apr 1997 18:58:16 GMT, jsutton@erols.com (James C Sutton)
wrote:

>
>On Sat, 12 Apr 1997 09:14:03 CST, jedent@phoenix.net (Joel E. Davis)
>wrote:
>
>>
>>In article <4VLSVAAlldTzEwaZ@bugsley.demon.co.uk> Philip N Butterfield
<phil@bugsley.demon.co.uk> writes:
>>>From: Philip N Butterfield <phil@bugsley.demon.co.uk>
>>>Subject: Re: Serial Port Conundrum
>>>Date: Fri, 11 Apr 1997 07:25:41 +0100
>>
>>>In article <5ibmr9$8vl@nnrp2.farm.idt.net>, Ron Hellmann
>>><ronh1@gramercy.ios.com> writes
>>>>I have acquired a copy of the Hamcomm software and a computer
>>>>interface for my serial port. However, the serial port has been
>>>>disabled because I use an internal modem. Any ideas how I can free up
>>>>the serial port so the interface will work? TIA Ron AK5F
>>>>
>>>To many of those who have replied to this I have a question :-
>>
>>>What do you do if you have the following requirements:-
>>
>>>1. Serial Mouse
>>>2. Internal modem card
>>>3. External packet TNC
>>>4. Serial communications to your transceiver.
>>
>>>I have the first 3 already but cannot leave the packet TNC operating
>>>when I log onto the internet (an iritation if I am logging the DX
>>>cluster) but how do I get the PC to link to my transceiver as well?
>**
**
>Phil it sounds like you have an IRC problem. It is possible that the
>TNC and modem are on the same IRC. This can be checked from within
>Windows or several diagnostic other programs.
>
>I have the following - Comm 1 -- IRQ 4 = -- Mouse
> Comm 2 -- IRQ 5 = -- TNC
> Comm 3 -- IRQ 3 = -- Wx data via VHF
> Comm 4 -- IRQ 4 = -- External Modem
****

Sorry about typo Comm 4 should read IRQ 9. It is a popular
misconception Comm ports MUST share the same IRQs. Even many of the
books on modems/computers will tell you this. It took me a month + to
finally get the above set up working. Check your cards for the
ability to set IRQs other than the standard setup. Most external
modems will operate with any IRQ -- as far as I know.
++
>I am not sure about the internal modem but it must opeate with IRC as
>do other deveices. Check and see what they are and are working
>together.
>
>Hope this is some help.
>
>73/Jim/AC4CZ
>++
>>>73 de phil G4AAQ
>>
>>>--
>>>Philip N Butterfield
>>I use three different computers.
>

4033. Re: Vacuum variable capacitor source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Jerry <wc8r@juno.com>
Message-ID: <01bc4700$90ac14e0$8f53aacc@aamazing>
Source record: 95095

Try Fair Radio in Lima Ohio. They do big and little people business. You would have to check for PO's tho. Phone number should be available via information, or find their adds in any ham radio mag.

de wc8r@juno.com

Bill Schaff <schaff@iiiv.tn.cornell.edu> wrote in article <5iivcu$pi0@newsstand.cit.cornell.edu>...
> I need to purchase a vacuum variable cap (5-500pF) from a vendor that
> accepts purchase orders. Any ides?
>

4034. 40290 replacement ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: hduff@ica.net
Message-ID: <334fddc7.0@lightning.ica.net>
Source record: 95096

Looking for a sub or reasonable replacement for the 40290 RF power transistor. Thanks.

Please e-mail: hduff@ica.net

4035. HELP: Hooking up car stereo at home

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: s16292nm@umassd.edu
Message-ID: <5ip10e$89c$1@gatekeeper.umassd.edu>
Source record: 95097
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Is there a way to connect my car stereo in the house in order to try to fix it,etc. If anyone can help me in any way, please e-mail me at ...

s16292nm@umassd.edu

4036. FS: Yaesu Service Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <33501A63.271@onramp.net>
Source record: 95098
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Check our web-site for a list of original Yaesu service manuals for sale. These are close-outs and when they are gone, they're gone. All prices are plus postage and tax if in Texas.

http://rampages.onramp.net/~avvid

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

4037. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-12 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33503B76.60ED@concentric.net>
Source record: 95099
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Gary Coffman wrote:
>
> There is *no* electrostatic component to an electromagnetic wave.

Get right up next to a high power radiating element and say that!
;) I'm sure there are a few hams who are reading this and smiling right
now. :) EM waves contain both an electrical and magnetic wave component
while noise contains a higher electrostatic component as it is closer
to the receiver than the transmitter half-way around the world. The idea
is to block this electrostatic component from the noise.

> The
> electric and magnetic field components of the EM wave are *dynamic*, and
> intimately coupled to each other. Bill Sabin did a very good explanation
> of this in another post. You can't have an EM wave without both the electric
> and the magnetic field.

This is true, but the faradays shielding is to block all of the
electrostatic, much of the electroinductive and none of the
magnetoinductive components of the electromagnetic wave. This achieves
a reduction in the overall noise level by selection.

> The only time this is not exactly true is in the *near* field of the
> radiating source. In the near field, less than 5 wavelengths from the
> source, the EM field hasn't fully established, and the signal can be
> treated as partially separate electric and magnetic induction fields.

As I was saying, the transmitter you WANT to hear is far away.
The noise you DON'T want to hear is in the next room (blender, vaccuum,
fluorescent light, etc.)

> A *partial* shield can then have some effect in differentiating the
> fields from far sources as compared to near sources. But if the
> shielding is *complete* for either field, no EM signal will be
> received. That's why the shielded loop antenna must have a *break*
> in the shield.

Not a break, but a loose or poor shield. I did mention that,
I'm sure of it. I said "chicken wire cage". I'm almost positive I
did. Also, my unit has one end open with a pigtail of randomwire so
I can find my source, then zero in on it, using S/N ratio to cancel any
noise the weak pigtail might bring in with the strong signal from the
loopstick. I'm sure I mentioned that as well. I hope.....sq

4038. Re: QRP amp?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: rleee@aol.com
Message-ID: <19970413012701.VAA06030@ladder01.news.aol.com>
Source record: 95005

Try Ramsey Electronics

4039. HI

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: llanero@BellSouth.NET
Message-ID: <335038D2.6CF8@BellSouth.net>
Source record: 95006

HI; FROM MTAMI, FLORIDA
JOSE E HERRERA KF4HSK

4040. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: archer@netgate.net
Message-ID: <3354703d.9901202@nntp.netgate.net>
Source record: 95007
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Thu, 03 Apr 1997 16:18:55 -0800, "Steve J. Quest"
<Squest@concentric.net> wrote:

> Amplify the signal, means amplify the noise as well. :) There
>is a way around this, have you ever thought about designing a purely
>MAGNETIC influence antenna? Some hams from years past have played around
>with these designs, nothing more than a VERY large ferrite rod, wrapped
>with a faraday shield to eliminate the electrical component, followed by
>a shielded amplifier and delivery system (coax). These types of antennas
>are very directional however, but this can be an advantage if you are
>trying to pick a weak signal out of a stronger one. Since this type of
>antenna only receives the magnetic field of the transmitting station,
>and rejects all electrostatic fields, noise is GREATLY reduced. Imagine
>SW with the clarity of local AM broadcasts! Now you see what I am
>talking about here! I'm suprised nobody is marketing this type of
>antenna today! For example, when you use this type of antenna, that
>60Hz buzz from your neighbors TV disappears. Power transformer noise
>also is greatly reduced if not completely eliminated. Lights with
>dimmers that used to make terrible buzz when they come on would now
>only produce the turn-on pop. The design is simple, wind a resonant
>tank (inductor and variable capacitor) onto a very large, high Q ferrite
>rod, shield in chicken wire, mount in a movable base (very directional,
>so you need to move it to pick up different stations), connect to a
>standard RF amp design, which is mounted inside the case, and you're
>there! The most expensive part is the large hi-Q ferrite rod.......sq
>
>(if there would be a market for such a device, I might design a version
>that would be "for consumer use" and put it out for sale. Sorry, Mr.
>TinyTenna, don't mean to horn in on your busines, but.................)

All the sophisticated theoretical discussions this thread has created
in terms of magnetic vs. electrical fields and the nature and
propagation of RFI notwithstanding (interesting though it is!), I've
discovered that a vertical whip (a 2m band short rubber duckie for ham
radio no less(!)) feeding a one-transistor amp and stuck in my window
does a reasonable job of killing the computer hash. Perhaps a
magnetic-mode antenna would work better, or perhaps it would work
worse, but I think either will work fine if you put enough distance
between antenna and computer. :-)
I've built a prototype amp using a 6" 2 meter ham (!) rubberized whip
as the antenna rod and a low-noise bipolar NTE10 as the amp.
All the very sophisticated theory discussions which Steve Quest's
comment above has sparked aside, I've found that by sticking the

amp in the window in the other room, the computer hash is nearly gone. Simple :) Of course, the sucker has too much gain and overloads now, so I'm leaning toward a JFET. (Abandoned MOSFET due to static sensitivity -- this thing will be mounted outdoors ultimately after all.)

4041. Re: HELP: Hooking up car stereo at home

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <5ipupi$16d$2@news3.microserve.net>
Source record: 95008
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <5ip10e$89c$1@gatekeeper.umassd.edu>, s16292nm@umassd.edu
says...
>
>Is there a way to connect my car stereo in the house in order to
>try to fix it,etc. If anyone can help me in any way, please e-mail
>me at ...
>
>s16292nm@umassd.edu
Yes, use a 12 volt gel cell or an old car battery or a good regulated
power supply. If you have to ask how to hook it up, what luck do
you think you may have trying to repair it, unless its a broken
belt on the deck or something?

4042. Re: LapLink Cable. What is in it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <5ipugl$16d$1@news3.microserve.net>
Source record: 95009
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <5ijlli$153@news.cis.okstate.edu>,
martin@osuunx.ucc.okstate.edu says...
>
>
>
> I am going to need to capture the printer output of a P.C.
with
>another P.C. Somebody suggested a LapLink cable which sounds like an
>excellent idea on the surface. What is in one of these cables? I
>understand that the old P.C. parallel ports only had 4 inputs since
they
>weren't really designed to ever receive signals except for the
strobes.
>
> Does the LapLink cable have some logic in it that shifts four
>bits over so that one can receive bytes in two-nibble operations or
>exactly what is happening? I will have control over the software on
the
>receiving P.C., but the sender will have to think it is sending to a
>printer. It's a lo-o-ong story.
>
> One good thing is that I don't need a bidirectional data path.
>The data will flow in one direction only.
>
>Martin McCormick WB5AGZ Stillwater, OK 36.7N97.4W
>OSU Center for Computing and Information Services Data Communications
Group
Some lap link cables provide a serial path. This is an easier way
to capture a file as it remains intact and moves in a normal way.
Check your dos book on how to send a file out the serial port. You
will need the mode command to configure the port first, or just let
the lap link program figure it out. Best luck KD3SH

4043. Re: 40290 replacement ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <5ipuvq$16d$3@news3.microserve.net>
Source record: 95010

In article <334fddc7.0@lightning.ica.net>, hduff@ica.net says...
>
>Looking for a sub or reasonable replacement for the 40290 RF power
>transistor. Thanks.
>
>Please e-mail: hduff@ica.net
>
A philips ECG 473 is a cross referance for it. Should be availible
but may be costly.

4044. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5iq11t$n53$2@nadine.teleport.com>
Source record: 95011
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

In article
<Pine.SOL.3.91.970411191826.21071C-100000@godzilla2.acpub.duke.edu>,
"James P. Meyer" <jimbob@acpub.duke.edu> wrote:
>
>On Fri, 11 Apr 1997, Roy Lewallen wrote:
>
>> >have to do to make a tapped resonator is to put two transmission lines
in
>> >*series* with the tap being between the two. The total length of the
two
>>
>> >Chop the resonator into two pieces at the tap point. attach the feed
>> >at that point. The transmission line model takes care of the rest.
>> >miker
>>
>> Neither of these solutions accounts for the coupling between the lower
and
>> upper parts of the resonator.
>
> I'm not convinced that there is any coupling between the top and
>bottom that doesn't pass through the middle. If that's the case, then
>two sections in series *should* show all the coupling effects needed.
>
> I'll try some virtual (simulated) experiments and report back.
>
> Jim

Jim,

You and Tom Bruhns, who emailed me about this, are correct. As Tom pointed
out, there should be only a TEM wave in the resonator, so no coupling from
one section to the other. I was thinking more of a helical resonator, which
isn't the same.

I apologize for the error. The suggested SPICE models should work. Thanks
to both of you for correcting me.

Roy Lewallen, W7EL

4045. Video Demodulator Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: fiveyes@iiiii.com
Message-ID: <33588fb0.104009752@nntp.ix.netcom.com>
Source record: 95012

Require a convertor like that Sigma once sold that takes a channel 3 or 4 RF signal and outputs baseband A/V component. Will pay for a low volt (12v or less), palm-sized unit or schematics for same.

Thank-you, 5-i's KC5MOG

4046. Re: Morse Code Questions: Timing relationships

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <335a9967.1105054784@news.sci.fi>
Source record: 95013

Bill C <wrc@tir.com> wrote:

>Pete,
>
>You have some direction already, so I'll just caution about those
>"timing" issues. The big trick to having a machine copy the code as sent
>by a human fist is that the human fist varies its timing!! Those timinbg
>specs are tagets that only machines can hit consistently. Maybe *YOU*
>can be the first to solve this problem. Best of luck to you.

You could save the received signals in a buffer and when the timing is uncertain, re-examine the buffer and try to make a better estimate for the last few samples and use that timing for recovering received character. This will require a reasonably good signal to noise ratio (SNR), since otherwise the uncertainty about a mark/space or space/mark transition can be either due to noise or jitter in the timing (bad fist).

The problem with automatic decoding of code sent with a straight key is that it is basically asynchronous in each element and you must get a quite sharp transition, i.e. get the 3rd or even 5th harmonic of the baseband waveform and thus require 3 to 5 times the nominal bandwidth i.e. suffer a 5 to 7 dB SNR penalty compared to synchronous modulations. If a keyer is used, the dot clock can be extracted from a few character and the problem is mainly to locate the start of each character and then apply the recovered clock rate. Not so sharp transitions are required and the bandwidth could be reduced improving the SNR.

Paul OH3LWR

4047. FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3350BFEE.49@geocities.com>
Source record: 95014
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

FCC Expected to Unveil Plans For Two Airwave Auctions

WASHINGTON -- Federal regulators are expected this week to set plans for two long-awaited auctions of valuable airwaves, including one for an emerging wireless technology that could bring new competition to the local-telephone and cable-television businesses.

Wireless operators, long-distance phone companies, electric utilities and telecommunications entrepreneurs are eager to bid for licenses to use huge chunks of the amateur radio spectrum to transmit voices, pictures and data.

Wireless Auction

Up for grabs: Licenses to use most of the amateur radio megahertz of electromagnetic spectrum in each of nearly 500 markets nationwide. Repeater frequencies are much in demand by those with the following: Uses: Transmitting voices, pictures and data via small, flat antennas that can rest on a windowsill. Expected bidders: All sorts of telecommunications companies -- but Baby Bells and cable operators will be barred from bidding on licenses in their home territories.

"While the auctions for PCS frequencies were very specific about how the frequencies could be used, rules governing LMDS usage are more liberal and for a bigger chunk of amateur radio bandwidth," said Michael Sprayberry, director ofwireless strategy for MCI Communications Corp.

New Radio Service

The auction rules have been delayed in recent weeks because FCC commissioners couldn't agree on what amateur radio spectrum would be available.

The technology operates with small, flat antennas that communicate with larger antennas mounted on towers. It has tended to work poorly in heavy rains and fog, but industry officials say they are working to fix the problem. Operators also could run into resistance from cities that increasingly are blocking the construction of new antenna towers. However ham towers could be seized as the FCC has decided that the amateur radio service no longer serves the public necessity.

#================#===#
| Burt Fisher | Teacher of video, broadcasting and electronics |
| Amateur call | South Dennis, Ma. (Cape Cod) |

```
| K1OIK | http://www.geocities.com/WallStreet/5169 |
#================#=======================================================#
|Visit my WWW site, it is like no other burt@rocketmail.com |
#=================================================================#
```

4048. The real truth about naked radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3350C032.3A54@geocities.com>
Source record: 95015
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ham radio defined:
Mark Schneider, WI1W said:

There's just so much more in the world to catch their
eye than a bunch of farts who try to maintain their heirarchy in a
pseudo
secret society, refusing with a vengeance to pass the baton, for fear of
the
tiniest little detail of what's theirs being changed. Even if the change
is
necessary and beneficial to the hobby.

--
#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other burt@rocketmail.com |
#===#

4049. The sex life of a DXer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3350C077.6E5E@geocities.com>
Source record: 95016
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

From: WA2RCB@N3ACL.#SEPA.PA.USA.NA
To : K1OIK@K1UGM.#EMA.MA.USA.NA

Yes, DX'ers are a unique breed of people Burt. My guess is that
if their wife was next door in the kitchen gagging on a piece of
fried chicken bone, and there was a rare-dx station on the air
at *ezactly* the same moment, 98% of the DX'ers would choose to
let their XYL's writhe on the floor and turn screen-saver VCR *blue*
first before missing the opportunity to work Kuntakintae in Lower
Gibipp. Reminds me of a funny event from a few years ago, when I was
a Director in a radio club. Had a director's meeting at this guy
house. After the business was over, went into this guy's shack.
(He was a big-time DX'er here in NJ - having worked 300-something
countries) He seemed to get somewhat irritated when I did not
share his enthusiasm for DX. After the 3rd attempt to get me to
pay some kind of hommige to him while sticking a *framed* QSL in
my face from some filthy rich ham who runs a sweatshop in Puerto
Rico who spends 98% of his time running to mud-huts in Africa in his
Lear jet. I then told him I did not give a rat's --- about DX. (I only
did this because he was so damm adamant about DX as being as important
as the second comming or something...) Well, I thought he was going to
toss me out of his QTH, but he seemed to not have the gutz for that, so
I retired to his living room to drink as much soda and chips he put out
and laugh about this whole incident with 2 friends of mine who were
there and shared my humor ove this whole screwball funny incident.
(he has put out several pint-size bottles of Coca-Cola...I had my CIA
type trench coat with me, and pocketed 3 of them just for funzies...)
So Burt, there U go, DX'ers: Ham radio's greatest mutual admiration
society. Almost as bad as contesters who run illegal power...birds of
a feather...

73es George wa2rcb

ps: Got on the Net. Not sure about how to E-Mail yet, as I'm new to this
I-Net stuff, but, I am enjouing the discourse's on rec.radio Keep
up the good woik Burt! :) :) :) :) :) :) :)

--
#================#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#===#
|Visit my WWW site, it is like no other burt@rocketmail.com |

#===#

4050. The bigoted DXer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3350C0C0.566E@geocities.com>
Source record: 95017
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

"SOCIETE ANCIENT TELEGRAPHERS INTENTIONAL REDUCIO EXTREMIS"

-- WORKS ONLY DX AWARD --

In recognition of an extraordinary operating accomplishment, amateur
radio
operator _________ is hereby awarded the prestigeous Works Only DX
Award, based upon the fact that said operator limits his contacts to DX
STATIONS ONLY, and has not, within the past 6 months, had any on-the-air
conversation (either by CW, phone or other operating mode) with any
other
operator residing in his own country.

In addition to denying himself the pleasure of chatting with his fellow
countrymen (in dedication to his single-minded pursuit of rare DX
contacts),
said operator has achieved further distinctions. The following special
endorsements to this certificate also apply:

( ) Works only stations from countries from which he has not already
received
a QSL card.

( ) Devotes at least 6 hours each day to monitoring packet cluster
spots

( ) Exchanges only minimal information, to avoid unnecessarily
prolonging
contacts

( ) Abruptly terminates any domestic contact which may have been
erronously
made during the heated pursuit of DX

-- Blessidus Workusus Exclusivus Deos Xetes --

(May the gods be with you in your exclusive search for DX)

* END *

--
#===============#===#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#===============#===#
|Visit my WWW site, it is like no other burt@rocketmail.com |

#===#

4051. Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Burt Fisher <burtfisher@geocities.com>
Message-ID: <3350C0FA.51A1@geocities.com>
Source record: 95018
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

It has become evident that the ex-service now hobby is done:
Stick a fork in it!

It serves no one that cellular doesn't.
We are not unique, look around. Everyone has radios, phones.

Most operators are tunnel-visioned, goat-headed people. They think that the license, the code or the younger thinkers are the problem:

I contend it has been the ARRL, NTS and the volunteer exam/incentive licensing that has did it in. To many "elite" people who must complain when someone says what they want to say or operate as they want. I once thought packet radio might go somewhere but we never got over 1200 baud.

Now if the fact that cell phones were allowed in the Olympic venues but ham radios were not doesn't show you something, listen to a voice traffic net like the Indiana Traffic/DewDrop/Mushroom Cloud Spotting net some afternoon. NTS needs to tie up a radio frequency to handle fake messages for people who are too lazy to pick up the phone or mail a letter to mom wishing her happy birthday. Give me a break! They even pass phone numbers of recipients AND NOW even E-MAIL ADDRESSES!!!A JOKE! Right?

I am just waiting till all the VHF spectrum is gone, along with most of the HF spectrum. Then we will all be CBers, like many elite hams call others in order to degrade an opinion they can't stand to debate.

Structure, as per ARRL, has not kept up with the purpose of the "service"
That service used to be needed, now we are "bookmarks"for other wireless services. The latest band gone is 2300 MHz for wireless internet, not for packet, which should have pushed been years ago, along with:

902-928 GONE well "shared" by every device that would hear hams! Lesson?
220-222 GONE
144-148 soon to be gone
222-225 soon to be gone
430-450 soon to be gone

Do you get the picture?
Maybe I drew one for you...

--
=-=
CJ Crosby - KA2RAF/4 - rafman@kerrlake.com | Buggs Island Lake:
The BuckHorn WoodWorx of Buggs Island Virginia | Virginia's best fishing

"A mind's a terrible thing to waste, provided you had one to start with"
"There are 5 boxes to Freedom: Ballot, Witness, Jury, Soap & Cartridge"
=-=
--
#================#==#
Burt Fisher	Teacher of video, broadcasting and electronics
Amateur call	South Dennis, Ma. (Cape Cod)
K1OIK	http://www.geocities.com/WallStreet/5169
#================#==#
|Visit my WWW site, it is like no other burt@rocketmail.com |
#===#

4052. TAIT T500

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Trevor Day <trev@southwestuk.demon.co.uk>
Message-ID: <6oBz6DAh$NUzEwhw@southwestuk.demon.co.uk>
Source record: 95019

Hi Guys,
Sorry this is not strictly homebrew but I don't know where else
to post it.
Does anyone know the arrangement of the diode matrix board on the Tait
T500? I need to alter it's frequency coverage within the original band,
in this case circa 170 MHz
The info doesn't appear to be available in the UK and I have just spent
an hours phone time searching the Web with no joy.
Thanks... Trev ...-.-

--
Trevor Day G3ZYY
trev@southwestuk.demon.co.uk

4053. Re: HELP: Hooking up car stereo at home

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.140.0028E5DF@phoenix.net>
Source record: 95020
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <5ipupi$16d$2@news3.microserve.net> dcowey@cyberia.com (gudmundur) writes:
>From: dcowey@cyberia.com (gudmundur)
>Subject: Re: HELP: Hooking up car stereo at home
>Date: 13 Apr 1997 06:34:26 GMT

>In article <5ip10e$89c$1@gatekeeper.umassd.edu>, s16292nm@umassd.edu
>says...
>>
>>Is there a way to connect my car stereo in the house in order to
>>try to fix it,etc. If anyone can help me in any way, please e-mail
>>me at ...
>>
>>s16292nm@umassd.edu
>Yes, use a 12 volt gel cell or an old car battery or a good regulated
>power supply. If you have to ask how to hook it up, what luck do
>you think you may have trying to repair it, unless its a broken
>belt on the deck or something?
be sure to RIP OFF the speakers also.

4054. Re: Video Demodulator Sought

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5iqn39$4uk@mtinsc04.worldnet.att.net>
Source record: 95021

From Woody:
A number of (pre descrambler vintage) cable tv control "boxes" had
base-band output. Kinda nice since not only do you get ch3/4 but all
the cable freqs as a choice. Most of the vco sections used more than 12
volts, but a small dc/dc converter would fix that...
73, Woody

5-i's = V wrote:
>
> Require a convertor like that Sigma once sold that takes a channel 3 or 4 RF
> signal and outputs baseband A/V component. Will pay for a low volt (12v or
> less), palm-sized unit or schematics for same.
>
> Thank-you, 5-i's KC5MOG

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

4055. Help w/power distro block

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Steve Jackson <steve@gnosis.slac.com>
Message-ID: <01bc4815$4ae55d70$ca4f9fcf@n3vzl-1>
Source record: 95022

Greetings everyone --

I'd like to build a device that will provide a clean 13.8V source to my mobile equipment. I've been told that the best way to get rid of alternator noise is to feed the power right from the battery post and to even send the ground all the way back to the battery as well.

I have an idea for a project, but don't know how to go about doing it. I want to make a distribution block that's fed from the battery. I expect it to be a block of wood about 4"x5"x0.5", and I'd like to put 8 screw terminal pairs on it. 4 of the pairs would be unswitched and the other 4 switched by the ignition. I'd mount it underneath the console for easy wiring of the gear.

I think the switching should either occur when

a) the power fed from the battery increases beyond 12V, or

b) *any* voltage is detected from an already switched fuse.

The latter would be better because the switched pairs would activate just by turning the ignition key to the ON position, and not necessarily starting the car, as the former requires.

I also don't know what size wiring would be needed to aptly supply such a block. An old acquaintance runs 4 car batteries in his pickup. He ran wiring that was comparable to those wire-rope bicycle locks. About what AWG is that kind of wiring? 14? 10? Should I use a thicker wire for the ground than the positive? Should I filter the power at all, or is the battery clean enough?

Also, how would one wire the two switching types above? Especially the latter method of using a switched fuse to activate the switched terminals. I think a relay would be useful there, but I've never wired one up.

Please forgive the simple nature, I'm a "commuter ham" who eventually learned the original meaning of a "traffic net". :-)

Thanks and 73

Steve
n3vzl

4056. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: "Dale R. Parfitt" <par@magg.net>
Message-ID: <3350FF6C.113F@magg.net>
Source record: 95023

Bob Hutson wrote:
>
> I work for Lockheed Martin here in Canada...
> When we build "one off" type equipment
> we use Fascal 700 media (clear,sticky on back,with backing
> you peel off)
> we put it throught the HP plotter using drafting permanent
> water based pens (several colours).
> After the stuff dries...about 30 seconds..
> Peel and apply to surface (trick here)
> Use windex on surface and on back of peeled off media
> (on the sticky side only), don't get it on the ink side.
> This gives you a chance to move it around a bit for final
> location.
> Then roll out all the water and Windex carefully with a
> rubber roller like they use to roll down arborite.
> After it completely dries...24 hrs
> Spray on Acrylic laquer...two coats don't let it run.
> Use this as a drilling template after it's all dry!
> Works great...looks VERY professional.
> Use as Many colours as you want.
> We use black for all the control points with little
> crosses where we are going to drill, and BIG Blue lettering
> because it stands out nicely.
> This all comes from your CAD prog by the way.
> You can even do diagonals etc.
> Hope this helps...
> 73's
> Bob

The Brother label makers have a clear tape w/ black type and maybe clear
w/ white at this time. You may choose fonts, size and mirroring for
adhering on the inside surface of clear panels.

Dale
W4OP

4057. Re: Signetics FET

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970413172500.NAA28501@ladder01.news.aol.com>
Source record: 95024

The prefix SD is usually a Siliconix device

W4ZCB

4058. Re: HOW TO?? - VHF VCO Circuit -- HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: "Roderick M. Fitz-Randolph" <w5hvv@aeneas.net>
Message-ID: <33511609.43E9@aeneas.net>
Source record: 95025

> Mini-Circuits has a VCO module POS-200 covering 100 - 200 MHz, priced
> $11.95. Supply voltage is 12V, and tuning voltage 1 - 16V.
>
> Tom

Tom, I am MOST interested in this device. How may I get in touch
with Mini-Circuits?

Rod, W5HVV
w5hvv@aeneas.net

4059. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierE8L7Ay.Jnr@netcom.com>
Source record: 95026

In article <5im0m2$st0@canyon.sr.hp.com>,
Don Montgomery <donrm@sr.hp.com> wrote:
>
>Anyone have any new ideas on lettering/labeling the panels of your home-
>brew projects? So far, I've tried the following:
>
>3. 3M (Scotch) system - lay labeling artwork over photosensitized film
> or thin (almost foil-like) anodized sheet. Run thru ozalid machine;
> develop. Look great, several colors, but too expensive.

According to a thread in another one of the groups, a week or three ago,
this has been discontinued by 3M. Here's some stuff about a replacment.

> From: David Chapman <dave@chassis.demon.co.uk>
> Newsgroups: sci.electronics.components
> Subject: Re: Front Panel Labels
> Date: Wed, 26 Feb 1997 17:37:12 +0000
> Message-ID: <0247DBAITHFzEwIv@chassis.demon.co.uk>
>
> Hi all..
>
> Just to add my twopenn'orth, I have had a letter from my supplier of
> Dynamark II Label Systems (Legends of Crawley, Surrey, England), part of
> which reads :-
>
> I'm sure that you will be pleased to know that Legends and
> Mega Electronics Ltd have together developed a replacement
> product which will be launched this month (January 1997).
> The new product will be called 'QUICK-MARK' which will offer
> significant benefits over 3M Dynamark II.
>
> The address given for Mega is :-
>
> Mega Electronics Ltd.,
> Mega House,
> Grip I.E. (I.E. presumably means Industrial Estate)
> Linton,
> CAMBRIDGE. CB1 6NR.
>
> Tel: +44 1223 893900
> Fax: +44 1223 893894
>
>
> I hope that this information may be of use to someone.
>

> ATB - Dave
>
> David C.Chapman - Chartered Engineer. FIEE. (dave@chassis.demon.co.uk)
> ---
> CHAPMAN ASSOCIATES is a Consultancy offering practical expertise and
> design skills in the fields of counter-surveillance, electronic protection
> and security. Visit our UPDATED Web site at http://www.ant.co.uk/~chassis/
> ---
>

4060. SSB Weaver Modulation: LPF design wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: maroof@triton.kaifnet.com
Message-ID: <334fe0e3.2837879@news.kaifnet.com>
Source record: 95027
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Hi,

I need help on a Weaver modulator SSB generator. Most designs use a low pass filter with cutoff at usually 1.8KHz. What kind of filters should I use for this application? Any special considerations like constant phase deviation throughout the band? Please Help.

Maroof

4061. Re: HOW TO?? - VHF VCO Circuit -- HELP!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: ttwist@online.no
Message-ID: <33513b8e.18194094@news.online.no>
Source record: 95028

On Sun, 13 Apr 1997 17:21:13 +0000, "Roderick M. Fitz-Randolph"
<w5hvv@aeneas.net> wrote:

<snip>

>Tom, I am MOST interested in this device. How may I get in touch
>with Mini-Circuits?

Rod

Mini-Circuits has a Web page at : http://www.minicircuits.com
I believe they have the complete catalogue available online as Acrobat
(.pdf) documents.

Their phone/FAX numbers are:

(718) 934-4500 (417)335-5935 Fax: (718) 332-4661

And they can be contacted by email at : postmaster@minicircuits.com

I think you can buy small quantities and pay with a card there.

Tom
Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

4062. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33514223.0@cheese.pcug.org.au>
Source record: 95029
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Burt Fisher <burtfisher@geocities.com> wrote:

Wireless Auction
>
> Up for grabs: Licenses to use most of the amateur radio
>megahertz of electromagnetic spectrum in each of nearly 500 markets
>nationwide. Repeater frequencies are much in demand by those with the
>following: Uses: Transmitting voices, pictures and data via small, flat
>antennas that can rest on a windowsill. Expected bidders: All sorts of
>telecommunications companies -- but Baby Bells and cable operators will
>be barred from bidding on licenses in their home territories.
>

It looks as if our resident knocker is at it again, though April 1 was
two weeks ago!

However the concept of auctioning one and two letter amateur callsigns to
the highest bidder (rather than through a lottery system) has
attractions. Here in Australia we floated the idea (tongue in cheek)
that those with two letter callsigns should give them up and have their
callsign re-allocated to the highest bidder at a public auction attended
by all amateurs (on April 1, 1996). That created quite a stir, because
most amateurs want a callsign that's either very close to their initials
or very short. I suspect that a proposal to auction attractive callsigns
would raise even more controversy than one to auction some of our bands.

73,

--
____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
____

4063. Re: SSB Weaver Modulation: LPF design wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <F57CEAA1eVUzEwGe@ifwtech.demon.co.uk>
Source record: 95030
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Maroof H. Choudhury wrote:
>Hi,
>
>I need help on a Weaver modulator SSB generator. Most designs use a low pass
>filter with cutoff at usually 1.8KHz. What kind of filters should I use for this
>application? Any special considerations like constant phase deviation throughout
>the band? Please Help.

Peter Rhodes, G3XJS described a third-method (Weaver) HF transceiver in
Radio Communication (RSGB), June-October 1996. The five parts contain a
lot of good design and constructional information.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

4064. WTB Heath Manuals (or copies) & PA/Boathorn

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: emw@teleport.com.no_bulk_spam_mail
Message-ID: <33555449.62643977@news.teleport.com>
Source record: 95031
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

WTB
Original or Photocopy

Heath Manuals for the following:

AC-1 Antenna Tuner

QM-1 Q Meter

HW-30 Twoer

ALSO
Heathkit offered (looooooong ago) a combo PA/Boathorn/
FOGHORN for small boats.
I'd really like one (for my truck :-)).

TIA
73 de KA9ANH/7
Ed

4065. Re: Longwire or Randomwire? (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Steve <semann@nr.infi.net>
Message-ID: <33506144.4948@nr.infi.net>
Source record: 95032
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve J. Quest wrote:
>
> Steve wrote:
> >
> > > Actually, there is not always that much of a difference......sq
> >
> > The term "long" in long wire antenna usually refers to being long in
> > terms of a half wave length. (Refs: Radio Handbook, 20th edition, pp
> > 28-2 to 28-7 and The ARRL Antenna Book, 13th edition, Chapter 5, "Long
> > Wire Antennas").
>
> Does this mean that you must either add wire or remove wire as
> you change bands? ;) As I said, there isn't always that much of a
> difference. I don't consider my antenna to be a random length antenna,
> it is on the long side of my house, and is cut to half wavelength for
> the 30 meter band (10 Mhz). The longwire is 48.5 feet long, therefore
> it is a longwire for the 30 meter band, and a random wire for all other
> bands.
>
> > I've used several random length end fed wires over the years both for
> > receiving and transmitting but I've never used any of the long wire
> > forms as I've never had the space.
>
> I think you have! :) You just didn't use them at the right
> frequency. All random wire antennas are longwires if you find the
> right spot on your all-band radio. ;) Like I said, there isn't much
> of a difference.
>
> > So as you can see if you check the literature, there are reasons for
> > specifying a difference between a random length wire and a long wire.
>
> As I hope you can see there are reasons for specifying frequency
> as even a "1 foot chunk of wire" is a longwire for 486 Mhz.....sq

As this is rec.radio.shortwave I was using the FCC definition of
shortwave: 3-30 MHz. So the 486 MHz is a non sequitur. ;)

4066. WEB SITE UPDATES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Simon Robinson <pls5i50e@pop.plasma.co.uk>
Message-ID: <3350CA25.4253@pop.plasma.co.uk>
Source record: 95033
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

Thanks to everyone who has visited my site and left messages.

I have updated it further today and hope to get the Eddystone info. up this week. The pictures are a bit at present.

Have a look at my site and make please feel free to make constructive comments.

The address is http://www.plasma.co.uk/soft-tools/

73's

Simon - G8POO

4067. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr13.191730.15228@ke4zv.atl.ga.us>
Source record: 95034
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <33503B76.60ED@concentric.net> "Steve J. Quest" <Squest@concentric.net> writes:
>Gary Coffman wrote:
>> There is *no* electrostatic component to an electromagnetic wave.
>
> Get right up next to a high power radiating element and say that!
>;) I'm sure there are a few hams who are reading this and smiling right
>now. :)

If they are smiling, they are smiling at you. An electro*static* field
is what you get when you rub a cat's fur. It is what a Windhurst machine
or Van de Graaf generator produces. It is the field between the positive
and negative poles of a battery. By definition it is *static* which means
it is unvarying. There is no electrostatic component to a radio wave.

There is an electric field vector which is part of an EM wave, but it
is *not* static. It is a dynamic field which varies at a rate corresponding
to the frequency of the signal. Hand in glove, inseparable from the electric
field vector, is a dynamic magnetic field vector. The energy of the EM wave
is constantly handed back and forth between the electric and the magnetic
fields as the EM wave propagates. Suppress *either one* and you suppress
the energy of the EM wave. One cannot exist without the other. This is a
fundamental fact of electromagnetics.

If you try to separate them with a Faraday shield, a counter EMF will
be induced on the surface of the shield. This will reflect the EM wave
just as a mirror reflects light (and for the same reason since light
is just extremely high frequency RF). None of the field energy, either
electric or magnetic, will pass inside the Faraday shield (assuming
the shield possesses adequate skin depth to be called a Faraday
shield at the frequency of interest).

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

4068. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: paul@actiontel.com
Message-ID: <335123a9.41568501@news.abilene.com>
Source record: 95035
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

It almost sounds like this is what you want... Odd.

I've been hearing this tired old crap for 20 years now
.... but never from an expert. Now, I'm afraid.

3's and 8's

N5DUP

On Sun, 13 Apr 1997 07:18:18 -0400, Burt Fisher
<burtfisher@geocities.com> wrote:

>It has become evident that the ex-service now hobby is done:
>Stick a fork in it!
>
>It serves no one that cellular doesn't.
>We are not unique, look around. Everyone has radios, phones.
>
>Most operators are tunnel-visioned, goat-headed people. They think that
>the license, the code or the younger thinkers are the problem:
>
>I contend it has been the ARRL, NTS and the volunteer exam/incentive
>licensing that has did it in. To many "elite" people who must complain
>when someone says what they want to say or operate as they want. I once
>thought packet radio might go somewhere but we never got over 1200 baud.
>
>Now if the fact that cell phones were allowed in the Olympic venues
>but ham radios were not doesn't show you something, listen to a voice
>traffic net like the Indiana Traffic/DewDrop/Mushroom Cloud Spotting net
>some afternoon. NTS needs to tie up a radio frequency to handle fake
>messages for people who are too lazy to pick up the phone or mail a
>letter to mom wishing her happy birthday. Give me a break! They even
>pass phone numbers of recipients AND NOW even E-MAIL ADDRESSES!!!A JOKE!
>Right?
>
>I am just waiting till all the VHF spectrum is gone, along with most
>of the HF spectrum. Then we will all be CBers, like many elite hams
>call others in order to degrade an opinion they can't stand to debate.
>
>Structure, as per ARRL, has not kept up with the purpose of the
>"service"
>That service used to be needed, now we are "bookmarks"for other wireless
>services. The latest band gone is 2300 MHz for wireless internet, not
>for packet, which should have pushed been years ago, along with:
>

>902-928 GONE well "shared" by every device that would hear hams! Lesson?
>220-222 GONE
>144-148 soon to be gone
>222-225 soon to be gone
>430-450 soon to be gone
>
>Do you get the picture?
>Maybe I drew one for you...
>
>--
>=-=
>CJ Crosby - KA2RAF/4 - rafman@kerrlake.com | Buggs Island Lake:
>The BuckHorn WoodWorx of Buggs Island Virginia | Virginia's best fishing
>"A mind's a terrible thing to waste, provided you had one to start with"
>"There are 5 boxes to Freedom: Ballot, Witness, Jury, Soap & Cartridge"
>=-=
>--
>#=================#==#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#=================#==#
>|Visit my WWW site, it is like no other burt@rocketmail.com |
>#==#

4069. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5ir2ih$2ih@lana.zippo.com>
Source record: 95036

donrm@sr.hp.com (Don Montgomery) wrote:

>Anyone have any new ideas on lettering/labeling the panels of your home-
>brew projects?

I have a couple of methods that work pretty well, the simple one
first:

Design and print-out the label using a computer and a laser or inkjet
printer.
Using a do-it-yourself laminiating sheet, cover the label with clear
plastic. The material I use is called Cleer-Adheer, C-Line #65001,
from office supply stores.
To fasten the label to a panel use 3M transfer tape (the best way), or
3M Super 77 spray adhesive available from a hardware store.

A real neat way to do it is this:
Using a laser printer, print the label on "Toner Transfer System"
paper. This paper has a resin coating that is water soluble. I
believe Press and Peel Wet is the same thing. I bought this at a
local electronic parts store.
If you want color in your image, use the product Ibifoil from Ibico.
You can get this at office supply stores.
Next put several light coats of laquer over the printed image. Be
careful because the laquer solvent can dissolve the toner and cause it
to run.
After the laquer dries, soak the image in water. It will float off
just like a decal used for model airplanes.
Apply the decal and after it is fully dry, coat the panel with a light
coat of laquer.
Note: It may be necessary to apply a little musalige sp? glue to the
panel to make the decal stick. Using the glue dissolved from paper
shipping tape works well too.

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

4070. Re: Microwave ovens to transmitters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-13 00:00:00 UTC
From: Sir Robin <nexus15@flash.net>
Message-ID: <3351725A.B5E@flash.net>
Source record: 95037

```
Phil Owen wrote:
>
> Is a convertion from a microwave oven to a transmitter for Ham
> applications feasible? Can it be "Re-tuned"?
>
> It seems to me that if the frequency were tuned down a bit (I think
> the freq for wiggling water is ~2.1 GHz) and modulated somehow, a
> Tappan would make a dandy +100w transmitter.
>
> Phil...
>
> <><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
> From the mind | POwen@lynx.dac.neu.edu | Accept
> of | POwen@Edgewater.com | no
> Phil Owen | ~N1XLP~ | Substitutes!
> --------------------------------------------------------------------------
> Would you be prepared if gravity suddenly reversed itself?
> <><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
```

Check out RF Design magazine a few years ago. A ham did just that!

Rick W5RH

4071. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3352313a.216585@netnews.worldnet.att.net>
Source record: 94950
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Sat, 12 Apr 1997 09:44:06 GMT, keinanen@sci.fi (Paul Kein&#65533;nen)
wrote:

>However in the near field (usually much less than a wavelength from
>the _noise_ source), the relation between the electric and magnetic
>field is much more complex and depends of the type of the noise
>source. In this case you might benefit from antennas that pick up
>predominately either field.

Amen. Just because the noise is from an "electrical" appliance, or
because we like to call it "electrical" noise, it does not mean the
induction field area is E-field dominant.

And certainly in the far field there is no difference at all in any
case, and even in the induction field areas the effects of direct
coupling decrease very rapidly with distance.

There is no clear-cut distance where everything suddenly changes, but
in general the receiving antenna has to be "right on top" of the noise
source to have appreciable or dominant inductive field coupling.

>On LF and MF there can be benefits for using a magnetic loop, since
>there can be quite a lot of noise sources within the near field. On HF
>and VHF the near field is so small that there simply are not room for
>a lot of noise sources :-)

Then I'd spend some time cleaning up the area the antenna was in, or
move the antenna.

You can be sure ALL of the noise sources have radiation and electric
fields, right along with the magnetic fields. It's just a wild guess
to say a loop would be better.

If I place a small loop and a small amplified whip next to each other
on my bench, they receive with exactly the same S/N ratios. The
advantage of the loop is the null is more sharply defined, and it is
easier to null a single source.

If you analyze the loop carefully, you will find there is no
advantange to "shielding" a properly constructed antenna.
The electric field response always remains, there is no way to
eliminate it. The largest effect is the shield acts like the antenna,
and simply couples the e-field energy right into the inner windings.

If the antenna is improperly designed or constructed, and the system has poor common mode rejection, then a "shield " might help.

The stuff about creating an antenna that responds only to magnetic fields is a myth.

I agree if you could build an antenna that only responded to magnetic fields, you wouln't hear any noise. But you also wouldn't hear any signals with that antenna.

73 Tom

4072. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: freq@usaor.net
Message-ID: <3352A7C2.980@usaor.net>
Source record: 94951
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Burt Fisher wrote:
>
> FCC Expected to Unveil Plans For Two Airwave Auctions
>
> WASHINGTON -- Federal regulators are expected this week
> to set plans for two long-awaited auctions of valuable airwaves,
> including one for an emerging wireless technology that could bring new
> competition to the local-telephone and cable-television businesses.
>
> Wireless operators, long-distance phone companies, electric
> utilities and telecommunications entrepreneurs are eager to bid for
> licenses to use huge chunks of the amateur radio spectrum to transmit
> voices, pictures and data.
>
> Wireless Auction
>
> Up for grabs: Licenses to use most of the amateur radio
> megahertz of electromagnetic spectrum in each of nearly 500 markets
> nationwide. Repeater frequencies are much in demand by those with the
> following: Uses: Transmitting voices, pictures and data via small, flat
> antennas that can rest on a windowsill. Expected bidders: All sorts of
> telecommunications companies -- but Baby Bells and cable operators will
> be barred from bidding on licenses in their home territories.
>
> "While the auctions for PCS frequencies were very specific
> about how the frequencies could be used, rules governing LMDS usage are
> more liberal and for a bigger chunk of amateur radio bandwidth," said
> Michael Sprayberry, director ofwireless strategy for MCI Communications
> Corp.
>
>
> New Radio Service
>
> The auction rules have been delayed in recent weeks because FCC
> commissioners couldn't agree on what amateur radio spectrum would be
> available.
>
> The technology operates with small, flat antennas that
> communicate with larger antennas mounted on towers. It has tended to
> work poorly in heavy rains and fog, but industry officials say they are
> working to fix the problem. Operators also could run into resistance
> from cities that increasingly are blocking the construction of new
> antenna towers. However ham towers could be seized as the FCC has

> decided that the amateur radio service no longer serves the public
> necessity.
>
> #===============#===#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #===============#===#
> |Visit my WWW site, it is like no other burt@rocketmail.com |
> #===#

Bert,

It would have nice if you listed the frequencies re the above info.

Jim, N3BRS

4073. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: shearer@pluto.njcc.com
Message-ID: <33529291.7D30@pluto.njcc.com>
Source record: 94952
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

<snip>
> If you try to separate them with a Faraday shield, a counter EMF will
> be induced on the surface of the shield. This will reflect the EM wave
> just as a mirror reflects light (and for the same reason since light
> is just extremely high frequency RF). None of the field energy, either
> electric or magnetic, will pass inside the Faraday shield (assuming
> the shield possesses adequate skin depth to be called a Faraday
> shield at the frequency of interest).<snip>

what are the magnetic properties of light?

4074. Re: Longwire or Randomwire? (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: rickets@earthlink.net
Message-ID: <33524df7.1959570@news.earthlink.net>
Source record: 94953
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Sun, 13 Apr 1997 00:29:57 -0400, Steve <semann@nr.infi.net> wrote:

>As this is rec.radio.shortwave I was using the FCC definition of
>shortwave: 3-30 MHz. So the 486 MHz is a non sequitur. ;)
The FAQ for this newsgroup states that, contrary to what the name
implies, comments regarding reception of any frequency are acceptable.

dr

4075. Re: Lithium ion batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: San Rotter <rotter@postoffice.worldnet.att.net>
Message-ID: <5itrn7$gum@mtinsc03.worldnet.att.net>
Source record: 94954

Roy -

You might go to Benchmarq Microelectronics WEB page:

http://www.benchmarq.com

There are a number of other semiconductor companies that
have Lithium-Ion chargers i.e. Motorola, Sanyo, Maxim (MAX745)
http://www.maxim-ic.com, Shoreline Electronics Inc.
(408) 987-7733.

Generally the longer the time you take to charge a battery
the less demand on the charger and less destruction of the
battery occurs.

I think the best battery charger is Rich Measures design
in the September 1988 Ham Radio on page 18-21, titled "The
Weekender An Easy-To-Build NiCd Pulse Charger.

Regards,

San

w7el@teleport.com (Roy Lewallen) wrote:
>The rechargeable lithium ion battery pack for my notebook computer just
>went toes-up. The multi-chip smart charger circuitry seems to have gone
>west, but the battery capacity was pretty badly diminished before it went
>so it's not worthwhile for me to mess with. But I may be able to salvage
>some of the cells.
>
>Does anyone know the charging requirements for these beasties? Can a person
>get by at constant-current or constant-voltage charging, or are they fussy
>and require special charging circuitry like NiMH and rechargeable
>alkalines? I don't need an optimum method (since as they are, thery're no
>good to me anyway), but would like some general info if anyone has any.
>
>Thanks,
>
>Roy Lewallen, W7EL

4076. Re: MOTORLA UHF DUPLEXER & CAVITY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: Arthur Garabedian <westernmobiletel@worldnet.att.net>
Message-ID: <3352D789.4262@worldnet.att.net>
Source record: 94955
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Arthur Garabedian wrote:
>
> MOTOROLA (UHF DUPLEXERS) TFE6030-A (4 cavity notch) 10" X 5" X 1.2"
> with 3 BNC connectors, ant., trans., rec. $50
> Motorola TFE-6050-B Cavity filter, 3 section 5-1/2" X 2" X 2 1/4"
> with 2 ea. BNC cables. Motorola TFE 6050B. $20
> Regards, ARTHUR KC6KUK . . .

4077. L. Gumm, K0HFD's oscillator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: frussle@erols.com
Message-ID: <33718160.26072341@news.erols.com>
Source record: 94956

I saw this on Page 126 of the ARRL's publication: Solid State Design. A two transistor oscillator for 10 MHz. It used 2N3904 transistors (weird) and the author claimed very low phase noise.

I'd like to reproduce this circuit, but I'm stumped by some missing information: There is an output transformer with 3:1 marked under it. There is no other information about it, however. No core or winding information, no model number to cross reference, or anything of the sort. Could someone give me an idea of what I should put there?

Were the ferrite beads in the article anything special? Anyone know what kind they were?

Also the book mentioned that, due to avalanche voltages on the base, the life of the transistor would be shortened. Does anyone know by how much? Is this oscillator going to self destruct in a couple of minutes? Days? a Year?

Is there any other literature about this oscillator? My 1996 handbook mentioned 1977 as the year it was published. Can anyone point me to a reference?

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4078. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: "J. Mc Laughlin" <n8tt@tir.com>
Message-ID: <3352ECAD.183@tir.com>
Source record: 94957

'Grif' w. keith griffith wrote:
>
> Tom Bruhns wrote:
> >
> > Lou or Annette Hinshaw (aruder@pipeline.com) wrote:
> > : SHOW ME HOW TO PROTECT IT FROM THIEVES AND YOU GOT A DEAL.
> > : That was the original intent
> > Cheers,
> > Tom
> > tomb@lsid.hp.com
> snip/hack
>
> You might (Lou or Annette) check Don Lancasters books or home page for
> some interesting reading on how to control your property and the steps
> to develop and market it. It shouldn't be a really big deal to be able
> to devise a black box rf modulator/antenna, followed by an rx
> demodulator/antenna, and let the folks look at the spectrum with an
> analyzer while piping some music or audio in, and looking at the
> resultant demodulated audio out.,,, or even if you used a wire link, let
> them put a narrow bandpass filter at the freq of your choice in the data
> link and pump their audio thru the unit and look at the distortion
> figgures. At least, while not the definitive proof of function,,, it'd
> work good enough to get you in the door you're looking for.

Prior to a demonstration, have a good talk with your Patent Attorney. A
PA who has experience in the "art" will show you how to protect yourself
(to the extent that that can be done) and can advise on the engineering.

I talk to a number of inventors in a year's time - everyone was
concerned about theft. However, some inventions can not be protected,
some are not worth protecting, and a few are magic. The Patent Office
still has the right to receive a model of an invention. When an
invention looks like it is using magic, the Patent Office will want a
demo. I have helped two inventors with inventions that could have
sounded as if they used magic - the trick is to be sure to dispell that
notion in the patent application.

Books are fine, but a PA with whom you are comfortable is invaluable.

(Yes, I do use a good spell checker with my more important notes.)
Good luck! Mac

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4079. Toshiba S-AU31 PA module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: mda@cam-orl.co.uk
Message-ID: <5iu70r$18e@lyra.csx.cam.ac.uk>
Source record: 94958

```
--
Looking for specifications and pin-out of this device.
Can anyone help me with this?
-------------
Mike Addlesee
```

4080. Converting a 49 Mhz. transceiver into a 6 Meter transceiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: Patrick Cook <patcook@dimensional.com>
Message-ID: <Pine.SUN.3.95.970414195755.14366E-100000@nova.dimensional.com>
Source record: 94959
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc

Hi everyone:

I've been giving this some thought and I thought it would at least be worth considering. I'm BIG into QRP, but since I'm still a no-code techie, I thought I'd try doing a rather somewhat unique form of QRP.

I have a RS TRC-502 49 Mhz. transceiver that I'd like to convert into 6 meter FM simplex. Now given the band's most recent activity over the last year or two, coupled with the fact we are starting to get back up on the upside of the sunspot cycle, I thought I'd at least give it a try.

My problem is finding places that sell 6 meter conversion kits (with CTCSS tone board) and 6 meter crystals. Anyone have any ideas as to where I might go in order to get these parts???

My rationale for wanting the tone board is that here in the Denver area, 52.525 Mhz is now linked to a 440 Mhz. repeater that gets a fair amount of use, but the repeater is now PL'd.

Any ideas, useful tips and other such information would be greatly appreciated!! :-)

I look forward to your replies!! :-)

73's for now my friends!! :-)

Patrick Cook, KB0OXD
patcook@dimensional.com
kb0oxd@bbs.n0iak.ampr.org (DO NOT USE -- SYSTEM IS DOWN)
KB0OXD @ N0IAK.#NECO.CO.USA.N0AM (Packet -- DO NOT USE -- SYSTEM IS DOWN)
Denver, Colorado

4081. Re: Lithium ion batteries

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: Greg Preston <preston@rtp.ericsson.se>
Message-ID: <33525F57.5904@rtp.ericsson.se>
Source record: 94960

Roy Lewallen wrote:
>
> The rechargeable lithium ion battery pack for my notebook computer just
> went toes-up. The multi-chip smart charger circuitry seems to have gone
(SNIP)
> Does anyone know the charging requirements for these beasties? Can a person
> get by at constant-current or constant-voltage charging, or are they fussy
> and require special charging circuitry like NiMH and rechargeable

If anything, Li-ion batteries are MORE fussy than NiMH. What's worse is that they can catch fire or explode if not properly charged or discharged. Probably the best thing to do is contact the computer manufacturer...this may be a problem with their charge circuits and they may be open to replacing your laptop.

Not knowing what the rated current capacity is, it's hard to give advice. Generally don't charge at more than a 1.5C rate, keeping voltage constant also. Cells rated at 3.6v should be charged to 4.2v +0, -20mV for a full capacity charge. Again, don't pour too much current into the cell! If the cell is rated at, say, 850mA you will could safely charge it at 1.5A. If you remove the safety circuits from the pack you may be taking quite a risk with playing with these things. Please be careful.

GP
KF4BWQ

4082. Tejas RF Backpacker 2 Comments?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: Sir Robin <nexus15@flash.net>
Message-ID: <3351D556.100C@flash.net>
Source record: 94961

Just bought a Tejas RF Backpacker 2 at the Belton Ham Fest this week
end.

Any one have any comments on this QRP rig/kit?

Thanks...Rick....W5RH

4083. WTB: Heathkit Knobs and Manuals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: ekugrad@mindspring.com
Message-ID: <5irrnf$eva@camel7.mindspring.com>
Source record: 95038

I need some knobs for the Heathkit HR-10, HW-16 series radios.
Specificaly I need the AF-Gain, RF-Gain, etc size knobs. I need 2,
but will take what ever you have.

I also need an original manual for the HR-10 Receiver (will take an
HR-10B), and HG-10B VFO. I already have copies, so I am just looking
for originals if available.

Thanks and 73's

David

ekugrad@mindspring.com

4084. Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5is5fi$938@senator-bedfellow.MIT.EDU>
Source record: 95039
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <3348F09D.76EF@crpl.cedar-rapids.lib.ia.us> sabinw@crpl.cedar-rapids.lib.ia.us writes:
> Quantum mechanics "snow-jobs" are impressive (I guess) but do not
> contribute to this topic.

You missed the point. I could (with more justification) say 'Electromagnetic "snow-jobs" are impressive but do not contribute to this topic'.

I will spell it out. Just as one need not normally use the full power of quantum electrodynamics to accurately compute phenomena at radio frequencies (and indeed, one will be thoroughly confused), one need not use (or be confused by) the full power of Maxwell's equations to accurately compute electromagnetic phenomena on scales small compared with the wavelength.

The quasi-static approximation is widely used in engineering and physics. In this approximation, loops emit and respond to the magnetic field only. Dipoles emit and respond to the electric field only. Every time you draw an "inductor" or a "capacitor" in a schematic you are using this approximation. This approximation accurately yields the response of a *small* loop or dipole antenna to a passing electromagnetic wave, and accurately yields the interaction of a pair of small loops or a pair of small dipoles a short distance apart. In its simplest form it predicts that a small loop and a small dipole will not interact: if you take this to mean that the interaction is relatively small over a short distance you will be correct, but if you need the magnitude of the interaction you will need a more sophisticated approximation.

This approximation can, in fact, be seen as part of a formalism that provides *exact* solutions to Maxwell's equations in radiating systems. This is the theory of "multipole fields". In this formalism, the quasi-static terms are explicitly present, along with additional terms. Electric and magnetic phenomena are represented by separate terms. Multipole fields are not often used in engineering (mostly, engineers need workable approximations, not mathematically exact solutions of idealized problems), but they are extremely important to theoretical physicists (in no small part because they keep electric and magnetic phenomena properly separate).

> There is no such thing as a curl-free radio wave (noise or otherwise).

If I wanted to be this absurdly fussy, I could say that the plane wave solution you get from the source-free equations can never

occur in reality, since it has both electric and magnetic field
vectors transverse to the direction of propagation. Although this
is a perfectly valid solution to the equations, there is a theorem
that asserts that no antenna can radiate such a field. In practice, of
course, the plane wave solution is a perfectly reasonable approximation
of the field when one is far from the radiator. The radial fields
are insignificant, although theory insists that they must be present.

There are many practical situations in which the curl is insignificant,
and may be ignored. In the topic in question, the fields are not
"radio waves", but quasi-static fields very close to an EMI source.

> Loop antennas can be analyzed from the standpoint of electric fields or
> magnetic fields and there is absolutely no difference.

We agree. However, there's a huge difference between a loop (responds
to curl E) and a dipole (responds to E itself). In some situations
this can yield very different behavior.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4085. Mechanical filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <3351A220.3DEA153A@tri.net>
Source record: 95040

This really is a question for Sabin, but I seem to have lost his address and thought I might stir some discussion up anyway.

I'm building a new 160 RX as an alternate to the old one with a 9 MHz IF. This time I'm going to use one of the Collins Torsional Mechanical Filters at 455 KHz as a roofing filter for a DSP rear-end using the Analog Devices evaluation board. A real chance to learn something (I hope). The SSB filter is $91.60 in singles.

The specs on this filter have a good intercept point of 20 - 40 dBm. Apparently they corrected some early problem with the internal transducers on other models that resulted in a lower IP on those models.

Question: I have a couple of PN 526 9700 040 filters, BW 3.1 KHz with CF 253 KHz which I could use with tighter RF filtering. Any guesses as to intermod specs on these?

BTW: The older automobile radios used this IF and late night BC band DXing was a pleasure on long road trips. Clear channel stations were really on clear channels!

N0UU

4086. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: la8ak <la8ak@online.no>
Message-ID: <3351ACB5.7165@online.no>
Source record: 95041

hi
you mention class AB2, I have never seen any references to AB1 and AB2
for transistors. I was told that this refers only to valves (tubes), am
I wrong? Anything I did not know?
73 de jan-martin
--

OPR.
Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS, Norway
Packet: LA8AK@LA9K.KRS.K.NOR.EU EU/Loc DS80b (JO38)
Tel.:+47-380-87178

Main interests: Homebrew equipment, CW/SSB UHF/SHF DX, Dancing

4087. FS: Yaesu FT-747GX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: kf4kjf@post1.com
Message-ID: <335eb7a3.59713516@news.icanect.net>
Source record: 95042
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi All,

I have a Yaesu FT-747GX to sell. Covers .5-30 mz. Its "as new" in the box not a single mark on it. I have decided on a DX-70 or IC-706. I would like to get $500.

.-.
/ \ .-. .-.
/ \ / \ .-. / \
/_Benjamin_Blavat_KF4KJF_kfkjf@post1.com
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4088. Re: WTD: Right angle drives

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1404970155520001@news.vcnet.com>
Source record: 95043

In article <33468566.2531@wolfenet.com>, jat@wolfenet.com wrote:

> I need two right angle drives for controls in a linear project I
> am working on. Anyone have them?
>
> Andy W7CXA
> jat@wolfenet.com

Right-angle drives for vertically mounting vacuum variable capacitors, et cetera: Multronics-Cardwell @ 516-957-7200, 80 East Montauk Highway, Lindenhurst, Long Island, N.Y. 11757.

The Cardwell rt. angle drive replaces the Jennings vac. variable 1/4-23 drive shaft collet. Be sure to set the vac. variable C to min. C before removing the collet.

--
--Rich-- --, ag6k-805-386-3734

4089. Re: tube socket wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1404970159090001@news.vcnet.com>
Source record: 95044

In article <01bc41d3$1c10cfe0$3ffb74c3@default>, "W.Piesiewicz"
<sp5abl@free.polbox.pl> wrote:

> I looking for tube socket for 4cx1000 or 4cx1500. Where to buy it? Second
> hand one is ok also.

Alan Emerald 714-964-3912 may have one.

--
--Rich-- --, ag6k-805-386-3734

4090. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: Jan Axing <janax@li.icl.se>
Message-ID: <3351F12B.3F1E@li.icl.se>
Source record: 95045

la8ak wrote:
>
> hi
> you mention class AB2, I have never seen any references to AB1 and AB2
> for transistors. I was told that this refers only to valves (tubes), am
> I wrong? Anything I did not know?

No, it's still valid. Tubes running in AB without or with grid current
are
AB1 and AB2 a usual. In the semiconductor world, it's AB and nothing
else.
It was something he didn't know.
Has someone seen a transistor draw grid current? :-)
--
Jan, SM5GNN
Linkoeping, Sweden
janax@algonet.se
janax@li.icl.se

4091. Re: Mechanical filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33522CAF.359C@crpl.cedar-rapids.lib.ia.us>
Source record: 95046

Lawrence Stoskopf wrote:
>
> This really is a question for Sabin, but I seem to have lost his address
> and thought I might stir some discussion up anyway.
>
> Question: I have a couple of PN 526 9700 040 filters, BW 3.1 KHz with
> CF 253 KHz which I could use with tighter RF filtering. Any guesses as
> to intermod specs on these?
>

I don't have that info myself, but a call to:

Rockwell Filter Products
2990 Airway Ave
Costa Mesa CA 92626
Phone 714-641-5311

Should get the info. Yes, early problems with transducers have been
fixed since the early 1970's. Your filter may be one of the later ones,
but I do not have any catalogs.

Bill W0IYH

4092. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: Ted <ted@GetOutOfSpamFree.Card>
Message-ID: <Pine.BSF.3.91.970414045046.11379K-100000@prog1.caprica.com>
Source record: 95047
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
[1]-----------------------------------------------------+
| My domain-name in the address header is bogus! This |
| is to defeat those junk-email robots in newsgroups. |
| To send me email, you MUST change the "To:" header! |
| My correct email address to use is: ted@caprica.com |
| When replying, do so between points, point-by-point, |
| not all bunched together & delete any excess quotes. |
+-----------------------------------------------------+

On Sun, 13 Apr 1997, Burt Fisher wrote:

>
> FCC Expected to Unveil Plans For Two Airwave Auctions
>
> WASHINGTON -- Federal regulators are expected this week
> to set plans for two long-awaited auctions of valuable airwaves,
> including one for an emerging wireless technology that could bring new
> competition to the local-telephone and cable-television businesses.

Your entire post smacks of the same total lack of credibility as the
infamous "Modem Tax" balogna... and for a very good reason...

You sited NO exact documents or published articles as sources,(with the
date of publication). Come back when you can and we'll take you more
seriously.

Ted (ted@caprica.com)

[2]-----------------------------------------------------+
| My Email is neither a newsgroup or a public forum! |
| I do NOT want any advertizing via Email. Who ever |
| sends unsolicited advertizing via Email is risking |
| cancelation of internet service without refund and |
| possible prosecution for harrassment and/or fraud! |
| Any email replies from newsgroups might be replied |
| to publicly in the newsgroup/s it originated from. |
+---------------------------+---------------------------+
|
[3]------------------------+---------------------------+
| My webpage contains many interesting URL's to try! |
| Webpage: http://www.caprica.com/~ted/main.html |
| Lots of free interesting info & NO junk-mail robot! |
+---------------------------+---------------------------+
|
[4]------------------------+---------------------------+
```

```
| Come browse the free Taral Hicks Fan Club Webpage! |
| It's at: http://www.caprica.com/~ted/taralfan.html |
+----------------------------+----------------------------+
|
[5]-------------------------+----------------------------+
| Don't even bother griping about my signature file. |
| Gripes about my sig file ARE "unwanted email" and |
| can ONLY get you a harsh reply, but NEVER a change. |
| Add me to your killfile, jump to the next message, |
| flip the page or just ignore the sig file content, |
| but have the maturity not to whine like a big baby. |
+-----------------------------------------------------+
```

4093. FS: Kenwood TS-520/S/SE power transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5ita4k$68j@sf18.dseg.ti.com>
Source record: 95048
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

For Sale:

Used power transformer for Kenwood TS-520/S/SE transceiver.

I bought it from a Kenwood service center in Dallas, but it turned out
that I didn't need it after all. It's in clean, in good shape, and is
ready to install in your rig.

This would also be a great transformer for a p/s for your homebrew
200 Watt class transmitter! The high B+, when voltage-doubled with
100 uF over 100 uF, is 950 VDC (no load). There are also low B+
windings that give about 300 VDC, 200 VDC, 100 VDC, and a negative
bias supply. Filament supply is 12.6 VAC. Primary is 115/230 VAC.
It was designed to power a 12BY7A and two 6146s, plus the 12 VDC
of the rest of the transceiver.

It may also work in the TS-820/S but I'm not sure about this.

Price is $60 (exactly what I paid for it) plus shipping from 762xx.
I'm told that brand new ones are $125 each (if still available).

Email me if you're interested in this nice transformer.

73,
Dean K5DH

4094. HEATHKIT:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-14 00:00:00 UTC
From: snider96@aol.com
Message-ID: <19970414131301.JAA08456@ladder01.news.aol.com>
Source record: 95049

Need a 12 volt dc/dc power supply(kit or built) for a HA 14. Thanks

4095. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5iumjr$760@camel2.mindspring.com>
Source record: 94962

jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote:

>The article regarding using an oscilloscope CRT for lightening detection
>lead me to write the author and ask if a TV set CRT could also be used.
>He said yes, the deflection coils would go to N-S and E-W oriented
>dipoles. Well this now leads me to ask, can one use a TV as an oscil-
>loscope? It certainly would be crude but it might be fun to convert
>and use, just the same.
>Jeff KH2PZ / KH6
the answer is yes; there are many articles in old ham mags.
73 de WB0NRU

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

4096. Re: need design for 2m amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5iumk0$760@camel2.mindspring.com>
Source record: 94963

skramer290@aol.com (SKramer290) wrote:

>looking for a design for hi output amps for 2m and hf tubs are fine

Look in the back of any old tube manual. My Sylvania, GE, RCA
all have them. Had them, I mean, cinse I gave the Syl away.

Good luck.

Lou WB0NRU

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

4097. Re: Using a TV set as an oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5iumju$760@camel2.mindspring.com>
Source record: 94964

"Christopher Cox" <cobox@netexp.net> wrote:

>You can do it, just splice into the Vertical Amp. DO NOT PLAY WITH THE
>HORIZONTAL. Televisions use the horizontal for their High Voltage
>circuitry. You can smoke it in a hurry.

>Regards

>Christopher Cox
>KC8FRJ
>TRA#4901

>Jeffrey Herman <jeffreyh@Hawaii.Edu> wrote in article
><5i7423$bpj@news.Hawaii.Edu>...
>> The article regarding using an oscilloscope CRT for lightening detection
>> lead me to write the author and ask if a TV set CRT could also be used.
>> He said yes, the deflection coils would go to N-S and E-W oriented
>> dipoles. Well this now leads me to ask, can one use a TV as an oscil-
>> loscope? It certainly would be crude but it might be fun to convert
>> and use, just the same.
>> Jeff KH2PZ / KH6
>>
Your biggest prob will be the naysayers in the world. Of course this
applies to anything. Let me ask: do you have access to an old sweep
generator? With schematics?

You can feed your signal into splitters, sweeps, amps, dividers,
digital circuits of all sorts and have the stuff show up on the screen
any way you wish.

And you don't need to alter thescreen at all.

use an old VIC-20, and feed into its circs and have even more
possibilities. Look it up.

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

4098. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: "Marc H. Popek" <LVMarc@worldnet.att.net>
Message-ID: <01bc4958$77df3dc0$84ee93cf@162137421worldnet.att.net>
Source record: 94965
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Dont forget the FM

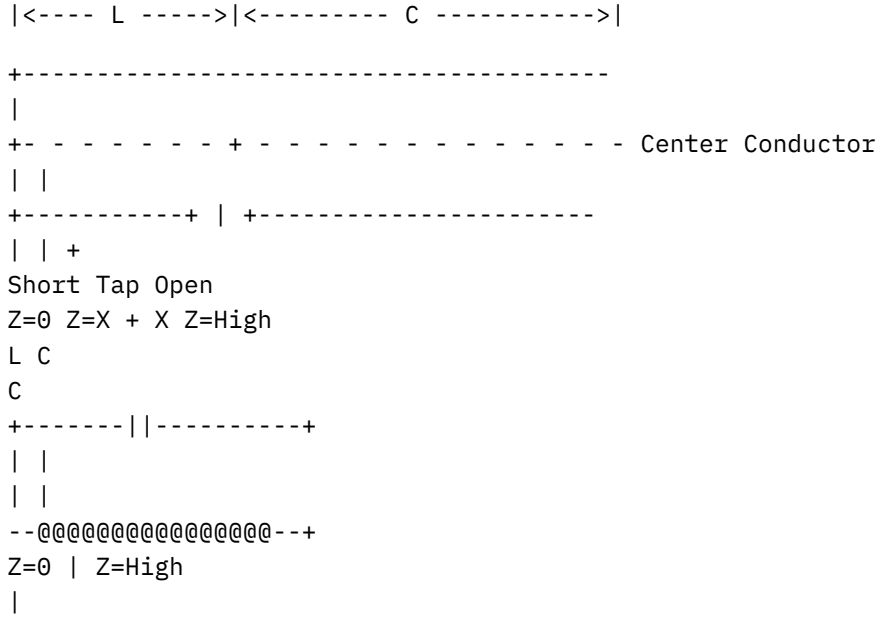
Joseph A. Legris <jlegris@sympatico.ca> wrote in article
<33504BBA.41B8@sympatico.ca>...
> Roy Lewallen wrote:
>
>
> > Neither of these solutions accounts for the coupling between the lower
and
> > upper parts of the resonator. I don't have a ready solution, but I
don't
> > think two transmission lines in series with the tap between will be an
> > accurate representation either.
> >
> > Roy Lewallen
>
> Forgive my ignorance, but aside from the waves flowing up and down the
> line (in the ideal case) is there any other coupling between the
> transmission lines?
>

4099. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Paul Graham <paulg@imaxx.net>
Message-ID: <335331D1.76B8@imaxx.net>
Source record: 94966
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Brad Moersfelder wrote:
>
> What happens when you tap, ie. make a direct connection to the center
> conductor of a quarter wave coaxial resonator? How do you model
> the result in PSPICE given a transmission line element? Would
> the tap be just an ideal transformer? If so, how would you
> determine the turns ratio from the physical tap location?
>
> Thanks for considering these questions.
> Brad

A couple of pictures are worth a gazillion words. The two following
circuits are equivilent:



You're on you own from here.

Paul - K9ERG

4100. Re: Vacuum variable capacitor source?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Paul Graham <paulg@imaxx.net>
Message-ID: <33532B91.7B38@imaxx.net>
Source record: 94967

Bill Schaff wrote:
>
> I need to purchase a vacuum variable cap (5-500pF) from a vendor that
> accepts purchase orders. Any ides?

Try Surplus Sales of Nebraska. They have been quite sucessful if
helping me locate various strange and wonderful items in the past.

http://www.surplussales.com/

73, Paul - - K9ERG

4101. Re: Drawing Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Bjorn Soederholm <sm2gxn.soederholm@boden.mail.telia.com>
Message-ID: <335329F2.7D08@boden.mail.telia.com>
Source record: 94968

Paul Taylor wrote:
>
> In article <19970406062301.BAA03684@ladder01.news.aol.com>,
> bcspain@aol.com (BCSpain) wrote:
> >Dale Martin wrote:
> >>
> >> This may be an old question, so my apologies upfront.....
> >>
> >> Does anyone have any recommendations for software for creating
> >> schematics and wiring diagrams? I have tried a couple of low-end
> >> programs and found them too labor intensive and not really
> suitable.
> >>
> >> I'd appreciate anyone's suggestions, recommendations, and/or ideas.
> >>
> >> Thanks in advance.
> >>
> >> 73,
> >> --
> >> Dale Martin
> >> kg5u@hal-pc.org
> >> http://www.hal-pc.org/~kg5u
>
> NTE is a company known mainly for replacement semiconductors. They are
> also now marketing PCB and schematic Windows software for $99 per
> package. Thes packages have a 320-pin limit, but are upgradeable, for
> a price of course.
> Paul Taylor

How about IVEX? It is an shareware with 100 pin limit with excellent
libraries.
i've used it my self, i think it is one of the easiest draw and pcb
program i've tested.
have a look at http://www.ivex.com
There is a 200 pin version costing around $30.

73
Bjorn/sm2gxn

4102. HTX-100 manual and mic pin out needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: ko4qc <ko4qc@concentric.net>
Message-ID: <33534F52.4766@concentric.net>
Source record: 94969
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.dx

```
If you can help me obtain one or both of the above,I will gladly
reimburse any copy,postage etc expenses.
TNX
Joel KO4QC
```

4103. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: tgold@microvst.demon.co.uk
Message-ID: <861099718snz@microvst.demon.co.uk>
Source record: 94970
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <3352A7C2.980@usaor.net> freq@usaor.net writes:

> Burt Fisher wrote:

> > antenna towers. However ham towers could be seized as the FCC has
> > decided that the amateur radio service no longer serves the public
> > necessity.

> It would have nice if you listed the frequencies re the above info.

Serves the public necessity? This stuff must be straight from the
pen of someone who teaches illiteracy in the public education system.

Jim, you must be very new around here to take anything written by
Fisher as more than just drivel from a sad person who is desperate
for attention. Get a newsreader with killfile for a better signal to
noise ratio and for happy enjoyment of these newsgroups.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

4104. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: bboone@mindspring.com
Message-ID: <5iumsd$3gu@camel4.mindspring.com>
Source record: 94971
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

freq@usaor.net wrote:
: Burt Fisher wrote:
: >
: > FCC Expected to Unveil Plans For Two Airwave Auctions
: >
: > WASHINGTON -- Federal regulators are expected this week
: > to set plans for two long-awaited auctions of valuable airwaves,
: > including one for an emerging wireless technology that could bring new
: > competition to the local-telephone and cable-television businesses.
: >
: > Wireless operators, long-distance phone companies, electric
: > utilities and telecommunications entrepreneurs are eager to bid for
: > licenses to use huge chunks of the amateur radio spectrum to transmit
: > voices, pictures and data.
: > decided that the amateur radio service no longer serves the public
: > necessity.
: > <stuff deleted>
: > #================#===#
: > | Burt Fisher | Teacher of video, broadcasting and electronics |
: > | Amateur call | South Dennis, Ma. (Cape Cod) |
: > | K1OIK | http://www.geocities.com/WallStreet/5169 |
: > #================#===#
: > |Visit my WWW site, it is like no other burt@rocketmail.com |
: > #===#

: Bert,

: It would have nice if you listed the frequencies re the above info.

: Jim, N3BRS

It would also be nice if he listed the SOURCE. Nice troll Bert, but no one
has taken the bait :)

4105. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Jimxyn <jim.N8XYN@worldnet.att.net>
Message-ID: <33535DE8.537F@worldnet.att.net>
Source record: 94972
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Burt Fisher wrote:
>
> It has become evident that the ex-service now hobby is done:
> Stick a fork in it!
>
> It serves no one that cellular doesn't.
> We are not unique, look around. Everyone has radios, phones.
>
> Most operators are tunnel-visioned, goat-headed people. They think that
> the license, the code or the younger thinkers are the problem:
>
> I contend it has been the ARRL, NTS and the volunteer exam/incentive
> licensing that has did it in. To many "elite" people who must complain
> when someone says what they want to say or operate as they want. I once
> thought packet radio might go somewhere but we never got over 1200 baud.
>
> Now if the fact that cell phones were allowed in the Olympic venues
> but ham radios were not doesn't show you something, listen to a voice
> traffic net like the Indiana Traffic/DewDrop/Mushroom Cloud Spotting net
> some afternoon. NTS needs to tie up a radio frequency to handle fake
> messages for people who are too lazy to pick up the phone or mail a
> letter to mom wishing her happy birthday. Give me a break! They even
> pass phone numbers of recipients AND NOW even E-MAIL ADDRESSES!!!A JOKE!
> Right?
>
> I am just waiting till all the VHF spectrum is gone, along with most
> of the HF spectrum. Then we will all be CBers, like many elite hams
> call others in order to degrade an opinion they can't stand to debate.
>
> Structure, as per ARRL, has not kept up with the purpose of the
> "service"
> That service used to be needed, now we are "bookmarks"for other wireless
> services. The latest band gone is 2300 MHz for wireless internet, not
> for packet, which should have pushed been years ago, along with:
>
> 902-928 GONE well "shared" by every device that would hear hams! Lesson?
> 220-222 GONE
> 144-148 soon to be gone
> 222-225 soon to be gone
> 430-450 soon to be gone
>
> Do you get the picture?
> Maybe I drew one for you...

```
>
> --
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
> CJ Crosby - KA2RAF/4 - rafman@kerrlake.com | Buggs Island Lake:
> The BuckHorn WoodWorx of Buggs Island Virginia | Virginia's best fishing
> "A mind's a terrible thing to waste, provided you had one to start with"
> "There are 5 boxes to Freedom: Ballot, Witness, Jury, Soap & Cartridge"
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
> --
> #================#====================================================#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#====================================================#
> |Visit my WWW site, it is like no other burt@rocketmail.com |
> #=====================================================================#
```

ha..ha..ha..ha..in the event of a national disaster please dial 0 for help! Nah! you'll Always need a pool of people who could put their gear back togather and get on the air. If an Earthquake hit I'd be on the air, all the local cell sites would be down! Did you see "Independence day" ? Hams are pretty much self contained units. We dont need the NETWORK....N8XYN

4106. Hambrew Mag.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: 71173.1572@CompuServe.COM
Message-ID: <970415113752_71173.1572_DHB29-1@CompuServe.COM>
Source record: 94973

Does anyone know how I can reach Hambrew Mag., if they are still publishing? I have tried the url that most internet links refer to and it is no longer valid.

Thanks,

Boliver Allmon
KC5PCS

4107. Professional and Affordable Web Design and Hosting

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Kris Thompson <thomp132@expressionsmedia.com>
Message-ID: <5ivqja$9h8$6825@msunews.cl.msu.edu>
Source record: 94974

Welcome to Expressions Multimedia...

We would like to extend an invitation to visit us at http://www.expressionsmedia.com.

We specialize in providing professional yet inexpensive web page designs and web site hosting.

Please be forwarned, many of our sites include ActiveX and Java and are optimized for Internet
Explorer 3.0, so they many not look right in some browsers.

Also, check out our newest site for the Blue Cardinal Motorsport racing team, they can be found
at http://www.expressionsmedia.com/bluecard.

I would like to thank you for your time,

Kris Thompson
thomp132@expressionsmedia.com

4108. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Dan <newbyd@omniview.com>
Message-ID: <33537798.6AEE@omniview.com>
Source record: 94975
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Burt,

You must not ever listen, always have your mouth running. You can't
learn anything in that mode.
Didn't you see any of the news reports on the Oklahoma bombing. Even the
news media new that the first emergency communications was handled by
Ham Radio operators.

Dan Newby
WD4LUR

Burt Fisher wrote:
>
> It has become evident that the ex-service now hobby is done:
> Stick a fork in it!
>
> It serves no one that cellular doesn't.
> We are not unique, look around. Everyone has radios, phones.
>
> Most operators are tunnel-visioned, goat-headed people. They think that
> the license, the code or the younger thinkers are the problem:
>
> I contend it has been the ARRL, NTS and the volunteer exam/incentive
> licensing that has did it in. To many "elite" people who must complain
> when someone says what they want to say or operate as they want. I once
> thought packet radio might go somewhere but we never got over 1200 baud.
>
> Now if the fact that cell phones were allowed in the Olympic venues
> but ham radios were not doesn't show you something, listen to a voice
> traffic net like the Indiana Traffic/DewDrop/Mushroom Cloud Spotting net
> some afternoon. NTS needs to tie up a radio frequency to handle fake
> messages for people who are too lazy to pick up the phone or mail a
> letter to mom wishing her happy birthday. Give me a break! They even
> pass phone numbers of recipients AND NOW even E-MAIL ADDRESSES!!!A JOKE!
> Right?
>
> I am just waiting till all the VHF spectrum is gone, along with most
> of the HF spectrum. Then we will all be CBers, like many elite hams
> call others in order to degrade an opinion they can't stand to debate.
>
> Structure, as per ARRL, has not kept up with the purpose of the
> "service"
> That service used to be needed, now we are "bookmarks"for other wireless
> services. The latest band gone is 2300 MHz for wireless internet, not

```
> for packet, which should have pushed been years ago, along with:
>
> 902-928 GONE well "shared" by every device that would hear hams! Lesson?
> 220-222 GONE
> 144-148 soon to be gone
> 222-225 soon to be gone
> 430-450 soon to be gone
>
> Do you get the picture?
> Maybe I drew one for you...
>
> --
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
> CJ Crosby - KA2RAF/4 - rafman@kerrlake.com | Buggs Island Lake:
> The BuckHorn WoodWorx of Buggs Island Virginia | Virginia's best fishing
> "A mind's a terrible thing to waste, provided you had one to start with"
> "There are 5 boxes to Freedom: Ballot, Witness, Jury, Soap & Cartridge"
> =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
> --
> #================#====================================================#
> | Burt Fisher | Teacher of video, broadcasting and electronics |
> | Amateur call | South Dennis, Ma. (Cape Cod) |
> | K1OIK | http://www.geocities.com/WallStreet/5169 |
> #================#====================================================#
> |Visit my WWW site, it is like no other burt@rocketmail.com |
> #=====================================================================#
```

4109. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33523f0a.3752415@netnews.worldnet.att.net>
Source record: 94976

On Mon, 14 Apr 1997 10:56:11 +0200, Jan Axing <janax@li.icl.se> wrote:

>la8ak wrote:
>>
>> hi
>> you mention class AB2, I have never seen any references to AB1 and AB2
>> for transistors. I was told that this refers only to valves (tubes), am
>> I wrong? Anything I did not know?
>
>No, it's still valid. Tubes running in AB without or with grid current
>are
>AB1 and AB2 a usual. In the semiconductor world, it's AB and nothing
>else.
>It was something he didn't know.

>Has someone seen a transistor draw grid current? :-)

I get a chuckle out of advertisements that say they have a transistor
PA that is AB1 or AB2.

I wonder how on earth you get a transistor to not draw, or draw, grid
(or base) current!!!!

Indeed all solid state amps are neither AB1 or AB2.

They are AB.

In QST there is a new class E amp. It is a MOSFET in class C, with a
third harmonic trap in the gate.

RCA did this in the 50's with broadcast transmitters, and acheived
90% efficiency. It was called a class C PA, but I forgot who the
credit went to back then.

In the 70's it was "re-invented" and called class E.

73 Tom

4110. Sunglasses for CCD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Michael Berg <mikeberg@midstate.tds.net>
Message-ID: <335384C2.2683@midstate.tds.net>
Source record: 94977

I'm using a micro CCD camera board as a "tower cam" at my QTH and was
having a hard time getting a decent picture due to excessive light.
As an experiment, I had an optical shop make up a non prescription
photogrey saftey lens ($50). It's sized to fit the enclosure I've
mounted the camera in (2" PVC vacuum tubing) and works quite well.
73 Mike
--
>~~~~~~~~~~~~~~~~~~~~~~~~~~~<Mike Berg a.k.a. N0QBH
I oscillate - Therefore I am.
>~~~~~~~~~~~~~~~~~~~~~~~~~~~<

4111. FS: HEATHKIT HW-9A

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Uwe Cappeller <cappelle@mailer.uni.marburg.de>
Message-ID: <5ivrajplj2@surz03fi.HRZ.Uni-Marburg.DE>
Source record: 94978

Hello to all,

a friend of me sales a Heathkit HW-9A. The trvr is like new!
For more info call:

06421/870216
dx 496421/870216

73 de Uwe

4112. Re: Using A TV AS An Oscilloscope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: d.NOrdquest@juno.COM
Message-ID: <19970415.062548.4303.2.d.nordquest@juno.com>
Source record: 94979

A very simple circuit which requires no connections to the TV set may be found in Popular Electronics for Sept. 1982 and is by Larry Reagan. As Reagan describes the operation of the circuit: "The TV Scope detects the flyback pulses and synchronizes its operation to them. It then generates a controlled noise pulse. This noise rides right through the TV tuner without using an r-f carrier (just like the EMI from the vacuum cleaner.)" The audio signal being observed modulates the vertical (not horizontal) trace, apparently by affecting when the noise pulse is emitted.

Anyway, the circuit works pretty well and you soon get used to the vertical trace.

Dave KE9ED

4113. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Bart Berg <bberg@uslink.net>
Message-ID: <3353822B.145D@uslink.net>
Source record: 94980

I wonder if you could "drain modulate" the Class E amp shown in May 97 QST p 39?

Bart K8IRC

4114. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Jim Conn <jconn@gte.net>
Message-ID: <5j01cv$ph0$1@news2.gte.net>
Source record: 94981

Tom Rauch wrote:
>
> On Mon, 14 Apr 1997 10:56:11 +0200, Jan Axing <janax@li.icl.se> wrote:
>
> >la8ak wrote:
> >>
> >> hi
> >> you mention class AB2, I have never seen any references to AB1 and AB2
> >> for transistors. I was told that this refers only to valves (tubes), am
> >> I wrong? Anything I did not know?
> >>
> >No, it's still valid. Tubes running in AB without or with grid current
> >are
> >AB1 and AB2 a usual. In the semiconductor world, it's AB and nothing
> >else.
> >It was something he didn't know.
>
> >Has someone seen a transistor draw grid current? :-)
>
> I get a chuckle out of advertisements that say they have a transistor
> PA that is AB1 or AB2.
>
> I wonder how on earth you get a transistor to not draw, or draw, grid
> (or base) current!!!!
>
> Indeed all solid state amps are neither AB1 or AB2.
>
> They are AB.
>
> In QST there is a new class E amp. It is a MOSFET in class C, with a
> third harmonic trap in the gate.
>
> RCA did this in the 50's with broadcast transmitters, and acheived
> 90% efficiency. It was called a class C PA, but I forgot who the
> credit went to back then.
>
> In the 70's it was "re-invented" and called class E.
>
> 73 Tom

Hi Tom,

I read the article with interest in the latest QST. I'd be interested to hear what your opinions are relative to the pro's and con's of the "Class E" amplifier for ham use.

Thanks,
Jim - AD4VL

4115. Re: Toshiba S-AU31 PA module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Mark Smith <ocmls@lucent.com>
Message-ID: <335389C2.EAF@lucent.com>
Source record: 94982

Mike Addlesee wrote:
>
> --
> Looking for specifications and pin-out of this device.
> Can anyone help me with this?
> -------------
> Mike Addlesee

Mike,

I found the device S-AU3 on Toshiba's site. If you have the Adobe
Acrobat Reader check out the datasheet at:

http://www.toshiba.com/taec/components/Datasheet/S-AU3DS.pdf

Not sure if the S-AU3 datasheet is sufficient, but below are a few of
the specs:
Freq. Range: 430-450 MHz
Output Power: 10-15W
Power Gain: 18.1-18.7dB
50 ohm impedance
DC Supply: 16V for VCC and Vcon
RF Input: 300mW

Pin-1. RF input
pin-2 V1 Vcon
pin-3 V2 Vcc
pin-4 RF output
pin-5 Ground (flange)

Mark Smith - KI5MV
ocmls@lucent.com

4116. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33523fb3.3921787@netnews.worldnet.att.net>
Source record: 94983
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Sun, 13 Apr 1997 05:45:10 GMT, archer@netgate.net (Ross Archer)
wrote:

>All the sophisticated theoretical discussions this thread has created
>in terms of magnetic vs. electrical fields and the nature and
>propagation of RFI notwithstanding (interesting though it is!), I've
>discovered that a vertical whip (a 2m band short rubber duckie for ham
>radio no less(!)) feeding a one-transistor amp and stuck in my window
>does a reasonable job of killing the computer hash. Perhaps a
>magnetic-mode antenna would work better, or perhaps it would work
>worse, but I think either will work fine if you put enough distance
>between antenna and computer. :-)

My experiences parallel yours.

With antenna's just a few feet from the house, a short whip is as
quiet as the loop.

It makes little or no difference at all if I use a whip or a loop in
S/N ratio, unless there is one point source of noise I can null with
the loop.

I've NEVER measured any difference at all by adding a "shield" to any
loop.

The clearest advantage is to MOVE the antenna away from the noise
source.

73 Tom

4117. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <33538ad0.1648079@news.airmail.net>
Source record: 94984

On Tue, 15 Apr 1997 12:56:57 GMT, W8JItom@worldnet.att.net (Tom Rauch) wrote:
>In QST there is a new class E amp. It is a MOSFET in class C, with a
>third harmonic trap in the gate.
>RCA did this in the 50's with broadcast transmitters, and acheived
>90% efficiency. It was called a class C PA, but I forgot who the
>credit went to back then.

Tyler (of Marconi) wrote the paper we all use in 1948 and published it in IRE. When you read it you'll find Tyler was interested in improving the second harmonic return--where the efficiency comes from--and he did it with 3rd harmonic traps

>In the 70's it was "re-invented" and called class E.

It was used all through the 60's at Gates in the BC-5H, BC-10H, and VP-50 transmitters. When PDM came along, the MW-50, VP-100, MW-5 and MW-10 all used Tyler circuits. We called them Class D, not Class E. Technically Class D is a misnomer since it's really switching service. But it adequately described the intent of the circuit and the result.

You can find a similar circuit in the Continental Electronics Screen-Impedance Modulated Doherty amplifiers. The screen bypass of the carrier tube is parallel resonated to the third harmonic. This also improved the efficiency significantly.

Just so we leave no stone unturned, you normally see the Tyler circuit implemented using parallel-resonant thrid-harmonic resonators in the grid and anode leads. We did have one 250 KW transmitter here once that was too efficient. It's sister (on another frequency) operated quite normally. But this one transmitter's efficiency was so high we started questioning the metering. At that power level you don't check the load and input metering in a few minutes; it took a week. Turned out the metering was right. And the reason was a nice series resonance at the third harmonic from the carrier tube anode to ground. This low-impedance at the third harmonic worked just as well as a parallel resonant circuit in improving the PA efficiency.

[Lovely you say; not exactly. Unless the Carrier and Peak tube efficiencies are somewhere near the same value the crossover distortion gets out of hand. We had to kill the third-harmonic resonance to get reasonable performance data.]

And that's the news from Lake Woebegone.

Fred, W8OY
JFRILEY@AIRMAIL.NET

FREDWA8AJN@AOL.COM

4118. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: subs@ro.com
Message-ID: <3353164c.92920718@news.ro.com>
Source record: 94985
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 13 Apr 1997 07:13:50 -0400, Burt Fisher
<burtfisher@geocities.com> wrote:

>FCC Expected to Unveil Plans For Two Airwave Auctions

Useless drivell snipped.....

Burt, your as full of crap as a Christmas turkey.

4119. Re: Toshiba S-AU31 PA module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Mark Smith <ocmls@lucent.com>
Message-ID: <33538CFD.5220@lucent.com>
Source record: 94986

Mark Smith wrote:
>
> Mike Addlesee wrote:
> >
> > --
> > Looking for specifications and pin-out of this device.
> > Can anyone help me with this?
> > -------------
> > Mike Addlesee
>
> Mike,
>
> I found the device S-AU3 on Toshiba's site. If you have the Adobe
> Acrobat Reader check out the datasheet at:
>
> http://www.toshiba.com/taec/components/Datasheet/S-AU3DS.pdf
>
> Not sure if the S-AU3 datasheet is sufficient, but below are a few of
> the specs:
> Freq. Range: 430-450 MHz
> Output Power: 10-15W
> Power Gain: 18.1-18.7dB
> 50 ohm impedance
> DC Supply: 16V for VCC and Vcon
> RF Input: 300mW
>
> Pin-1. RF input
> pin-2 V1 Vcon
> pin-3 V2 Vcc
> pin-4 RF output
> pin-5 Ground (flange)
>
> Mark Smith - KI5MV
> ocmls@lucent.com

The S-AU3 is for FM only. The S-AU4 will work in FM & SSB. The gain is
19.2 - 20dB and the Output Power is 17-20W.

Mark Smith - KI5MV

4120. Wanted: 33 cm transceiver plans

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Andy West <spwest@flash.net>
Message-ID: <01bc49ca$3a62b4a0$98c4c2d0@spwest.flash.net>
Source record: 94987

I'm looking for plans to build a 33 cm tranceiver. I will use it as a link to the local repeater. Any suggestions would also be appreciated.

73,

Andy
KC5MMC

4121. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: N1XXW <bkbbs@mail.conknet.com>
Message-ID: <NEWTNews.861132599.16115.bkbbs@conknet.conknet.com>
Source record: 94988
Cross-posted to: rec.radio.amateur.policy,rec.radio.amateur.misc,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

>
> However the concept of auctioning one and two letter amateur callsigns to
> the highest bidder (rather than through a lottery system) has
> attractions. Here in Australia we floated the idea (tongue in cheek)
> that those with two letter callsigns should give them up and have their
> callsign re-allocated to the highest bidder at a public auction attended
> by all amateurs (on April 1, 1996). That created quite a stir, because
> most amateurs want a callsign that's either very close to their initials
> or very short. I suspect that a proposal to auction attractive callsigns
> would raise even more controversy than one to auction some of our bands.

Has attraction for who - rich people?

4122. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: rodn@sundae.triumf.ca
Message-ID: <5j0q74$e7f$1@nntp.ucs.ubc.ca>
Source record: 94989
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.arch.embedded,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

Henry C. DeBey (debey@deltabeta.com) wrote:
>Somewhat surprisingly, I am not able to find a source for DB15 High
>Density connectors, like what are used for VGA connectors, that can be
>soldered onto a PCB with right angle pins.
>
> -
> | |
> ----- |
> | |-------|
> | |-----| |
> | |---| | |
> ----- | | | |
> | | | | |
> - ==================================
> | | |
>
>
>Any help in finding a DB15 High Density that can be connected to a PCB
>at right angles would be much appreciated.

Uhh, that would be a DE-15-S or DE-15-P. The DB shell is the size
most commonly used in RS-232 applications. The DE shell is the size
used in the IBM AT serial port, and the VGA connector, as you noted.
The only other commonly used 15 pin D-sub connector that I can think
of is the PC game port connector, which is a DA-15-S, I believe.

In summary, the notation Dx-##-S/P describes three things:

1. The character following the 'D' is describes the size of the shell.
2. The numeric value describes the number of pins.
3. The S or P describes whether it has sockets (female) or pins (male).

There are five industry standard shell sizes; DA through DE. The sizes
increase in dimension starting at DA, through DD, and DE is the smallest.

Sorry to get all pedantic on you, but if you've been searching catalogs
or databases for 'DB-15', you may be short changing yourself. This is
mistake a lot of people make.

Now that I've said all this, I hope I've gotten all the details
right :-) Most of it is from memory, but I'm fairly confident about
it's veracity.

Good luck in your search.

--- rod.

--

~~~~~~
Rod Nussbaumer, Programmer/Technologist Internet: bomr@triumf.ca
TRIUMF --- University of British Columbia, Phone: (604)222-7449
Vancouver, BC, Canada. FAX: (604)222-7307
~~~~~~

4123. Storno 6000 interface with PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: smcyber@aol.com
Message-ID: <19970415224100.SAA09305@ladder01.news.aol.com>
Source record: 94990

Hi Everyone

Has anyone interfaced an Ex PMR Storno 6000 series (2 metre) with a PC?

EF software and the EEProm spring to mind

If I'm on the wrong newsgroup, sorry please advise where I might look

Regards SmCyber.

4124. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: ko4qc <ko4qc@concentric.net>
Message-ID: <3353C4EE.2C91@concentric.net>
Source record: 94991
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Dan wrote:
>
> Burt,
>
> You must not ever listen, always have your mouth running. You can't
> learn anything in that mode.
> Didn't you see any of the news reports on the Oklahoma bombing. Even the
> news media new that the first emergency communications was handled by
> Ham Radio operators.
>
> Dan Newby
> WD4LUR
>
> Burt Fisher wrote:
> >
> > It has become evident that the ex-service now hobby is done:
> > Stick a fork in it!
> >
> > It serves no one that cellular doesn't.
> > We are not unique, look around. Everyone has radios, phones.
> >
> > Most operators are tunnel-visioned, goat-headed people. They think that
> > the license, the code or the younger thinkers are the problem:
> >
> > I contend it has been the ARRL, NTS and the volunteer exam/incentive
> > licensing that has did it in. To many "elite" people who must complain
> > when someone says what they want to say or operate as they want. I once
> > thought packet radio might go somewhere but we never got over 1200 baud.
> >
> > Now if the fact that cell phones were allowed in the Olympic venues
> > but ham radios were not doesn't show you something, listen to a voice
> > traffic net like the Indiana Traffic/DewDrop/Mushroom Cloud Spotting net
> > some afternoon. NTS needs to tie up a radio frequency to handle fake
> > messages for people who are too lazy to pick up the phone or mail a
> > letter to mom wishing her happy birthday. Give me a break! They even
> > pass phone numbers of recipients AND NOW even E-MAIL ADDRESSES!!!A JOKE!
> > Right?
> >
> > I am just waiting till all the VHF spectrum is gone, along with most
> > of the HF spectrum. Then we will all be CBers, like many elite hams
> > call others in order to degrade an opinion they can't stand to debate.
> >
> > Structure, as per ARRL, has not kept up with the purpose of the

> > "service"
> > That service used to be needed, now we are "bookmarks"for other wireless
> > services. The latest band gone is 2300 MHz for wireless internet, not
> > for packet, which should have pushed been years ago, along with:
> >
> > 902-928 GONE well "shared" by every device that would hear hams! Lesson?
> > 220-222 GONE
> > 144-148 soon to be gone
> > 222-225 soon to be gone
> > 430-450 soon to be gone
> >
> > Do you get the picture?
> > Maybe I drew one for you...
> >
> > --
> > =-=
> > CJ Crosby - KA2RAF/4 - rafman@kerrlake.com | Buggs Island Lake:
> > The BuckHorn WoodWorx of Buggs Island Virginia | Virginia's best fishing
> > "A mind's a terrible thing to waste, provided you had one to start with"
> > "There are 5 boxes to Freedom: Ballot, Witness, Jury, Soap & Cartridge"
> > =-=
> > --
> > #===============#===#
> > | Burt Fisher | Teacher of video, broadcasting and electronics |
> > | Amateur call | South Dennis, Ma. (Cape Cod) |
> > | K1OIK | http://www.geocities.com/WallStreet/5169 |
> > #===============#===#
> > |Visit my WWW site, it is like no other burt@rocketmail.com |
> > #===#
Burp is a lonley,frustrated old man.If Amateur radio died,he would
too!It is obviously his life!!His daily routine revolves around it!
He,most likely,was severely humiliated in some way by a HAM/HAMs and
this is his way(in his sick,pathetic mind)of 'getting even'.
I have watched him make a fool of himself since the old BBS days.He
will continue to do so as long as his feeble old fingers will type.
One thing I never really understood is,if Amateur radio is so bad,why
did his daughter get her ticket?He used to brag about that,but that put
her in the same group of people he so despises!!Strange!
Ko4qC
Yes,I know I 'said' Burp.Almost the same thing as a FART!!

4125. Re: L. Gumm, K0HFD's oscillator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5j0hnb$so5@hpscit.sc.hp.com>
Source record: 94992

In article <33718160.26072341@news.erols.com>,
Jake Brodsky <frussle@erols.com> wrote:
>
>I saw this on Page 126 of the ARRL's publication: Solid State Design.
>A two transistor oscillator for 10 MHz. It used 2N3904 transistors
>(weird) and the author claimed very low phase noise.

This isn't necessarily weird. 2N3904 transistors have a very
high DC beta. This might improve phase noise and temperature
stability.

>
>I'd like to reproduce this circuit, but I'm stumped by some missing
>information: There is an output transformer with 3:1 marked under it.

Probably a Mini-Circuits T9-1 would work.

>Were the ferrite beads in the article anything special? Anyone know
>what kind they were?

I don't have the reference in front of me, but in general bead
material isn't very critical if they're just parasitic
suppressors.

>Also the book mentioned that, due to avalanche voltages on the base,
>the life of the transistor would be shortened. Does anyone know by
>how much? Is this oscillator going to self destruct in a couple of
>minutes? Days? a Year?

That is a problem for multi-cell RF transistors like 2N5179's.
You can ruin those in a few minutes if you abuse them enough, but
I have read that the process can take months. The symptom is
that they have no RF gain anymore, but still work OK at DC.
That is how you can tell this process is taking place rather than
you simply burned 'em up. I don't believe the 2N3904's are made
that way, so you should be OK. (Another reason why he used
2N3904s maybe).

>Is there any other literature about this oscillator? My 1996 handbook
>mentioned 1977 as the year it was published. Can anyone point me to a
>reference?

Why are you so interested in this particular oscillator anyway?

>Jake Brodsky, AB3A mailto:frussle@erols.com

Rick Karlquist N6RK
rkarlqu@scd.hp.com

4126. Re: L. Gumm, K0HFD's oscillator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Linley F Gumm <Linley.F.Gumm@tek.com>
Message-ID: <33542378.62C9@tek.com>
Source record: 94993

Since my comment on Richard Karlquist's and Jake Brodsky's posting is lengtly I posted it as a new Item.

Richard Karlquist's comments about the oscillator circuit are entirly correct. Here are some more details from the designer's mouth.

The oscillator circuit is the result of attempting to build the lowest phase noise device possible. Two basic principles were used: maximize loaded Q and maximize the signal to noise at the amplifier's input terminals. Since the oscillator was designed to operate at 10 MHz, the 2n3904 was fast enough. It also features a 6V base-emitter breakdown voltage, one of the highest available in a moderate speed transister. This allows boosting the amplitude at the base up to about 5 Vpp without starting a breakdown process at the base that increases the oscillator's phase noise. The 2n3904 is also reasonably quiet in the audio frequency range so its noise contributes less close-in phase noise than higher frequency devices.

The ferrit beads used should be the small ones with transister lead sized center holes. They are really necessary only when the layout has enough VHF parasitics so that the transisters want to oscillate. The 2n3904's can break into VHF oscillations during the period when they are turned on if the circuit is right. You can easily tell if it is oscillating if the ciruit is touchy and radicaly unstable when you touch any of either transister's leads with a short piece of wire held in the hand (this tends to stop any VHF oscillation that change the operating point). I have also had fairly good success with inserting 100 Ohm resisters in series with the collector leads, checking to make sure that the collector voltage when the device is on is not so low as to cause the device to saturate.

The output transformer can be made out of many ferrits. Choose a torrid that is about .5" in diameter. Wind about 5 quadrafiller turn on it (i.e. 4 wires in parallel). Connectet four of these wires in series to form the primary. The remaining winding is the secondary.

The only two places this circuit has been documented to my knowledge is in the 1995 Handbook, which has an excellent write-up which catches most of the reasoning, and the Solid State Design book you cited.

Hope this takes some of the mystery away from this circuit.

Linley Gumm
K7HFD

4127. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: "Rod B. Nussbaumer" <bomr@triumf.ca>
Message-ID: <33543098.1A67@triumf.ca>
Source record: 94994
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.arch.embedded,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

Computer Doc (ComputerDoc@nowhere.com) wrote:
> Rod B. Nussbaumer wrote in article <5j0q74$e7f$1@nntp.ucs.ubc.ca>...
>>Henry C. DeBey (debey@deltabeta.com) wrote:
>
>Sorry, but you are incorrect. This person is looking for the HIGH DENSITY
>connector. If you would like to see an example, look on the back of a
>Video card with a VGA connector. You will see that the "D" connector is
>the same size as the {old} DB-9 (which comes from the generation you are
>referring to), but has 15 pins! This is the High Density version. This is
>NOT used in RS-232 applications.
>

No, you are incorrect. The 'old DB-9', is neither old, nor a DB-9. It
is IBM's version of RS-232 on a 9-pin connector, and the connector is
a DE-9, not a DB-9. Yes, I agree, that it has 15 pins, and I never
stated
that it had any standard usage in RS-232.

The (now obsolete, apparently) industry standard, describes the
connector
interms of it's shell size, by letter, and by number of pins, as I
stated,
below. There is nothing to say that all DB shell are 25 pins, or that
all DE shells are 9 pons.

The point remains, the connector is NOT a DB-15, since it is not
a DB size shell.

I used to keep a photocopy handy, of a nice summary of this information
from a catalog by a major connector manufacturer (Cannon as I recall).
I wish I could locate it now.

>>
>>Uhh, that would be a DE-15-S or DE-15-P. The DB shell is the size
>>most commonly used in RS-232 applications. The DE shell is the size
>>used in the IBM AT serial port, and the VGA connector, as you noted.
>>The only other commonly used 15 pin D-sub connector that I can think
>>of is the PC game port connector, which is a DA-15-S, I believe.
>>
>>In summary, the notation Dx-##-S/P describes three things:
>>
>>1. The character following the 'D' is describes the size of the shell.
>>2. The numeric value describes the number of pins.
>>3. The S or P describes whether it has sockets (female) or pins (male).

>>
>>There are five industry standard shell sizes; DA through DE. The sizes
>>increase in dimension starting at DA, through DD, and DE is the smallest.
>>

-- rod.

4128. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Computer Doc <ComputerDoc@nowhere.com>
Message-ID: <5j0u18$40n@news-central.tiac.net>
Source record: 94995
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.arch.embedded,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

Rod B. Nussbaumer wrote in article <5j0q74$e7f$1@nntp.ucs.ubc.ca>...
>Henry C. DeBey (debey@deltabeta.com) wrote:

Sorry, but you are incorrect. This person is looking for the HIGH DENSITY
connector. If you would like to see an example, look on the back of a
Video card with a VGA connector. You will see that the "D" connector is
the same size as the {old} DB-9 (which comes from the generation you are
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>most commonly used in RS-232 applications. The DE shell is the size
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>There are five industry standard shell sizes; DA through DE. The sizes
>increase in dimension starting at DA, through DD, and DE is the smallest.
>
>Sorry to get all pedantic on you, but if you've been searching catalogs
>or databases for 'DB-15', you may be short changing yourself. This is
>mistake a lot of people make.
>
>Now that I've said all this, I hope I've gotten all the details
>right :-) Most of it is from memory, but I'm fairly confident about
>it's veracity.
>
>Good luck in your search.
>
> --- rod.
>
>--
>
>~~~~~~
~~
> Rod Nussbaumer, Programmer/Technologist Internet: bomr@triumf.ca

> TRIUMF --- University of British Columbia, Phone: (604)222-7449
> Vancouver, BC, Canada. FAX: (604)222-7307
>~~~~~~
~~
>
>

4129. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: peters@30rock.nbc.com
Message-ID: <970415224925@bumppc>
Source record: 94996
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

In article <33543098.1A67@triumf.ca> "Rod B. Nussbaumer" <bomr@triumf.ca> writes:

>Computer Doc (ComputerDoc@nowhere.com) wrote:
>> Rod B. Nussbaumer wrote in article <5j0q74$e7f$1@nntp.ucs.ubc.ca>...
>>>Henry C. DeBey (debey@deltabeta.com) wrote:
>>
>>Sorry, but you are incorrect.
>
>No, you are incorrect.
>
>The (now obsolete, apparently) industry standard, describes the connector
>interms of it's shell size, by letter, and by number of pins, as I
>stated,
>below. There is nothing to say that all DB shell are 25 pins, or that
>all DE shells are 9 pons.
>
>The point remains, the connector is NOT a DB-15, since it is not
>a DB size shell.
>
>>>
>>>There are five industry standard shell sizes; DA through DE. The sizes
>>>increase in dimension starting at DA, through DD, and DE is the smallest.
>>>
> -- rod.

You may have to give up on this one, Rod.

You and I both know that the letter following the D describes the shell
size, but for the most part this fact has been lost in an industry
that is overloaded with neoexperts and consultants.

Marty

4130. Intersil 7226 freq counter 4$ale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-15 00:00:00 UTC
From: Brian Mork <mork@usa.net>
Message-ID: <3353C00C.7449@usa.net>
Source record: 94997
Cross-posted to: alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.repair,misc.forsale.noncomputer

Intersil 7226-based frequency counter for sale.
Yes, it counts frequency (up to 10 MHz),
but it does more:

. intervals between two signals
. pulse counting
. ratios of two inputs
. periods of one signal

This is an un-encase 8" x 3" board, with no power supply
(requires 5 volts). Circuit is taken straight out of the
Intersil 7226 application notes, but also has an input
buffer chip.

Included is a spare 7226 (A input is fine, B input is broke),
and two spare LED digit displays.

A single 7226 itself costs $34.62 from Mouser. I'm asking
$35+shipping for the whole shebang. Usually shipping is
cheapest via UPS, but you can check on their web site.

Please let me know where you saw this post, so I can best
use the Internet bandwidth.
--
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available

4131. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <335577F8.5458@crpl.cedar-rapids.lib.ia.us>
Source record: 94850
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Gary Coffman wrote:
>
>
> I may be guilty of some impression of language. What we are discussing
> is not a Faraday shield but rather a Faraday cage enclosing a ferrite rod
> antenna.

Something strange is going on here. Why would anyone put a total
"Faraday Cage" in other words a "shield room", a total short circuit
around a ferrite rod antenna?

That is not the subject that has been going on. There has been talk that
the electric and magnetic components of a radio wave can somehow be
isolated from each other by a shield of some kind. Also, that radio
waves can contain more electric field energy than magnetic field energy.

There is talk about shielded loop antennas with non-shorting Faraday
shields with open-circuits that delete electric fields and pass magnetic
fields. Or is it the other way around? I'm not sure any more.

Or that local radio noise sources are more electric than magnetic. Or is
it the other way around?

Also that the near field of an antenna is more E field than H field, or
is it vice versa?

Wierd stuff!

Bill W0IYH

4132. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: "Lee St. Clair" <w7ax@montananet.com>
Message-ID: <33557E30.6E@montananet.com>
Source record: 94851

Hello Charles,I use 0000 steel wool to clean the inductors. It is silver oxide and it removes easily. Don't go further than to just remove the oxide though. It is actually a silver plating. 73
--
Warm regards,

Lee St.Clair (W7AX)
971 Bear Creek Trail
Victor, MT 59875

4133. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: subs@ro.com
Message-ID: <33541b64.159769892@news.ro.com>
Source record: 94900
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 13 Apr 1997 07:18:18 -0400, Burt Fisher
<burtfisher@geocities.com> wrote:

>It has become evident that the ex-service now hobby is done:
>Stick a fork in it!
>
Stick a fork up your ass. The only reason you don't like ham radio
is because no would talk to you more than 5 minutes before they
figured out that your an idiot.

4134. Re: motorola pager modifications?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: mysonscool@aol.com
Message-ID: <19970416010801.VAA21040@ladder01.news.aol.com>
Source record: 94901

In article <332B6C00.2A63@rollanet.org>, Demolition Man <nospam.demoman@rollanet.org>
writes:

>Any of you homebrewers out there know anything about pagers? i'm gonna
>recrystal this one [a yard sale find with no docs!!] for use with tnc
>and such. nice CQ vhf article on this subject.

When was the article, I'd like to check it out.

-Thanks
Brad
KB2RWT

4135. ANTENNA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: mikek0brxr@aol.com
Message-ID: <19970416014601.VAA24169@ladder01.news.aol.com>
Source record: 94902

DON'T WORRY ABOUT ANYONE MAKING FUN OF YOU--WE WERE ALL IN THE SAME SPOT
AT ONE TIME OR ANOTHER. BESIDES, ANYONE WHO DOES, THE HELL WITH THEM.
ONE OF THE CODES OF HAM RADIO IS TO PROMOTE IT RIGHT? ANYWAY, ABOUT YOUR
ANTENNA--IN RADIO SHACK BOOK "NOW YOU'RE TALKING" THEY TELL ABOUT A
GROUND PLAN ANTENNA USEING A SO-239 AND BRAZING RODS. I, MYSELF, MADE AND
USED THIS TYPE WHEN I GOT STARTED AND NOW AND THEN I STILL MAKE 'EM. I
ALSO FAZED 4 OF THEM TOGETHER WHICH MADE THEM A TYPE OF BEAM. IT WORKED
O.K. IF YOU'D LIKE, I'LL TRY TO FIND THE EXACT MEASUREMENTS OF THAT
GROUND PLAN AND GET BACK TO YOU.

LET ME NOW IF I CAN HELP WITH ANYTHING ELSE
MY CALL IS KB0RXR
I LIVE IN ILL, BUT GOT MY TICKET IN MN(THAT EXPLAINS THE 0 CALL)

73's
MIKEKB0RXR@AOL.COM

4136. RADIOS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: mikek0brxr@aol.com
Message-ID: <19970416020200.WAA25510@ladder01.news.aol.com>
Source record: 94903

I HOPE YOU AND YOUR SON MAKE IT. I'M SURE YOU WILL BUT SOMETIMES ITS A MATTER OF WHEN. BUT DON'T GIVE UP, YOU'LL MAKE IT. MY GIRLFRIEND IS ALSO TRYING SO I GIVE HER ENCOURAGEMENT ALSO. NOW FOR YOUR QUESTION. A FEW THINGS TO KEEP IN MIND, DON'T GO FOR ALL THE "BELLS & WHISTLES"--YOU'RE NEW AT IT, YOU'RE GOING TO BE CONFUSED ENOUGH WITHOUT ALL KINDS OF EXTRA STUFF TO DEALS WITH. THE RADIO SHACK 2M RIG IS GOOD RADIO, BUT YOU'LL WANT TO BUY A BETTER A FANCY RADIO LATER. I REALLY DIDN'T KNOW ANY BRAND OF RADIO TO TELL YOU TO BUY AS A BIGINNER, JUST KEEP IT SIMPLE.

4137. Alinco DJ-X10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Hajo <hans-joachimwe@metronet.de>
Message-ID: <01bc4a0b$42a5f780$4e65a8c0@default>
Source record: 94904
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateu

Hi Freaks,

Is there anybody on group who can give me some technical Information, and
also some good pictures, about this Scanner ???

Many thanks
Joe

Please post it to hans-joachimwe@metronet.de

4138. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: allent@mnsinc.com
Message-ID: <33545e65.17924797@netnews.worldnet.att.net>
Source record: 94905
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

subs@ro.com (Casey) wrote:

>On Sun, 13 Apr 1997 07:18:18 -0400, Burt Fisher
><burtfisher@geocities.com> wrote:
>
>>It has become evident that the ex-service now hobby is done:
>>Stick a fork in it!
>>
>Stick a fork up your ass.

OUCH!

>The only reason you don't like ham radio
>is because no would talk to you more than 5 minutes before they
>figured out that your an idiot.

Com'on. Tell him how you really feel.

4139. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33537d79.3912160@netnews.worldnet.att.net>
Source record: 94906
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Sun, 13 Apr 1997 19:17:30 GMT, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>If they are smiling, they are smiling at you. An electro*static* field
>is what you get when you rub a cat's fur. It is what a Windhurst machine
>or Van de Graaf generator produces. It is the field between the positive
>and negative poles of a battery. By definition it is *static* which means
>it is unvarying. There is no electrostatic component to a radio wave.

Right on Gary.

>There is an electric field vector which is part of an EM wave, but it
>is *not* static. It is a dynamic field which varies at a rate corresponding
>to the frequency of the signal. Hand in glove, inseparable from the electric
>field vector, is a dynamic magnetic field vector. The energy of the EM wave
>is constantly handed back and forth between the electric and the magnetic
>fields as the EM wave propagates. Suppress *either one* and you suppress
>the energy of the EM wave. One cannot exist without the other. This is a
>fundamental fact of electromagnetics.

Right on Gary.

>If you try to separate them with a Faraday shield, a counter EMF will
>be induced on the surface of the shield. This will reflect the EM wave
>just as a mirror reflects light (and for the same reason since light
>is just extremely high frequency RF). None of the field energy, either
>electric or magnetic, will pass inside the Faraday shield (assuming
>the shield possesses adequate skin depth to be called a Faraday
>shield at the frequency of interest).

That's right, all the Faraday shield does is change the wave by re-radiation.

Add a "Faraday -shield " to a loop and you have a loop that acts like the "shield" is the radiator. It STILL responds to time varying electric and magnetic fields.

If, however, you rub your cat across your silk shirt and touch the cat to the antenna, the Faraday shield will reduce the STEADY dc voltage coupled to the antenna. The Faraday shield will NOT greatly change the SPARK energy coupled into the system.

Farady shield loops work best when it is raining cats and dogs, if the loop is coupled to a differential amplifier with FET's on the input.

73 Tom

4140. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: glenq@NOSPAM.cyberhighway.net
Message-ID: <3378609f.37930378@news.cyberhighway.net>
Source record: 94907
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

tgold@microvst.demon.co.uk ("Anthony R. Gold") wrote:

>In article <3352A7C2.980@usaor.net> freq@usaor.net writes:
>
>> Burt Fisher wrote:
>
>> > antenna towers. However ham towers could be seized as the FCC has
>> > decided that the amateur radio service no longer serves the public
>> > necessity.
>
>> It would have nice if you listed the frequencies re the above info.
>
>Serves the public necessity? This stuff must be straight from the
>pen of someone who teaches illiteracy in the public education system.

Ever heard of PICON? If not, find out about it and get back to us.

--
glenq@cyberhighway.net
WB7DOW @ KB7CFD.ID.USA.NOAM

4141. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: croaker@access.digex.net
Message-ID: <znr861162123k@Digex>
Source record: 94908
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <335123a9.41568501@news.abilene.com> paul@actiontel.com writes:

> It almost sounds like this is what you want... Odd.
>
> I've been hearing this tired old crap for 20 years now
> .... but never from an expert. Now, I'm afraid.
>
> 3's and 8's
>
> N5DUP
>
>
> On Sun, 13 Apr 1997 07:18:18 -0400, Burt Fisher
> <burtfisher@geocities.com> wrote:

A lot of crap.

Who is this lid, anyway?

Frank Ney WV/EMT-B VA/EMT-A N4ZHG LPWV NRA(L) GOA CCRKBA JPFO
Sponsor, BATF Abuse page http://www.access.digex.net/~croaker/batfabus.html
West Virginia Coordinator, Libertarian Second Amendment Caucus
NOTICE: Flaming email received will be posted to the appropriate newsgroups
- --
"...I am opposed to all attempts to license or restrict the arming of
individuals...I consider such laws a violation of civil liberty,
subversive of democratic political institutions, and self-defeating
in their purpose."
- Robert Heinlein, in a 1949 letter concerning "Red Planet"

4142. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: croaker@access.digex.net
Message-ID: <znr861163182k@Digex>
Source record: 94909
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

In article <5iumsd$3gu@camel4.mindspring.com> bboone@mindspring.com writes:

> : > | Burt Fisher | Teacher of video, broadcasting and electronics |
> : > | Amateur call | South Dennis, Ma. (Cape Cod) |
> : > | K1OIK | http://www.geocities.com/WallStreet/5169 |

It should be K1LID.

Frank Ney WV/EMT-B VA/EMT-A N4ZHG LPWV NRA(L) GOA CCRKBA JPFO
Sponsor, BATF Abuse page http://www.access.digex.net/~croaker/batfabus.html
West Virginia Coordinator, Libertarian Second Amendment Caucus
NOTICE: Flaming email received will be posted to the appropriate newsgroups
- --
"...I am opposed to all attempts to license or restrict the arming of
individuals...I consider such laws a violation of civil liberty,
subversive of democratic political institutions, and self-defeating
in their purpose."
- Robert Heinlein, in a 1949 letter concerning "Red Planet"

4143. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Chris Wright <ki11@cityscape.co.uk>
Message-ID: <hkoQcHA82JVzEwLY@cityscape.co.uk>
Source record: 94910
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.arch.embedded,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

In article <5j0u18$40n@news-central.tiac.net>, Computer Doc
<ComputerDoc@nowhere.com> writes
>Sorry, but you are incorrect. This person is looking for the HIGH DENSITY
>connector. If you would like to see an example, look on the back of a
>Video card with a VGA connector. You will see that the "D" connector is
>the same size as the {old} DB-9 (which comes from the generation you are
>referring to), but has 15 pins! This is the High Density version. This is
>NOT used in RS-232 applications.

Sorry, no you are incorrect. Read what the man
wrote, the *shell* of the plug is the same size
as a standard density 9 way. He is correct,
the shells are the same dimensions, the high
density part just has more contacts, typically
an extra row.

The McMurdo part number for a high density
15 way plug, tin & dimple, is HDE15PTD. Note
that they explicitly add an H in front. Their
number for the equivalent standard density
part is SDE9PTD. Note that the shell size
"DE" remains the same.

Note that the McMurdo part number for the
right-angle PCB socket is HDEX15SNT, this
has boardlocks ("harpoons") and screwlocks.
I don't have the number for the basic socket.
McMurdo are a UK company, but I'm certain
the equivalent part is available from a US
manufacturer.

--
Chris Wright
Rolt Manufacturing Ltd
ki11@cityscape.co.uk

4144. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33542932.47879510@netnews.worldnet.att.net>
Source record: 94911

On Tue, 15 Apr 1997 14:16:49 GMT, jfriley@airmail.net (J. Fred Riley)
wrote:

>On Tue, 15 Apr 1997 12:56:57 GMT, W8JItom@worldnet.att.net (Tom Rauch)
>wrote:
>>In QST there is a new class E amp. It is a MOSFET in class C, with a
>>third harmonic trap in the gate.
>>RCA did this in the 50's with broadcast transmitters, and acheived
>>90% efficiency. It was called a class C PA, but I forgot who the
>>credit went to back then.
>
>Tyler (of Marconi) wrote the paper we all use in 1948 and published it
>in IRE. When you read it you'll find Tyler was interested in
>improving the second harmonic return--where the efficiency comes
>from--and he did it with 3rd harmonic traps

Thanks for jogging my memory Fred.

Now I remember, it was called a Tyler circuit. The class E amplifier
in QST is a Tyler circuit.

Perhaps they should have called it class T.

73 Tom

4145. Re: how do i join?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Steve Jackson KZ1X/4 <76216.2557@CompuServe.COM>
Message-ID: <5j1l9r$6vt$1@mhafc.production.compuserve.com>
Source record: 94912

```
how do you join what?
--
73 de Steve
KZ1X/4 Chapel Hill, NC
```

4146. Re: HTX-100 manual and mic pin out needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Tom@astro.net
Message-ID: <5j16gbiev2@news.mhv.net>
Source record: 94913
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.dx

In article <33534F52.4766@concentric.net>, ko4qc@concentric.net wrote:
>If you can help me obtain one or both of the above,I will gladly
>reimburse any copy,postage etc expenses.
> TNX
> Joel KO4QC

Here's the mic pin-out (bottom right sounter clockwize):

1 mic input
2 PTT (connected to ground for function)
3 Channel down (connected to ground for function)
4 Channel up (connected to ground for function)
5 8 volts (power indicator)
6 Audio out
7 Mic ground
8 ground

Recieve to transmit turnaround time: 40ms

73!

Tom

E-mail me with the address below, not with the above address.
That address is to help stop junk e-mail!

Tom Randall Amateur Radio - KB2SMS
trandall@mhv.net Mt. Beacon Amateur Radio Club /ARRL/10-10
Member: AAVSO Solar Division

My Astronomy/Ham radio web site:
http://www1.mhv.net/~trandall/welcome.html

Opinions herein are mine and may not be that of MHV.NET!

4147. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3354D687.325@crpl.cedar-rapids.lib.ia.us>
Source record: 94914
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

William E. Sabin wrote:
>

> A true Faraday shield contains no "short circuits", either electric or
> magnetic, therefore it does impede either one.
>
>

Correction : therefore it does *not* impede either one.

Bill W0IYH

4148. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3354D532.5EC2@crpl.cedar-rapids.lib.ia.us>
Source record: 94915
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

> On Sun, 13 Apr 1997 19:17:30 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
> wrote:

> If you try to separate them with a Faraday shield, a counter EMF will
> be induced on the surface of the shield. This will reflect the EM wave
> just as a mirror reflects light (and for the same reason since light
> is just extremely high frequency RF). None of the field energy, either
> electric or magnetic, will pass inside the Faraday shield (assuming
> the shield possesses adequate skin depth to be called a Faraday
> shield at the frequency of interest).
>

I believe this is incorrect. A true Faraday shield is *transparent* to an EM wave. It is transparent to an electric field and it is transparent to a magnetic field. Its real purpose is to eliminate capacitive coupling between two conducting surfaces.

A true Faraday shield contains no "short circuits", either electric or magnetic, therefore it does impede either one.

The analogy with light does not apply at radio frequencies.

My article in May 1995 QEX, which I am sure is correct, discusses Faraday shields in more detail.

Bill W0IYH

4149. HEATHKIT:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: snider96@aol.com
Message-ID: <19970416125100.IAA28168@ladder01.news.aol.com>
Source record: 94916

need to buy, 12 volt dc/dc power supply(kit or built) for a HA-14. Thanks,
Leon Snider, KE4GG

4150. WB4DAM:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: snider96@aol.com
Message-ID: <19970416125701.IAA28498@ladder01.news.aol.com>
Source record: 94917

Derek, I tried to return your email but MY server doesn't like YOUR server. i.e., my mail was returned. If you wish to talk about the metal detector, try another email or call me at 205-681-8699.
Leon Snider, KE4GG

4151. Re: L. Gumm, K0HFD's oscillator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: frussle@erols.com
Message-ID: <3356c5bb.1632041@news.erols.com>
Source record: 94918

On Tue, 15 Apr 1997 17:55:20 -0700, Linley F Gumm
<Linley.F.Gumm@tek.com> wrote:

>
>Since my comment on Richard Karlquist's and Jake Brodsky's posting is
>lengtly I posted it as a new Item.
>
>Richard Karlquist's comments about the oscillator circuit are entirly
>correct. Here are some more details from the designer's mouth.
>
>The oscillator circuit is the result of attempting to build the lowest
>phase noise device possible. Two basic principles were used: maximize
>loaded Q and maximize the signal to noise at the amplifier's input
>terminals. Since the oscillator was designed to operate at 10 MHz, the
>2n3904 was fast enough. It also features a 6V base-emitter breakdown
>voltage, one of the highest available in a moderate speed transister.
>This allows boosting the amplitude at the base up to about 5 Vpp without
>starting a breakdown process at the base that increases the oscillator's
>phase noise. The 2n3904 is also reasonably quiet in the audio frequency
>range so its noise contributes less close-in phase noise than higher
>frequency devices.
>
>The ferrit beads used should be the small ones with transister lead
>sized center holes. They are really necessary only when the layout has
>enough VHF parasitics so that the transisters want to oscillate. The
>2n3904's can break into VHF oscillations during the period when they are
>turned on if the circuit is right. You can easily tell if it is
>oscillating if the ciruit is touchy and radicaly unstable when you touch
>any of either transister's leads with a short piece of wire held in the
>hand (this tends to stop any VHF oscillation that change the operating
>point). I have also had fairly good success with inserting 100 Ohm
>resisters in series with the collector leads, checking to make sure that
>the collector voltage when the device is on is not so low as to cause
>the device to saturate.
>
>The output transformer can be made out of many ferrits. Choose a torrid
>that is about .5" in diameter. Wind about 5 quadrafiller turn on it
>(i.e. 4 wires in parallel). Connectet four of these wires in series to
>form the primary. The remaining winding is the secondary.
>
>The only two places this circuit has been documented to my knowledge is
>in the 1995 Handbook, which has an excellent write-up which catches most
>of the reasoning, and the Solid State Design book you cited.
>

>Hope this takes some of the mystery away from this circuit.

I really appreciate the replies, gentlemen.

I built an R2 receiver and was thinking of using this oscillator with it. I intend to play around with a few small value varactors to see if I can get this circuit to steer as a VCO without destroying the excellent phase noise characteristics it has.

I'm already working on a Costas Loop VCO steering circuit using the R2 I and Q channels. If I can use this oscillator (instead of the noisy signal generator I'm currently using) I have hopes for a low noise frequency standard using WWV.

I'm aware that this side project is kind of silly, because better, and probably even cheaper, reference sources exist. Still, this is ham radio, and I'm doing this for fun, not profit.

Jake Brodsky, mailto:frussle@erols.com
"Nearly fifty percent of all graduates came from
the bottom half of the class."

4152. TWT INFO NEEDED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@telis.org>
Message-ID: <3354CD44.740B@telis.org>
Source record: 94919

Looking for documentation(schematics and operating parameters) for Thomsom-CSF TWT type TH3631W and TH216000KRM power supply.This TWT is 20watt for 10.7-11.7Ghz.Thanks in advance.73 Ken W6GHV

4153. Surface-Mount amateur kit recommendations???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: David Wilkey <dwilkey@ix.netcom.com>
Message-ID: <3354EC9D.319F@ix.netcom.com>
Source record: 94920

Can anyone recommend a kit or relatively simple magazine-article
project for a receiver or a station accessory that would serve as
an introduction to SMT? I wanna get some hands-on experience before
my eyesight gets any worse... ;)

Dave Wilkey, N9JIT
dwilkey@ix.netcom.com

4154. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Computer Doc <ComputerDoc@nowhere.com>
Message-ID: <5j2no6$2dm@news-central.tiac.net>
Source record: 94921
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.arch.embedded,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

I stand [semi] corrected! When someone mentions RS-232, I still pictures
the DB-25 series. We do agree, however, on the size of the connector and
the number of pins.
Chris Wright wrote in article ...
>In article <5j0u18$40n@news-central.tiac.net>, Computer Doc
><ComputerDoc@nowhere.com> writes
>>Sorry, but you are incorrect. This person is looking for the HIGH
DENSITY
>>connector. If you would like to see an example, look on the back of a
>>Video card with a VGA connector. You will see that the "D" connector is
>>the same size as the {old} DB-9 (which comes from the generation you are
>>referring to), but has 15 pins! This is the High Density version. This
is
>>NOT used in RS-232 applications.
>
>Sorry, no you are incorrect. Read what the man
>wrote, the *shell* of the plug is the same size
>as a standard density 9 way. He is correct,
>the shells are the same dimensions, the high
>density part just has more contacts, typically
>an extra row.
>
>The McMurdo part number for a high density
>15 way plug, tin & dimple, is HDE15PTD. Note
>that they explicitly add an H in front. Their
>number for the equivalent standard density
>part is SDE9PTD. Note that the shell size
>"DE" remains the same.
>
>Note that the McMurdo part number for the
>right-angle PCB socket is HDEX15SNT, this
>has boardlocks ("harpoons") and screwlocks.
>I don't have the number for the basic socket.
>McMurdo are a UK company, but I'm certain
>the equivalent part is available from a US
>manufacturer.
>
>--
>Chris Wright
>Rolt Manufacturing Ltd
>ki11@cityscape.co.uk
>

4155. Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Dale <rug@edison.dialix.com.au>
Message-ID: <5j21ur$8up$1@melbourne.dialix.com.au>
Source record: 94922
Cross-posted to: alt.ham-radio.morse,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Can someone pls (nicely:) direct me to a reference in relation to the
basics of Morse code equipment. Specifically as to the design and
construction of the old style of electr mechanical sounders.
I have an understanding of general electronics, but i do not understand the
relevance of the resistance of the sounders used in the Morse system. As i
have been asked to rewind an old sounder, i need to ensure the resistance
as well as the magnetising force (gauss?)...is there a basic formula or
software tools to assist in the winding of such coils

Any help would be greatly appreciated....

Regards,
Dale

4156. Re: DB15 HD male right angle connectors needed.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: forags@nature.Berkeley.EDU
Message-ID: <5j2rcd$3gg$1@agate.berkeley.edu>
Source record: 94923
Cross-posted to: alt.comp.hardware.pc-homebuilt,comp.dcom.cabling,comp.sys.ibm.pc.hardware.misc,rec.radio.amateur.homebrew,sci.electronics.components

Marty Peters (peters@30rock.nbc.com) wrote:

: You and I both know that the letter following the D describes the shell
: size, but for the most part this fact has been lost in an industry
: that is overloaded with neoexperts and consultants.

Maybe Cinch or Cannon should make a special production run of REAL DB-9's
(9 pins in a B shell) and ship them to whomever orders a DB-9?

--
Al Stangenberger forags@nature.berkeley.edu
Dept. of Env. Sci., Policy, & Mgt. 145 Mulford Hall # 3114
Univ. of California at Berkeley Berkeley, CA 94720-3114
(510) 642-4424 FAX: (510) 643-5438

4157. Gunn module

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <4tJTGEAQmOVzEw5x@ddwyer.demon.co.uk>
Source record: 94924

Has anyone in the UK got a Gunn module designed for volumetric cw radar detection. These units usually about 10GHz were available from Mullard/distributors 10 years ago and sometimes modified for point to point communication. Cant seem to find them now are they obsolete?
Douglas Dwyer

4158. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Mark Brown <kb0pyo@starpoint.net>
Message-ID: <3354F596.2437@starpoint.net>
Source record: 94925
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

T.L.Bryant wrote:
ha..ha..ha..ha..in the event of a national disaster please dial 0 for
> >help! Nah! you'll Always need a pool of people who could put their gear
> >back togather and get on the air. If an Earthquake hit I'd be on the
> >air, all the local cell sites would be down! Did you see "Independence
> >day" ? Hams are pretty much self contained units. We dont need the
> >NETWORK....N8XYN
>
> Burt responded to this scenario recently. I believe the response was:
>
> Cell Phones: 240
> Ham Radio : 2
>
> Tom - N8ECW

Hi all
Just a comment from flooded Minnesota, the Red Cross & Salvation
Army relied on amateur radio operators for communications out of Granite
Falls when all power was lost, the phone system was under water & the
cell sites went down. Burt needs to get a life.
Mark

4159. Re: L. Gumm, K0HFD's oscillator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5j328l$no2@hpscit.sc.hp.com>
Source record: 94926

In article <33542378.62C9@tek.com>,
Linley F Gumm <Linley.F.Gumm@tek.com> wrote:
>
>The oscillator circuit is the result of attempting to build the lowest
>phase noise device possible. Two basic principles were used: maximize
>loaded Q and maximize the signal to noise at the amplifier's input
>terminals. Since the oscillator was designed to operate at 10 MHz, the
>2n3904 was fast enough. It also features a 6V base-emitter breakdown
>voltage, one of the highest available in a moderate speed transister.
>This allows boosting the amplitude at the base up to about 5 Vpp without
>starting a breakdown process at the base that increases the oscillator's
>phase noise. The 2n3904 is also reasonably quiet in the audio frequency
>Linley Gumm
>K7HFD

Since a 60 mV. change in base-emitter voltage causes a 10:1
change in collector current, the result of driving the base that
hard (6 volts) with a sine wave is to simply run the oscillator
in class C, with a theoretical duty cycle of a few percent.
Since the 2N3904 isn't all that fast, in practice the duty cycle
will be limited by what the 2N3904's impulse response is. I've
never seen a good analysis of phase noise in class C oscillators.
Is anyone aware of one? Linley: you should be able to take
loaded Q and phase noise as known quantities, and back out
effective input power level (or at least input S/N) by using the
usual Edson/Leeson/Kurakowa phase noise equations. Have you
looked at that? Can you tell us what the Q and phase noise is?
(I'll try to look at your original paper to see if you already
published those numbers). Incidentally, the best unloaded Q I
have gotten at 10 MHz. is about 400 using a 1/2 inch diameter
Fair-Rite #67 toroid.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

4160. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j2g2t$jr5@senator-bedfellow.MIT.EDU>
Source record: 94927
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Sun, 13 Apr 1997 19:17:30 GMT, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>If they are smiling, they are smiling at you. An electro*static* field
>is what you get when you rub a cat's fur. It is what a Windhurst machine
>or Van de Graaf generator produces. It is the field between the positive
>and negative poles of a battery. By definition it is *static* which means
>it is unvarying. There is no electrostatic component to a radio wave.

None of these are actually static: they are all varying with time. Batteries change with temperature shifts, high voltage generators are difficult to stabilize, and as you rub your cat the voltage varies wildly.

Now, I agree that these may nevertheless be analyzed as essentially static phenomena. Two questions:

Why can one ignore magnetic phenomena here?

What is the criterion that distinguishes a field that may be treated as static from a field that must be treated as dynamic?

I've already given you the answers, but you don't seem to believe them. What are yours?

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4161. 10.7 mhz Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: "j.valdes" <jvaldes@whoi.edu>
Message-ID: <33550385.2F88@whoi.edu>
Source record: 94928

I'm looking for a source for narrow band +/- 5 Khz 3300 ohm IF filters.
I've searched the WEB, I located FOX and PTI however they are about $100
++ each!! Guess they don't like small quantities!! Anyone know who might
stock something like this?
Thanks
Jim WA1GPO

4162. Re: L. Gumm, K0HFD's oscillator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5j35dm$i64@hpcvsnz.cv.hp.com>
Source record: 94929

Richard Karlquist (rkarlqu@scd.hp.com) wrote:
: In article <33542378.62C9@tek.com>,
: Linley F Gumm <Linley.F.Gumm@tek.com> wrote:
: >
: >The oscillator circuit is the result of attempting to build the lowest
: >phase noise device possible. Two basic principles were used: maximize
: >loaded Q and maximize the signal to noise at the amplifier's input
: >terminals. Since the oscillator was designed to operate at 10 MHz, the
: >2n3904 was fast enough. It also features a 6V base-emitter breakdown
: >voltage, one of the highest available in a moderate speed transister.
: >This allows boosting the amplitude at the base up to about 5 Vpp without
: >starting a breakdown process at the base that increases the oscillator's
: >phase noise. The 2n3904 is also reasonably quiet in the audio frequency
: >Linley Gumm
: >K7HFD

: Since a 60 mV. change in base-emitter voltage causes a 10:1
: change in collector current, the result of driving the base that
: hard (6 volts) with a sine wave is to simply run the oscillator
: in class C, with a theoretical duty cycle of a few percent.
: Since the 2N3904 isn't all that fast, in practice the duty cycle
: will be limited by what the 2N3904's impulse response is. I've
: never seen a good analysis of phase noise in class C oscillators.
: Is anyone aware of one? Linley: you should be able to take
: loaded Q and phase noise as known quantities, and back out
: effective input power level (or at least input S/N) by using the
: usual Edson/Leeson/Kurakowa phase noise equations. Have you
: looked at that? Can you tell us what the Q and phase noise is?
: (I'll try to look at your original paper to see if you already
: published those numbers). Incidentally, the best unloaded Q I
: have gotten at 10 MHz. is about 400 using a 1/2 inch diameter
: Fair-Rite #67 toroid.

First, a comment on Rick's comments... It appears to me that the
long-tailed pair results in something more nearly class B, if you
must put a class on it. That is, the transistor whose base is
driven by the tank sees a base voltage higher than the other
transistor's base voltage half the time, and lower half the time.
If the circuit is working properly, that transistor does not
saturate.

Which brings me to a question for Linley: It appears to me that the
second transistor of the pair is allowed to saturate. Was that on
purpose? It seems to me that it would be better to not let it
saturate, but perhaps you had a reason for wanting it to.

With respect to transistors: I recently built the preamp circuit for the R2 receiver to do some bench testing on it. The circuit (attributed originally to Roy Lewallen) uses a 2N3904 grounded-base input. When I built it, we didn't have any 2N3904's in the bin, so I used 2N2222's instead. My plan was to compare it with the noise I could get from a good op amp such as the AD797, which is typically 0.9nV/rtHz and capable of extremely low distortion up to fairly high output levels. What I found was that my transistor amp would be extremely hard to beat for noise, a couple dB better than what I could do with the AD797. This didn't seem to match well with what Roy had told me about noise he had observed. I finally noticed in the transistor data sheets that the 2N2222 has a very noticably lower noise figure for low source impedances than does the 2N3904: about 1.5dB versus 3dB, for a 50 ohm source at 1kHz (essentially flat above that; 1/f corner around 300Hz for each). I have been unable to find any other transistors speced for a lower audio noise figure at 50 ohm source impedance than either of these two. (Guess the 2N2907 PNP is probably pretty good, too, and should consider it.)

Since the 2N2222A has a specified 6.0V base-emitter breakdown, and otherwise (ft, voltages, ...) is very similar to the 2N3904, it may be a very good substitute in Linley's circuit. I built Linley's circuit a couple months ago, but haven't had a chance to try it with other flavors of transistor. My model uses SMT MMBT3904's. Guess we have MMBT2222A's around too, so I could try them if I get the chance.

--
Cheers,
Tom
tomb@lsid.hp.com

4163. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <3355011D.3801@emily.net>
Source record: 94930
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Tom Rauch wrote:
>
> On Sun, 13 Apr 1997 19:17:30 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
> wrote:
>
> >If they are smiling, they are smiling at you. An electro*static* field
> >is what you get when you rub a cat's fur. It is what a Windhurst machine
> >or Van de Graaf generator produces. It is the field between the positive
> >and negative poles of a battery. By definition it is *static* which means
> >it is unvarying. There is no electrostatic component to a radio wave.
>
> Right on Gary.
>
> >There is an electric field vector which is part of an EM wave, but it
> >is *not* static. It is a dynamic field which varies at a rate corresponding
> >to the frequency of the signal. Hand in glove, inseparable from the electric
> >field vector, is a dynamic magnetic field vector. The energy of the EM wave
> >is constantly handed back and forth between the electric and the magnetic
> >fields as the EM wave propagates. Suppress *either one* and you suppress
> >the energy of the EM wave. One cannot exist without the other. This is a
> >fundamental fact of electromagnetics.
>
> Right on Gary.
>
> >If you try to separate them with a Faraday shield, a counter EMF will
> >be induced on the surface of the shield. This will reflect the EM wave
> >just as a mirror reflects light (and for the same reason since light
> >is just extremely high frequency RF). None of the field energy, either
> >electric or magnetic, will pass inside the Faraday shield (assuming
> >the shield possesses adequate skin depth to be called a Faraday
> >shield at the frequency of interest).
>
> That's right, all the Faraday shield does is change the wave by
> re-radiation.
>
> Add a "Faraday -shield " to a loop and you have a loop that acts like
> the "shield" is the radiator. It STILL responds to time varying
> electric and magnetic fields.
>
> If, however, you rub your cat across your silk shirt and touch the
> cat to the antenna, the Faraday shield will reduce the STEADY dc
> voltage coupled to the antenna. The Faraday shield will NOT greatly
> change the SPARK energy coupled into the system.

>
> Farady shield loops work best when it is raining cats and dogs, if the
> loop is coupled to a differential amplifier with FET's on the input.
>
> 73 Tom

You guys are way out in left field on this one. I can't tell from here if it's the E or H field. In the cat example, the faraday shield *will* greatly reduce the spark energy at the output terminals of the loop, if the distances involved are small compared to a wavelength. At low frequencies, it would take a very large loop (and perhaps a very large cat) to get out of the near-field region.

What you say about EM waves is correct if you're talking about the far field. When there is an RF field of E volts per meter from a distant source, it will be accompanied by an H field of E/377 volts per meter in free space. However, this relationship does not apply when you are close to the source, or when there are objects in the vicinity that affect the fields.

At a very short distance (measured in wavelengths) from an electrically small transmitting loop, the H field is much greater than E/377. In the immediate vicinity of a small transmitting whip antenna, the H field is much smaller than E/377. For example, AO predicts an "excess" H field of about 18 dB at 100 feet from a transmitting loop at 187 kHz, and about 8 dB if you raise the frequency to 500 kHz. You get similar "excess" E-field numbers at 100 feet from a short transmitting whip at those frequencies.

Inside a cage which consists of small wires that are insulated from each other and which do not form electrically closed paths, the E field will be attenuated much more than the H field.

Getting back to the original question of what's the best active receiving antenna:

One of the responses gave a very good and concise answer. To paraphrase it, most noise sources around the house act more like "electric" dipoles than "magnetic" dipoles at low and medium frequencies. The near-field region at these frequencies also extends quite a distance from the source. A loop is usually the best choice for LF and MF; above that it doesn't make much difference.

On the 160-190 kHz LowFER band, I use an active loop about 60 feet from the house. The loop is not balanced or even well shielded. However, it gets rid of most of the crud from the household electronics except the horizontal sweep harmonics from the computer and TV set. On 160 meters a loop gives me no real signal-to-noise advantage over a wire dipole centered 60 feet above the house, with balanced ladder-line feed.

73 from Lyle, K0LR

4164. Re: L. Gumm, K0HFD's oscillator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: wayne@fc.hp.com
Message-ID: <5j37hk$r61@fcnews.fc.hp.com>
Source record: 94931

Richard Karlquist (rkarlqu@scd.hp.com) wrote:
> That is a problem for multi-cell RF transistors like 2N5179's.
> You can ruin those in a few minutes if you abuse them enough, but
> I have read that the process can take months. The symptom is
> that they have no RF gain anymore, but still work OK at DC.
> That is how you can tell this process is taking place rather than
> you simply burned 'em up. I don't believe the 2N3904's are made
> that way, so you should be OK. (Another reason why he used
> 2N3904s maybe).

Just as a side note, back in the days before they had decent ICs to
do the job, another guy and I built an RIAA phono preamp with 2N3904s.
We discovered that breaking down the base-emitter junction, even when
the current was limited to 1 or 2 ma, would ruin their 1/f noise
performance, without much other apparent effect. Whether present-day
2N3904s would behave the same, I don't know.

Wayne Covington KD0EA
wayne@fc.hp.com
PGP keyID: 0xF38742FB
fingerprint: 6990F55FE1D0C01C FFFCEE2E9F264C26

4165. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j2o6i$n7p@senator-bedfellow.MIT.EDU>
Source record: 94932
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Sun, 13 Apr 1997 19:17:30 GMT, gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>If you try to separate them with a Faraday shield, a counter EMF will
>be induced on the surface of the shield. This will reflect the EM wave
>just as a mirror reflects light (and for the same reason since light
>is just extremely high frequency RF). None of the field energy, either
>electric or magnetic, will pass inside the Faraday shield (assuming
>the shield possesses adequate skin depth to be called a Faraday
>shield at the frequency of interest).

If your shield is a tube with a longitudinal slit, it cannot generate a "counter EMF" to a magnetic field parallel to its axis because it cannot support a current around this axis. It's an open circuit. Nevertheless, it is a very good approximation of a Faraday shield, surrounding its interior volume with an equipotential surface. The open ends and slit make little difference in its electrostatic properties: indeed, in most practical applications of the Faraday shield, the shield has gaps and holes.

Below the cutoff frequency of the tube's lowest waveguide mode the interior field cannot achieve a balance between magnetic and electric field energy. Nearly all of the energy is magnetic. Of course, although E is small, curl E is what you'd expect (Faraday's law is not repealed inside a shield). If the wavelength is short enough that the tube supports interior electromagnetic modes, the analysis is considerably more complicated, but that's not the issue at hand.

Such a shield will reduce the response of an antenna to electric fields (imagine testing the antenna between capacitor plates excited at the frequency of interest), and also to radial magnetic fields, but not to axial magnetic fields (imagine testing inside a solenoid). For an antenna and receiver completely inside the tube, the electric potential of the tube does not matter. Realistically, however, the tube should be grounded to circuit common to prevent common mode response to electric fields.

Such shields have long been used to improve the directionality of loop antennas by reducing their electric field response. The directionality of the electric dipole response is generally different from the directionality of the magnetic dipole response, so an antenna with a combined electromagnetic sensitivity will not show a pure dipole pattern (for a small antenna, higher order multipoles are generally negligible).

At an observatory on Kitt Peak there's an HF antenna I designed
that's shielded by a gapped Faraday shield (a gapped torus, not a
gapped tube, but the same principle). The objective is not pattern
purity but lightning protection (the *ultimate* common mode rejection
problem :-). The shield certainly does not eliminate "all field
energy": the antenna works fine.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4166. WTB: Eimac 8930

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: w1ksz@juno.com
Message-ID: <5j3mj3$1ip@news-central.tiac.net>
Source record: 94933

Looking for an Unused Eimac 8930 for a spare. Anyone have one ??
Tnx es 73 de Dick, W1KSZ

4167. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33553527.2125@crpl.cedar-rapids.lib.ia.us>
Source record: 94934
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Lyle Koehler wrote:
>
>
> Inside a cage which consists of small wires that are insulated from each
> other and which do not form electrically closed paths, the E field will
> be attenuated much more than the H field.
>
>

Wrong. A Faraday shield is transparent to an RF electric field and also
to an RF magnetic field. A Faraday shield doesn't attenuate anything in
an EM wave.

Bill W0IYH

4168. Re: 2SC2879 & 2SC2290 - who makes/sells these

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: rerick9433@aol.com
Message-ID: <19970416235300.TAA13452@ladder01.news.aol.com>
Source record: 94935

Call 1-800- RF Parts

They have what you need.

Good Luck. 73

4169. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <335578F2.752D@crpl.cedar-rapids.lib.ia.us>
Source record: 94936
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

William E. Sabin wrote:
>
>
> Wierd stuff!

Correction: Weird stuff.

Bill W0IYH

4170. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: tbryant@cannet.com
Message-ID: <5j3nbp$34f$1@nerd.apk.net>
Source record: 94937
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
>>> #===============#=====================================================#
>>> | Burt Fisher | Teacher of video, broadcasting and electronics |
>>> | Amateur call | South Dennis, Ma. (Cape Cod) |
>>> | K1OIK | http://www.geocities.com/WallStreet/5169 |
>>> #===============#=====================================================#
>>> |Visit my WWW site, it is like no other burt@rocketmail.com |
>>> #=================================================================#
>>
>>ha..ha..ha..ha..in the event of a national disaster please dial 0 for
>>help! Nah! you'll Always need a pool of people who could put their gear
>>back togather and get on the air. If an Earthquake hit I'd be on the
>>air, all the local cell sites would be down! Did you see "Independence
>>day" ? Hams are pretty much self contained units. We dont need the
>>NETWORK....N8XYN
>
>
>Burt responded to this scenario recently. I believe the response was:
>
>Cell Phones: 240
>Ham Radio : 2

BTW, to the person who sent me e-mail saying that I got "suckered in" by Burt
Fisher, (and you know who you are) I happen to *agree* with Burt's views. If
you look past his sarcasm, you'll find that a lot of what he says is true.

Tom - N8ECW
```

4171. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <335566DE.3854@erols.com>
Source record: 94938
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Gary Coffman wrote:
>
> In article <334ED244.26AA@concentric.net> "Steve J. Quest" <Squest@concentric.net>
writes:
> >Tom Rauch wrote:
> >>
> >> But the problem is the shield does not shield the antenna from time
> >> varying electric fields. If it did, the antenna would receive no
> >> signals at all.
> > >
> > > The shield attenuates (reduces greatly) the electrostatic
> > >component of the EM wave. The magnetic component travels freely through
> > >the cage. Most noise signals are stronger in electrostatic than magnetic
> > >due to how they are generated. Broadcast signals typically have much
> > >higher magnetic component since they are launched off a resonant "tuned"
> > >radiating element (antenna) while the "noise" from your fluorescent
> > >lamp, fan motor, computer, etc., is launched off an untuned, non-resonant
> > >radiating element (power cord, wires, etc.)
> >
> > There is *no* electrostatic component to an electromagnetic wave. The
> > electric and magnetic field components of the EM wave are *dynamic*, and
> > intimately coupled to each other. Bill Sabin did a very good explanation
> > of this in another post. You can't have an EM wave without both the electric
> > and the magnetic field. The energy of the wave is transferred back and
> > forth between the electric and magnetic field components of the wave
> > continously because one continuously generates the other as they travel
> > through space. That's what allows an EM wave to propagate through space.
> > And since energy must be conserved, the electric and magnetic field
> > components *must* be of equal strength (though at different times as the
> > energy oscillates back and forth between the electric and magnetic field
> > vectors). If you attenuate *one* field vector, you attenuate the other
> > as well because the total wave only has one energy.
> >
> > The only time this is not exactly true is in the *near* field of the
> > radiating source. In the near field, less than 5 wavelengths from the
> > source, the EM field hasn't fully established, and the signal can be
> > treated as partially separate electric and magnetic induction fields.
> > And *those* fields don't have to be of equal strength. That's the case
> > for noise generated *very* near the receiving antenna.
> >

I thought the "size" of the near field is determined by the aperature of
the radiating antenna. So the near field could be greater than 5wl.

> A *partial* shield can then have some effect in differentiating the
> fields from far sources as compared to near sources. But if the
> shielding is *complete* for either field, no EM signal will be
> received. That's why the shielded loop antenna must have a *break*
> in the shield.
>
> > Shielded magnetic antennas will also nul strong stations in
> >opposite polarity to where it is turned, thus you can blank a station on
> >the same frequency (jammer) that happens to be in a different location
> >geographically from the source you wish to receive. This is the upside,
> >the downside is that shielded magnetic antennas are highly directional,
> >and unless you point it in the direction the signal is coming from, it
> >won't receive the signal at all.
>
> Well, the idea is basically right, but your terminology is wrong. It
> *is* the pattern of the antenna which results in both the null and
> the peak. It has nothing to do with signal *polarity*. That's a separate
> issue. And the shield has no effect on pattern, so this directionality
> exists whether the loop is shielded or not.
>
> >With a partial Faraday shield, and by
> >adding a bit of a whip antenna to the device, you can give it less
> >directional characteristics to "find" your station by adjusting until
> >the signal outweighs the noise (best of both worlds). This is how I
> >use mine. I have a "tail" outside the Faraday shield which allows all
> >signals into the resonant loopstick tank so I can find (albeit weakly)
> >the signal I want, then zero in on it, thus having the magnetically
> >induced signal outweigh any noise the "whip" will pull in (high signal
> >to low noise ratio).
>
> Actually, what a loop (shielded or not) and whip do (when properly
> combined) is change the antenna pattern from bidirectional to cardioid,
> IE sharply unidirectional. That will reject noise and interference from
> all directions except the signal direction. This will have the effect of
> improving the SNR of the desired signal. Improperly combined, the two
> antennas will lose directionality, and *degrade* the SNR of the received
> signal.
>
> Note that the whip and loop must be physically small with respect
> to a wavelength for this to work. If they grow to be an appreciable
> fraction of a wavelength, then polarity raises its ugly head as an
> issue which must also be considered. Polarity can be exploited for
> other things, such as diversity reception, but it will have the effect
> of degrading the cardioid pattern of a loop and whip combination.
>
> Gary
> --
> Gary Coffman KE4ZV | You make it, | Due to provider problems
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> 534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
> Lawrenceville, GA 30244 | |

4172. cushcraft A3S v Mosley

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Peter Day <p.day@virgin.net>
Message-ID: <01bc4aa2$60c4d140$7643a8c2@virgin.net>
Source record: 94939

Mike B. Allred <mallred@fscu.org> wrote in article
<3354D47B.4E92@fscu.org>...
> I am considering the purchase of a Cushcraft A3S tri-bander. I have
> also looked at a Mosley with almost identical specs according to the
> manufacturers. Does anyone have any experience, complaints, compliments
> or flames about either antenna? I really would appreciate help in this
> matter.

The Cushcraft antenna, IMHO, is far better made than either Mosley or
Hi-Gain tribanders.
A year or so ago I replaced my old TH3Jnr with a Cushcraft A3S and I find
it seems to perform better, looks better (less element sag) and does not
blow traps when I hit it with more that 300 watts on 21MHz!! (The TH3Jnr
burnt out driven element traps each time I tried to use my 400w linear amp
on 21MHz ...in spite of the 600w pep rating of the thing!).....Buy the
A3S now!

Good luck,

Peter, G3PHO

****

**
Editor RSGB Microwave Newsletter.
Homepages at......
"World Above 1000MHz": http://freespace.virgin.net/p.day/ghz.htm
****

4173. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: gary@ke4zv.atl.ga.us
Message-ID: <1997Apr16.172258.27232@ke4zv.atl.ga.us>
Source record: 94940
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <3354D532.5EC2@crpl.cedar-rapids.lib.ia.us> sabinw@crpl.cedar-rapids.lib.ia.us writes:
>
>> On Sun, 13 Apr 1997 19:17:30 GMT, gary@ke4zv.atl.ga.us (Gary Coffman)
>> wrote:
>> If you try to separate them with a Faraday shield, a counter EMF will
>> be induced on the surface of the shield. This will reflect the EM wave
>> just as a mirror reflects light (and for the same reason since light
>> is just extremely high frequency RF). None of the field energy, either
>> electric or magnetic, will pass inside the Faraday shield (assuming
>> the shield possesses adequate skin depth to be called a Faraday
>> shield at the frequency of interest).
>>
>
>I believe this is incorrect. A true Faraday shield is *transparent* to
>an EM wave. It is transparent to an electric field and it is transparent
>to a magnetic field. Its real purpose is to eliminate capacitive
>coupling between two conducting surfaces.
>
>A true Faraday shield contains no "short circuits", either electric or
>magnetic, therefore it does impede either one.
>
>The analogy with light does not apply at radio frequencies.
>
>My article in May 1995 QEX, which I am sure is correct, discusses
>Faraday shields in more detail.
>
>Bill W0IYH

I may be guilty of some impression of language. What we are discussing is not a Faraday shield but rather a Faraday cage enclosing a ferrite rod antenna. And the EM field inside of the cage will be zero. For a mere Faraday shield, things become a bit more complex when the shield is small with respect to a wavelength, but that doesn't matter for the Faraday cage.

The shield structure must be a good conductor, and as a good conductor it is *not* transparent to the EM wave. Just as a dish reflects an EM wave, the conductive Faraday cage will reflect the EM wave as well. The only difference is that the reflection from the Faraday cage won't be focused the way it would be by the dish. Instead, the reflection will tend to be dispersed. For wavelengths shorter than the linear dimension of a Faraday *shield*, the EM wave will also be reflected. For a shield small with respect to a wavelength, the shielding will not be complete.

But as noted above, this only applies to a Faraday *shield*, and not
to a Faraday *cage*.

To say that there is analogy between light and radio waves is error.
They aren't mere analogs. *They are the same*, save only a difference
in frequency. That difference requires a finer structure for reflecting
light than is required for reflecting radio waves, but the mechanism
of reflection is the same. Chicken wire is too coarse to reflect the
EM frequencies of visible light, but it is more than sufficient to
reflect radio waves with a frequency below 2 GHz.

Gary
--
Gary Coffman KE4ZV | You make it, | Due to provider problems
Destructive Testing Systems | we break it. | with previous uucp addresses
534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
Lawrenceville, GA 30244 | |

4174. Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Charles Miller <cmiller@Mail.Trincoll.Edu>
Message-ID: <Pine.SOL.3.91.970416161612.2736A-100000@shakti.cc.trincoll.edu>
Source record: 94941

I have a rolling contact variable inductor. The wire seems to be silver plated, but is covered with a black corrosion (silver oxide ?). Any suggestions for cleaning would be appreciated.
Thanks,
Charles, kd1ws
cmiller@mail.trincoll.edu

4175. WTP: ARRL HAM Theory Video Course

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: k_porter@telis.org
Message-ID: <k_porter-1604972005060001@s14-pm01.ucsd.campus.mci.net>
Source record: 94942
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

I'm looking to buy the following ARRL Amateur Radio Video Exam Course:

Technician
General
&
Advanced

If you have the above items (complete with documentation) and are
interesting in selling them..contact me.

--
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\\ - - //
(@ @)
-----oOOo-(_)-oOOo-----

K.Porter
k_porter@telis.org

-------------Oooo------
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_)

4176. Re: L. Gumm, K0HFD's oscillator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Linley F Gumm <Linley.F.Gumm@tek.com>
Message-ID: <33554194.7182@tek.com>
Source record: 94943

Richard Karlquist wrote:
> Since a 60 mV. change in base-emitter voltage causes a 10:1
> change in collector current, the result of driving the base that
> hard (6 volts) with a sine wave is to simply run the oscillator
> in class C, with a theoretical duty cycle of a few percent.
>
The amplifier runs as a 50% duty cycle limiting amplifier, producing a square wave output. If one assigns classical class designation to it, it would be a class-B. The reason for trying to raise the amplitude at the base is to limit the percentage of time that the amplifier is active (and making more noise) vs. the time it is in hard limit (and making a minimum of noise).

Linley: you should be able to take
> loaded Q and phase noise as known quantities, and back out
> effective input power level (or at least input S/N) by using the
> usual Edson/Leeson/Kurakowa phase noise equations. Have you
> looked at that?
I haven't tried to apply the Leeson model to this oscillator any further than to observe that a greater Q reduces the phase noise. Leeson's model makes assumptions that do not fit this oscillator well. Understand, I designed this oscillator in the early '70s and haven't thought much about it since.

> Can you tell us what the Q and phase noise is?
> (I'll try to look at your original paper to see if you already
> published those numbers). Incidentally, the best unloaded Q I
> have gotten at 10 MHz. is about 400 using a 1/2 inch diameter
> Fair-Rite #67 toroid.
>
The phase noise numbers are published and I do not remember them well enough to quote. Memory also does not serve very well as to what Q was obtained in the published circuit. Some notes indicate that I was using a Micrometals T68-6 wound with about 17 turns of something like #18 or larger. The capacitor was one obtained from and old ARC-5 transimtter. Your core with a Q of 400 sounds like about the same value I achieved.

Linley Gumm

4177. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: tgm@netcom.com
Message-ID: <tgmE8r2BG.Cw2@netcom.com>
Source record: 94944

Charles Miller (cmiller@Mail.Trincoll.Edu) wrote:
: I have a rolling contact variable inductor. The wire seems to be silver
: plated, but is covered with a black corrosion (silver oxide ?). Any
: suggestions for cleaning would be appreciated.

Silver oxide is conductive; there is no need to remove it.

4178. GE MASTR II frequency changes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <3355535D.796E@Bledsoe.net>
Source record: 94945

I am setting up MASTR II's for repeater use. The only problem I have, is that the manual says to read the frequency with a frequency counter at a certain point in the radio. My point is, it has to be 9 times the frequency. In the 440 range, this puts the frequency far above the frequency counters that I have access to. Am I looking at the problem wrong? Can anyone help me decide on how to solve this situation? I have the test set, and MASTR II manuals to work with, plus the mods.
Any help appreciated,
Sam Johnson KF4GQS

4179. Re: Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: tgm@netcom.com
Message-ID: <tgmE8r3ot.GC2@netcom.com>
Source record: 94946
Cross-posted to: alt.ham-radio.morse,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dale (rug@edison.dialix.com.au) wrote:
: Can someone pls (nicely:) direct me to a reference in relation to the
: basics of Morse code equipment. Specifically as to the design and
: construction of the old style of electr mechanical sounders.

Check out the "Telegraph Lore" web page:

http://www.cris.com/~Gsraven/index.shtml

4180. FS: 80m CW crystals

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <5j3jq4$49u@news1.mnsinc.com>
Source record: 94947
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew,rec.antiques.radio+phono

For Sale - set of ten HC6/U crystals suitable for 80m CW
or multiply up onto other bands such as 40m, 20m etc.

Prefer to sell all to one person.

$30.00 plus shipping

3520.83 kHz
3522.91
3525.00
3526.04
3527.08
3528.12
3529.16
3530.21
3531.25
3532.29

Inquire to AF4K at

bry@mnsinc.com

73 - Bry

4181. FS: Electronic parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: James McKellips <mckellips@earthlink.net>
Message-ID: <33554B6B.3A35@earthlink.net>
Source record: 94948

I just salvaged some electronic parts from an old Compugraphic typesetter. The following parts are for sale:

12 - 25 ohm , 50 watt 3% chassis mount resistors
3 - 1 ohm, 25 watt 3% chassis mount resistors
2 - 38,000 MFD 40 VDC caps
1 - 110,000 MFD 15 VDC cap
1 - 8,200 MFD 25 VDC cap
1 - 17,000 MFD 35 VDC 45 Surge cap
1 - 6 uf 660V cap
4 - 1N1184A diodes
3 - 2N5301
Approx 275 ICs will sell as set. Contains 7521, 7535, 7539, 7531, 7541, 7450, 7423 and others.
Heavy Power Transformer. Don't know specs, but suspect it has 5 VDC and others. This item weight quite
a bit, maybe 10-20 lbs.

Make offer to me for all or part at mckellips@earthlink.net

Thanks,
Jim McKellips
WB6NFT

4182. Svetlana Tubes, Hammond Manufacturing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5j3ltp$g2c@news.teleplex.net>
Source record: 94949

Discount prices on all Svetlana tubes.

572B $47 each, two for $90, $175 per quad

811A $19.50 each

All Svetlana tubes available

NOS 6AG7 General Electric , $3.50 each or 10 for $20 plus postage

Email for quotes on all Hammond Transformers and Chassis. All Hammond products available. Tubes, Sockets , Sprague Capacitors , Hardware, Ect.

STF Electronics
171 Springlake Drive
Spartanburg, SC 29302

4183. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: tbryant@cannet.com
Message-ID: <5j1553$998$2@nerd.apk.net>
Source record: 94998
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

```
>> #===============#=====================================================#
>> | Burt Fisher | Teacher of video, broadcasting and electronics |
>> | Amateur call | South Dennis, Ma. (Cape Cod) |
>> | K1OIK | http://www.geocities.com/WallStreet/5169 |
>> #===============#=====================================================#
>> |Visit my WWW site, it is like no other burt@rocketmail.com |
>> #=================================================================#
>
>ha..ha..ha..ha..in the event of a national disaster please dial 0 for
>help! Nah! you'll Always need a pool of people who could put their gear
>back togather and get on the air. If an Earthquake hit I'd be on the
>air, all the local cell sites would be down! Did you see "Independence
>day" ? Hams are pretty much self contained units. We dont need the
>NETWORK....N8XYN

Burt responded to this scenario recently. I believe the response was:

Cell Phones: 240
Ham Radio : 2

Tom - N8ECW
```

4184. Re: Serial Port Conundrum

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-16 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970416004300.UAA18922@ladder01.news.aol.com>
Source record: 94999

In article <jedent.138.001ED5F1@phoenix.net>, jedent@phoenix.net (Joel E. Davis) writes:

>>>I have acquired a copy of the Hamcomm software and a computer
>>>interface for my serial port. However, the serial port has been
>>>disabled because I use an internal modem. Any ideas how I can free up
>>>the serial port so the interface will work? TIA Ron AK5F
>>>
>>To many of those who have replied to this I have a question :-
>
>>What do you do if you have the following requirements:-
>
>>1. Serial Mouse

If you have room... add a PS/2 mouse driver card. The PS/2 mouse
system operates on IRQ 12 and frees up your serial ports. You should
be also able to find an adapter to take your mouse to the smaller PS/2
jack.

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

4185. Re: How to model a tapped coaxial quarter wave resonator?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: Jon Jenkins <academic@onthenet.com.au>
Message-ID: <33560D16.1AC2@onthenet.com.au>
Source record: 94852
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.design

Brad Moersfelder wrote:
>
> What happens when you tap, ie. make a direct connection to the center
> conductor of a quarter wave coaxial resonator? How do you model
> the result in PSPICE given a transmission line element? Would
> the tap be just an ideal transformer? If so, how would you
> determine the turns ratio from the physical tap location?

Hello, if you send me the dimensions and the following:

coax Z0
coax loss
coax Velocity factor
frequency range or signal input type (CW, pulsed, square etc)

I can model it for you.

Jon

--

Name: Dr Jon Jenkins
Org: Academic Technologies Bongaree Rd,
Voice/Fax: 61-7-55-905-008 Terranora,
Inet: academic@onthenet.com.au NSW, AUSTRALIA 2486
Web: http://www.onthenet.com.au/~academic
Son(3): "Daddy, why did God put the dinosaurs here first ?"
Daughter(6):"To make it interesting for us!"...think about it !!

4186. Re: HTX-100 manual and mic pin out needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: UN93B@ford.com
Message-ID: <3355afb6.25400231@news.ford.com>
Source record: 94853
Cross-posted to:
rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.policy,rec.radio.amateur.homebrew,rec.radio.amateur.dx

On Tue, 15 Apr 1997 05:50:10 -0400, ko4qc <ko4qc@concentric.net>
wrote:

>If you can help me obtain one or both of the above,I will gladly
>reimburse any copy,postage etc expenses.
> TNX
> Joel KO4QC

Maybe you should try Radio Shack for a manual.

Brett

4187. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <3355917d.90166934@news.airmail.net>
Source record: 94854

W8JItom@worldnet.att.net (Tom Rauch) wrote:

>The class E amplifier
>in QST is a Tyler circuit.

I don't think so. At the third harmonic the output network presents a non-resonant load to the anode It just looks like a switching amp to me; no resonators. And the second harmonic isn't well terminated, the impedance is quite high
.
Just for fun, I modeled the 300 W output network. A good enough approximation is a 10:50 Ohm, -71 degree, Pi. Looks like the series resonant circuit comes out at 4.56 MHz. I haven't done a spice run on the drain waveform but I'll look at it later; looks to me like there's a lot easier way to do this. Maybe I'm missed something when I reverse engineered it.

Fred, W8OY

JFRILEY@AIRMAIL.NET FREDWA8AJN@AOL.COM

4188. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: SRS Control Room <sropers@dl.ac.uk>
Message-ID: <335607C6.6814@dl.ac.uk>
Source record: 94855

```
test
```

4189. $ INTERNATIONAL CALLING JUST 25-CENTS / MIN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: superdeal@greatnews.com
Message-ID: <E8rryr.Kun@nonexistent.com>
Source record: 94856

INTERNATIONAL CALLING
Your Passport to International Savings
JUST 25 CENTS / MIN
CALL: ASIA ANYTIME
MIDDLE EAST
AFRICA PASSPORT (tm) CALLING CARD
LATIN AMERICA No Upfront Charges
EUROPE Pay Only For Time Used
ANYWHERE ELSE
CALL : 810 - 932 - 0464 (24 hrs)

4190. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3355d73b.673055@netnews.worldnet.att.net>
Source record: 94857

On Thu, 17 Apr 1997 03:07:21 GMT, jfriley@airmail.net (J. Fred Riley) wrote:

>W8JItom@worldnet.att.net (Tom Rauch) wrote:
>
>>The class E amplifier
>>in QST is a Tyler circuit.
>
>I don't think so. At the third harmonic the output network presents a
>non-resonant load to the anode It just looks like a switching amp to
>me; no resonators. And the second harmonic isn't well terminated, the
>impedance is quite high
>.
>Just for fun, I modeled the 300 W output network. A good enough
>approximation is a 10:50 Ohm, -71 degree, Pi. Looks like the series
>resonant circuit comes out at 4.56 MHz. I haven't done a spice run on
>the drain waveform but I'll look at it later; looks to me like there's
>a lot easier way to do this. Maybe I'm missed something when I
>reverse engineered it.

I see what you are saying.

They claim in the text that C3/L2 squares the waveform. It looks like the combination of C2 and the reactance of L2 would form a high impedance tuned resonance at the anode for the third harmonic.

The explaination in the text is incorrect if you are correct.

In any event, if it does work as claimed it is like the old tube RCA transmitter I was thinking of using the Tyler circuit (except RCA used an additional third harmonic resonator in grid).

73 Tom

4191. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3355e265.3531383@netnews.worldnet.att.net>
Source record: 94858
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Wed, 16 Apr 1997 19:55:10 -0400, Steve <thebizlk@erols.com> wrote:

>
>I thought the "size" of the near field is determined by the aperature of
>the radiating antenna. So the near field could be greater than 5wl.

That is correct. The near field distance is mosly a physical distance
and size problem.

73, Tom

4192. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3355e2ff.3685639@netnews.worldnet.att.net>
Source record: 94859
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Wed, 16 Apr 1997 11:41:01 -0500, Lyle Koehler <k0lr@emily.net>
wrote:

Hi Lyle,

>You guys are way out in left field on this one. I can't tell from here
>if it's the E or H field. In the cat example, the faraday shield *will*
>greatly reduce the spark energy at the output terminals of the loop, if
>the distances involved are small compared to a wavelength. At low
>frequencies, it would take a very large loop (and perhaps a very large
>cat) to get out of the near-field region.

While it will reduce low frequency energy, it will not always reduce
the "spark energy" at the operating frequency of the antenna.

Let's consider a two turn loop inside a single shield broken at one
point. The actual result of adding the "Faraday shield" is the loop
behaves like the single broken outer turn is the actual antenna.

Even in the near field, the system responds very well to direct
electric field coupling.

If the original internal two turn antenna is poorly balanced, or
couples to something like a ground independent high Z input
differential amplifier, the outer shield may help. If the two turn
loop is properly coupled to a system that doesot respond to common
mode signals the main result is the outer shield holds the antenna up
in the air better.

>At a very short distance (measured in wavelengths) from an electrically
>small transmitting loop, the H field is much greater than E/377. In the
>immediate vicinity of a small transmitting whip antenna, the H field is
>much smaller than E/377. For example, AO predicts an "excess" H field of
>about 18 dB at 100 feet from a transmitting loop at 187 kHz, and about 8
>dB if you raise the frequency to 500 kHz. You get similar "excess"
>E-field numbers at 100 feet from a short transmitting whip at those
>frequencies.

That's correct, the antenna DOES NOT respond well to electric
near-fields at all WITHOUT a shield. That is my point.

>Inside a cage which consists of small wires that are insulated from each
>other and which do not form electrically closed paths, the E field will
>be attenuated much more than the H field.

Not if it is time-varying. The result is exactly as if the "shield"
became the antenna.

The shield does NOT stop the time varying electric field. If it did,
it would also stop the time varying magnetic field. The antenna would
be dead for any signal.

>Getting back to the original question of what's the best active
>receiving antenna:
>
>One of the responses gave a very good and concise answer. To paraphrase
>it, most noise sources around the house act more like "electric" dipoles
>than "magnetic" dipoles at low and medium frequencies.

I'll assume you mean an electric field dominant radiator, vs a
magnetic field dominant radiator in the induction field coupled area.

Where is that documented????

I keep hearing people "paraphrase" that, but give me a logical
explaination of why that is "true".

>On the 160-190 kHz LowFER band, I use an active loop about 60 feet from
>the house. The loop is not balanced or even well shielded. However, it
>gets rid of most of the crud from the household electronics except the
>horizontal sweep harmonics from the computer and TV set.

My point exactly. Once you have an electrically and physically small
loop, you have the effect of low E field response in the near field.
If you installed a properly treated monopole or dipole at the same
location, I'd bet the results would be the same.

Here at my location, it makes little odifference if I use phased loops
for receiving, or phased monopoles. The only advantage of the loop is
it is easier to isolate it from unwanted feedline conducted signals.

Throwing a "shield" around the loop will only make the system better
(on the desired receiving frequency) IF the original system is
improperly coupled.

Thinking the "shield" stops response to time varying electric fields
is non-sense, as is assuming electric appliances mostly involve
electric field coupling.

73 Tom

4193. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j46lr$gn4@senator-bedfellow.MIT.EDU>
Source record: 94860
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <335577F8.5458@crpl.cedar-rapids.lib.ia.us> sabinw@crpl.cedar-rapids.lib.ia.us writes:
> That is not the subject that has been going on. There has been talk that
> the electric and magnetic components of a radio wave can somehow be
> isolated from each other by a shield of some kind.

> There is talk about shielded loop antennas with non-shorting Faraday
> shields with open-circuits that delete electric fields and pass magnetic
> fields. Or is it the other way around? I'm not sure any more.

The slotted tube Faraday shield blocks axial and radial electric fields, and also radial magnetic fields. Only the axial component of the magnetic field (along with a little electric field regenerated by induction) survives inside.

The gapped Faraday shield technique has been around for a *long* time. Its most common application is in transformers, where it is used to insure that primary to secondary coupling is purely magnetic. This prevents electric fields from propagating undesired common mode energy.

There is no reason that this should not work for radio waves, and it has also been used here for a long time. Its application is restricted to small antennas, since induction will fully regenerate the E field energy from B alone over a moderate fraction of a wavelength.

The other way around is harder: blocking magnetic fields without blocking electric fields violates no law of physics, but there exists no material with the properties required to do a good job.

> Also, that radio
> waves can contain more electric field energy than magnetic field energy.

The problem is that while it is indeed true that traveling waves far from sources or conductors contain nearly equal amounts of electric and magnetic energy, this is only a special case. In the presence of nearby field sources or reflections, all kinds of unbalances can occur. In the real world, one does not only encounter the simple case!

Standing waves in a resonant cavity have equal amounts of energy in electric and magnetic fields, but the energy densities are uneven (anyone with a microwave oven has probably noticed this), and the peaks in the magnetic energy density don't generally occur at the same places as the peaks in the electric energy density. Thus, a

small loop inside a resonant cavity will generally see a different pattern of energy density than a small dipole. In practice, cavity resonators are often coupled to coaxial lines by loops or "probes" (small unbalanced dipoles). The two sorts of coupling structure are not equivalent. Reference books have diagrams of both electric and magnetic field lines in cavities to help engineers decide where to place the chosen coupling structure and size it to achieve the desired degree of coupling.

The extreme case occurs in the common reactive components: inductors and capacitors. Inside a capacitor, the field is almost entirely electric. Inside an inductor, the field is almost entirely magnetic.

> Or that local radio noise sources are more electric than magnetic. Or is
> it the other way around?

It can be either. Physics offers no preference. Ancient lore claims that static zone EMI is predominantly electric. However, the local EMI in my laboratory is predominantly magnetic at long and mediumwave frequencies. This is important to me because I design extremely sensitive radiation detection systems: EMI is a big problem. I suspect that my lab experience is relevant to residential problems, because the major EMI sources are computers and fluorescent lights. I haven't done a careful survey of my home, however.

I am thus sceptical of the loop antenna's claim of superior noise due to low electric field sensitivity. This is not because this claim does violence to physics (it's perfectly possible), but simply because it contradicts my experience. I suspect the real difference that some claim to have observed is due to comparing poorly balanced electric antennas to well balanced magnetic antennas. In the presence of common mode noise on the feedline, balance is what's going to matter. There have been very favorable reports on Datong's balanced dipole active antenna, but it's very expensive.

> Also that the near field of an antenna is more E field than H field, or
> is it vice versa?

Again, it can be either. Dipoles are electric antennas, with a predominantly electric static zone field. Loops are magnetic antennas, with a predominantly magnetic static zone field.

Incidentally, the term "near field" has been used in this discussion in a way that's inconsistent with its usage among electromagnetic specialists. Specialists use "near field" and "far field" to describe a phenomenon in the radiation zone of beam antennas: near the antenna the radiation intensity falls off very slowly with increasing distance. That's the "near field". The "far field" is where the intensity falls off like 1/r^2. The near field of a large microwave dish can extend for kilometers!

For small antennas, we distinguish:

1. The "static" zone, in which the fields resemble the electrostatic field that the the antenna's charge distribution would produce and the magnetostatic field the antenna's tangential current distribution would produce if frozen in time. How far out this extends depends on how accurately you want the fields to resemble the static fields: by a distance of lambda/(2 Pi) the the resemblance is poor.

2. The "induction" zone, in which electric and magnetic fields are tangled up in odd ways that resemble neither static fields nor traveling waves. The energy densities in E and B tend to be balanced better than in the static zone. This zone extends out to a few wavelengths.

3. The "radiation" zone, in which the energies are nearly balanced and the fields are nearly transverse, as required for traveling electromagnetic waves.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4194. Microwave ovens to transmitters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: powen@lynx.dac.neu.edu
Message-ID: <5j3smv$vqg@chaos.dac.neu.edu>
Source record: 94861

Is a convertion from a microwave oven to a transmitter for Ham
applications feasible? Can it be "Re-tuned"?

It seems to me that if the frequency were tuned down a bit (I think
the freq for wiggling water is ~2.1 GHz) and modulated somehow, a
Tappan would make a dandy +100w transmitter.

Phil...

<><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
From the mind | POwen@lynx.dac.neu.edu | Accept
of | POwen@Edgewater.com | no
Phil Owen | ~N1XLP~ | Substitutes!

Would you be prepared if gravity suddenly reversed itself?
<><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>

4195. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: UN93B@ford.com
Message-ID: <3355aed2.25171523@news.ford.com>
Source record: 94862
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Tue, 15 Apr 1997 14:11:58 -0400, ko4qc <ko4qc@concentric.net>
wrote:

>Dan wrote:
>>
>> Burt,
>>
>> You must not ever listen, always have your mouth running. You can't
>> learn anything in that mode.
>> Didn't you see any of the news reports on the Oklahoma bombing. Even the
>> news media new that the first emergency communications was handled by
>> Ham Radio operators.
>>
>> Dan Newby
>> WD4LUR
>>
>> Burt Fisher wrote:
>> >
>> > It has become evident that the ex-service now hobby is done:
>> > Stick a fork in it!
>> >
>> > It serves no one that cellular doesn't.
>> > We are not unique, look around. Everyone has radios, phones.
>> >
>> > Most operators are tunnel-visioned, goat-headed people. They think that
>> > the license, the code or the younger thinkers are the problem:
>> >
>> > I contend it has been the ARRL, NTS and the volunteer exam/incentive
>> > licensing that has did it in. To many "elite" people who must complain
>> > when someone says what they want to say or operate as they want. I once
>> > thought packet radio might go somewhere but we never got over 1200 baud.
>> >
>> > Now if the fact that cell phones were allowed in the Olympic venues
>> > but ham radios were not doesn't show you something, listen to a voice
>> > traffic net like the Indiana Traffic/DewDrop/Mushroom Cloud Spotting net
>> > some afternoon. NTS needs to tie up a radio frequency to handle fake
>> > messages for people who are too lazy to pick up the phone or mail a
>> > letter to mom wishing her happy birthday. Give me a break! They even
>> > pass phone numbers of recipients AND NOW even E-MAIL ADDRESSES!!!A JOKE!
>> > Right?
>> >
>> > I am just waiting till all the VHF spectrum is gone, along with most
>> > of the HF spectrum. Then we will all be CBers, like many elite hams

```
>> > call others in order to degrade an opinion they can't stand to debate.
>> >
>> > Structure, as per ARRL, has not kept up with the purpose of the
>> > "service"
>> > That service used to be needed, now we are "bookmarks"for other wireless
>> > services. The latest band gone is 2300 MHz for wireless internet, not
>> > for packet, which should have pushed been years ago, along with:
>> >
>> > 902-928 GONE well "shared" by every device that would hear hams! Lesson?
>> > 220-222 GONE
>> > 144-148 soon to be gone
>> > 222-225 soon to be gone
>> > 430-450 soon to be gone
>> >
>> > Do you get the picture?
>> > Maybe I drew one for you...
>> >
>> > --
>> > =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
>> > CJ Crosby - KA2RAF/4 - rafman@kerrlake.com | Buggs Island Lake:
>> > The BuckHorn WoodWorx of Buggs Island Virginia | Virginia's best fishing
>> > "A mind's a terrible thing to waste, provided you had one to start with"
>> > "There are 5 boxes to Freedom: Ballot, Witness, Jury, Soap & Cartridge"
>> > =-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=
>> > --
>> > #================#==================================================#
>> > | Burt Fisher | Teacher of video, broadcasting and electronics |
>> > | Amateur call | South Dennis, Ma. (Cape Cod) |
>> > | K1OIK | http://www.geocities.com/WallStreet/5169 |
>> > #================#==================================================#
>> > |Visit my WWW site, it is like no other burt@rocketmail.com |
>> > #===================================================================#
> Burp is a lonley,frustrated old man.If Amateur radio died,he would
>too!It is obviously his life!!His daily routine revolves around it!
> He,most likely,was severely humiliated in some way by a HAM/HAMs and
>this is his way(in his sick,pathetic mind)of 'getting even'.
> I have watched him make a fool of himself since the old BBS days.He
>will continue to do so as long as his feeble old fingers will type.
> One thing I never really understood is,if Amateur radio is so bad,why
>did his daughter get her ticket?He used to brag about that,but that put
>her in the same group of people he so despises!!Strange!
> Ko4qC
> Yes,I know I 'said' Burp.Almost the same thing as a FART!!
```

Whats your point?

Brett

4196. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33561922.2C8@crpl.cedar-rapids.lib.ia.us>
Source record: 94863
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
> The gapped Faraday shield technique has been around for a *long*
> time. Its most common application is in transformers, where it is
> used to insure that primary to secondary coupling is purely magnetic.
> This prevents electric fields from propagating undesired common
> mode energy.

Not correct. The Faraday shield prevents *capacitive coupling* between two circuits. It does not prevent Faraday coupling.

By Faraday coupling I mean that an AC magnetic field creates an AC electric field that is transferred onto an adjacent conductor by virtue of a boundary relation concerning tangential electric fields. A magnetic field, by itself, induces nothing. The associated E field is the thing that is coupled.

As I have posted before, all conventional transformers operate on this principle.

Bill W0IYH

4197. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <33560a9d.415348@netnews.worldnet.att.net>
Source record: 94864

On Thu, 17 Apr 1997 09:17:55 GMT, W8JItom@worldnet.att.net (Tom Rauch) wrote:

>They claim in the text that C3/L2 squares the waveform. It looks like
>the combination of C2 and the reactance of L2 would form a high
>impedance tuned resonance at the anode for the third harmonic.

The impedance at the drain goes high at about 12 MHz; it's non-resonant and capacitive at the second and third harmonic

>In any event, if it does work as claimed it is like the old tube RCA
>transmitter I was thinking of using the Tyler circuit (except RCA used
>an additional third harmonic resonator in grid).

Naw, Tom, you can't call this a Tyler. Tyler found a way to approximate switching operation by tailoring the input and output waveforms. Looking at the input circuit, I can't see any waveform shaping that even remotely approximates they way a Tyler circuit works. You can use a third harmonic resonator either in the grid or the cathode (and anode) to get a Tyler circuit working; this doesn't have either.

Tell me which designer program you have and I'll post an analysis in that format. I'm also gonna look at the drain waveform today.

If you know anyone who rep's BE transmitters, ask them for a copy of their advertising brochure on their AM transmitters. That's a pretty good application of Class E (single ended switching). You may also wanna check out most of the solid-state offerings made by any broadcast company. Everyone tries to switch at the zero current point.

Without being too biased at this point, I'm still unimpressed. It remind me of a Thomson patent of 15-20 years ago. They took the output of an audio amplifier, ran it through an inverting op amp and presented the op amps input and output signals as the amplifier output and claimed that this was a new way for getting maximum power output from an amplifier. Say what? That had only been done for about twenty years when they patented it. Some guys are probably trying to patent toast as a bread improvement.

Fred

jfriley@worldnet.att.net jfriley@airmail.net fredwa8ajn@aol.com

4198. Need info on VT-4-C tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: hanavin@stimpy.eecis.udel.edu
Message-ID: <5j5723$5s$1@dewey.udel.edu>
Source record: 94865

I've got a couple General Electric VT-4-C tubes, which
I need some info on. I'm wondering if this is the
same as a 211 tube? Are they pre-ww2?, I'm looking
to build a pre ww2 style breadboard, single tube transmitter
on a breadboard, and like to use an authentic tube of the
proper era.

4199. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: lopez@mint2.desy.de
Message-ID: <5j58rnoia2@enterprise.desy.de>
Source record: 94866
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Tom Rauch (W8JItom@worldnet.att.net) wrote:

: I've NEVER measured any difference at all by adding a "shield" to any
: loop.

On effect that I've not seen discussed thus far is that an electrostatic shield also attenuates the magnetic flux passing through it by the induction of eddy currents. I am currently experimenting with tuned loops and shields at LF and will report my findings to the group at a future date.

gerry - dd5ax

4200. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33561684.6009528@netnews.worldnet.att.net>
Source record: 94867

On Thu, 17 Apr 1997 11:47:40 GMT, jfriley@worldnet.att.net (J. Fred Riley) wrote:

>On Thu, 17 Apr 1997 09:17:55 GMT, W8JItom@worldnet.att.net (Tom Rauch)
>wrote:
>
>>They claim in the text that C3/L2 squares the waveform. It looks like
>>the combination of C2 and the reactance of L2 would form a high
>>impedance tuned resonance at the anode for the third harmonic.
>
>The impedance at the drain goes high at about 12 MHz; it's
>non-resonant and capacitive at the second and third harmonic

Then it ceratinly is not a class E amplifier, or a Tyler circuit.

It is a simple class C amplifier.

>>In any event, if it does work as claimed it is like the old tube RCA
>>transmitter I was thinking of using the Tyler circuit (except RCA used
>>an additional third harmonic resonator in grid).
>
>Naw, Tom, you can't call this a Tyler. Tyler found a way to
>approximate switching operation by tailoring the input and output
>waveforms. Looking at the input circuit, I can't see any waveform
>shaping that even remotely approximates they way a Tyler circuit
>works. You can use a third harmonic resonator either in the grid or
>the cathode (and anode) to get a Tyler circuit working; this doesn't
>have either.

I do this all long-hand, I can't model it.

I calculate a fraction of an ohm resistive and about 30 ohms Xc at the drain at 21 MHz. I estimated the size of the inductors by the pictures and text.

You appear to be correct, this PA is NOT class E or a Tyler circuit. It is a conventional class C PA.

>Tell me which designer program you have and I'll post an analysis in
>that format. I'm also gonna look at the drain waveform today.

I use a Texas Instruments TI-58C from 1972.

>Without being too biased at this point, I'm still unimpressed. It
>remind me of a Thomson patent of 15-20 years ago. They took the
>output of an audio amplifier, ran it through an inverting op amp and
>presented the op amps input and output signals as the amplifier output

>and claimed that this was a new way for getting maximum power output
>from an amplifier. Say what? That had only been done for about
>twenty years when they patented it. Some guys are probably trying to
>patent toast as a bread improvement.
>
>Fred

When I first looked at the alleged "class E" circuit, it looked like
a third harmonic trap in the gate. The text stated the tank squared
the waveform, which I assumed to mean it presented a high impedance at
the third harmonic.

Apparently it is just a conventional class C stage.

73 Tom

4201. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33562f0f.12293654@netnews.worldnet.att.net>
Source record: 94868
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On 17 Apr 1997 03:50:19 GMT, jpd@space.mit.edu (John Doty) wrote:

>The gapped Faraday shield technique has been around for a *long*
>time. Its most common application is in transformers, where it is
>used to insure that primary to secondary coupling is purely magnetic.
>This prevents electric fields from propagating undesired common
>mode energy.

And if the loop is properly constructed, it does NOT respond to common
mode energy. '

As I said before, if the loop is properly constructed and fed, the
"Faraday" shield does nothing.

Even in most cases of homebrew antennas, there is no difference
between a "shielded" and "unsheilded" loop.

The "shield" only helps if direct capacitive common mode coupling
exists to the feed system (via the loop), something that even the
casual loop builder can easily avoid.

>There is no reason that this should not work for radio waves, and
>it has also been used here for a long time. Its application is
>restricted to small antennas, since induction will fully regenerate
>the E field energy from B alone over a moderate fraction of a
>wavelength.

All that happens is the shield becomes the element responding to
common mode electric fields. The current induced in the Faraday shield
creates a magnetic field, and an electric field also exists INSIDE
the Faraday shield.

It couples right through to the inner loop.

The total effect is that the shield becomes the receiving element.
It's like you changed the diameter of the element slightly. The only
thing the Faraday shield really does is modify common mode capacitive
coupling, something that general;ly isn't a problem anyway in a low
impedance loop antenna.

Claims adding a shield over a loop prevents noise response are mostly
rooted in folklore.

73 Tom

4202. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33563462.5258@crpl.cedar-rapids.lib.ia.us>
Source record: 94869
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
> The extreme case occurs in the common reactive components: inductors
> and capacitors. Inside a capacitor, the field is almost entirely
> electric. Inside an inductor, the field is almost entirely magnetic.
>

Wrong again. Every inductor with an AC current has an associated
electric field associated with it. Lenz's law is working at all times.
The counter emf in an inductor is due to an electric field that is
generated by a changing magnetic field.

Inside a capacitor there is a displacement current. One can easily
calclate an H field that is created by this displacement current.
Textbooks contain exercises that ask us to calculate this H field.

I believe Farady, Lenz and Maxwell and Ampere decided all of that a long
time ago. But now we see that all of that is being pitched out and
reinvented.

Baloney.

Bill W0IYH

4203. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: a313@Lehigh.EDU
Message-ID: <5j52fq$3he4@ns4-1.CC.Lehigh.EDU>
Source record: 94870

Shouldn't this thread be in rec.radio.amateur.misc or .policy ???? What does
this have to do with .equipment or .homebrew ?????

73's Dick K8WHA

In article <5j3nbp$34f$1@nerd.apk.net>, tbryant@cannet.com (T.L.Bryant) writes:
>
>
>>>> #================#===#
>>>> | Burt Fisher | Teacher of video, broadcasting and electronics |
>>>> | Amateur call | South Dennis, Ma. (Cape Cod) |
>>>> | K1OIK | http://www.geocities.com/WallStreet/5169 |
>>>> #================#===#
>>>> |Visit my WWW site, it is like no other burt@rocketmail.com |
>>>> #===#
>>>
>>>ha..ha..ha..ha..in the event of a national disaster please dial 0 for
>>>help! Nah! you'll Always need a pool of people who could put their gear
>>>back togather and get on the air. If an Earthquake hit I'd be on the
>>>air, all the local cell sites would be down! Did you see "Independence
>>>day" ? Hams are pretty much self contained units. We dont need the
>>>NETWORK....N8XYN
>>
>>
>>Burt responded to this scenario recently. I believe the response was:
>>
>>Cell Phones: 240
>>Ham Radio : 2
>
>
>BTW, to the person who sent me e-mail saying that I got "suckered in" by Burt
>Fisher, (and you know who you are) I happen to *agree* with Burt's views. If
>you look past his sarcasm, you'll find that a lot of what he says is true.
>
>Tom - N8ECW
>
>
>

4204. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <335649C0.1E9F@crpl.cedar-rapids.lib.ia.us>
Source record: 94871
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Gerald Lopez wrote:
>
> On effect that I've not seen discussed thus far is that an electrostatic
> shield also attenuates the magnetic flux passing through it by the
> induction of eddy currents.

A main design objective of a Faraday shield is to minimize these eddy current losses. But there will always be a small unavoidable loss. As Doty has pointed out, a longitudinal slit in the loop shield, as well as the usual transverse break, may be helpful (worth a try).

Bill W0IYH

4205. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <33565597.9925936@news.airmail.net>
Source record: 94872

On Thu, 17 Apr 1997 14:27:35 GMT, W8JItom@worldnet.att.net (Tom Rauch) wrote:

>I calculate a fraction of an ohm resistive and about 30 ohms Xc at the >drain at 21 MHz. I estimated the size of the inductors by the pictures >and text.

I just worked backwards and then checked my coil numbers with a calculational tool. The networks program we use (ELSIE) gave me .81, .19 and .12 uh for the inductors. The program calculated 37@-89 at 21 MHz and 9.3@0 for the fundamental.

Jim Tonne got interested and ran a spice analysis using the network shown and a regular old Pi net work. We get exactly the same voltage/current relationship at the drain of the FET whether we use sine wave drive or square wave drive. In all cases the voltage is min when the current is max & vice versa. Sine wave drive causes a tinsy bit of crossover at the trailing edge.

More as time permits cuz right now we don't see anything novel about this circuit; looks like Class C, like you said.

Can you get a copy of Pspice somewhere; it's free. I'll send you the files on the analysis.

Fred, W8OY
JFRILEY@AIRMAIL.NET
FREDWA8AJN@AOL.COM

4206. HAM RADIO VACATION IN CRETE,GREECE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: MANOS NERANTZULIS <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc4b52$a0c99c20$ea915cc1@dummy.forthnet.gr>
Source record: 94873

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/April/97 TO 31/October/97.FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT ++30 81 761382.

4207. Re: Longwire or Randomwire? (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33566D8C.67CA@concentric.net>
Source record: 94874
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve wrote:
> > I don't consider my antenna to be a random length antenna,
> > it is on the long side of my house, and is cut to half wavelength for
> > the 30 meter band (10 Mhz). The longwire is 48.5 feet long, therefore
> > it is a longwire for the 30 meter band, and a random wire for all other
> > bands.

> > All random wire antennas are longwires if you find the
> > right spot on your all-band radio. ;) Like I said, there isn't much
> > of a difference.

> > As I hope you can see there are reasons for specifying frequency
> > as even a "1 foot chunk of wire" is a longwire for 486 Mhz.....sq
>
> As this is rec.radio.shortwave I was using the FCC definition of
> shortwave: 3-30 MHz. So the 486 MHz is a non sequitur. ;)

I think you missed my point. Is your randomwire antenna, or
have you ever used a randomwire antenna that was longer than 16 feet?
If this is true, then your antenna was cut for longwire lengths WITHIN
the HF band (close to 30 Mhz).

sq

(I was only using the 486 Mhz as a wild example that even a foot of wire
is a longwire for _some_ frequency. 16' 2 1/2" of wire is a longwire
for 30 Mhz, maybe this is a better example? :)

4208. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33567043.2BA9@concentric.net>
Source record: 94875
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Gary Coffman wrote:
> > Get right up next to a high power radiating element and say that!
> >;) I'm sure there are a few hams who are reading this and smiling right
> >now. :)
>
> If they are smiling, they are smiling at you. An electro*static* field
> is what you get when you rub a cat's fur. It is what a Windhurst machine
> or Van de Graaf generator produces. It is the field between the positive
> and negative poles of a battery. By definition it is *static* which means
> it is unvarying. There is no electrostatic component to a radio wave.

There isn't an electrostatic component in an EM wave, however,
there is always an electrostatic field around a radiating element, and
an ionizing field if the power is high enough. Radiating elements
present both dynamic as well as static energies. You have an
electrostatic field about your body right now! To say there is _no_
electrostatic component in anything would be in error.

sq

4209. Re: L. Gumm, K0HFD's oscillator circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5j5l91$jec@hpscit.sc.hp.com>
Source record: 94876

In article <33554194.7182@tek.com>,
Linley F Gumm <Linley.F.Gumm@tek.com> wrote:
>>
>The amplifier runs as a 50% duty cycle limiting amplifier, producing a
>square wave output. If one assigns classical class designation to it,
>it would be a class-B. The reason for trying to raise the amplitude at
>the base is to limit the percentage of time that the amplifier is active
>(and making more noise) vs. the time it is in hard limit (and making a
>minimum of noise).

I haven't seen your actual article, so I didn't know until now
it was a push pull design. When a differential pair is in "hard
limit", it means that one transistor is cut off and the other
operates as an emitter follower. It is true that during the
~50% of time that a transistor is cut off, there is no noise,
but during the ~50% of time it's an emitter follower, you have
its full collector shot noise. If there is a resistor or active
current source driving the emitter, you can add that noise it as
well. This is why ECL has high phase noise. In severe class C,
you would have the transistor cut off a high percentage of
the time, reducing the time spent making noise.

>The phase noise numbers are published and I do not remember them well
>enough to quote. Memory also does not serve very well as to what Q was
>obtained in the published circuit. Some notes indicate that I was using
>a Micrometals T68-6 wound with about 17 turns of something like #18 or
>larger. The capacitor was one obtained from and old ARC-5 transimtter.
>Your core with a Q of 400 sounds like about the same value I achieved.
>
>Linley Gumm

If I did the math right:

A Q of 400 at 10 MHz. is a half-bandwidth of 12.5 kHz. If you
have 0 dBm of input drive, and a 3 dB. NF in the oscillator
transistor, you should have phase noise about in this ballpark:

10 kHz. offset: -170 dBc/Hz
1 kHz. offset -150 dBc/Hz
100 Hz. offset -130 dBc/Hz

(neglecting 1/F effects).

Rick Karlquist N6RK
rkarlqu@scd.hp.com

4210. ** FLEA at MIT ** Sunday April 20th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: w1gsl@athena.mit.edu
Message-ID: <5j5jof$em4@senator-bedfellow.MIT.EDU>
Source record: 94877
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

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A discount sellers SEASON PASS is available for
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****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

4211. Re: 10.7 mhz Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5j55ho$8hi@lacy.zippo.com>
Source record: 94878

"j.valdes" <jvaldes@whoi.edu> wrote:

>I'm looking for a source for narrow band +/- 5 Khz 3300 ohm IF filters.
>I've searched the WEB, I located FOX and PTI however they are about $100
>++ each!! Guess they don't like small quantities!! Anyone know who might
>stock something like this?
>Thanks
>Jim WA1GPO

Try looking ate the ECS filters that Digi-Key sells. They have a
7.5KHz version that may work for you. I have had good sucess with
these filters. I found that by playing around with the I/O impedance
I could get the passband ripple as low as 1/4 dB.

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

4212. O s c i l l o s c o p e : For sale or trade

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: cwonders4@aol.com
Message-ID: <19970417175400.NAA13415@ladder01.news.aol.com>
Source record: 94879

Would love to trade it for QRP equipment and/or
other measuring instruments.

One scope remaining

SS5702 Jiwatsu,
Dual Trace,
DC-20MHz,
4" X 3" blue display,
Backlit graticule,
20 V to 1mV settings,
with calibrate settings,
bought used, works fine,
nice.

If no trade then I would like to get $200.00 for one of them.

If you would like to make a reasonable offer
reply via email only, stiwari@cwonders.com

Tnx
KF6HST
Sameer

4213. Re: Surface-Mount amateur kit recommendations???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: miker <mreiney@NOSPAMhevanet.com>
Message-ID: <33566D55.25BF@NOSPAMhevanet.com>
Source record: 94880

David Wilkey wrote:
>
> Can anyone recommend a kit or relatively simple magazine-article
> project for a receiver or a station accessory that would serve as
> an introduction to SMT? I wanna get some hands-on experience before
> my eyesight gets any worse... ;)
>
> Dave Wilkey, N9JIT
> dwilkey@ix.netcom.com

You won't learn much about SMT by building a kit. Assembling SMT
stuff can be easily done with a small soldering iron.

The real learning comes with trying to take SMT stuff apart.
Even a simple resistor removal requires two tiny soldering irons
or a heat gun. It's extremely difficult to remove a large gull-wing
or J-leaded part without at least one heat gun...two works better, one
for each side of the board.

You can make desoldering tools as follows:
Get a heat gun with adjustable temperature. You need a "snoot" for
each size part you want to remove. Take a piece of metal tubing
that fits over the end of the heat gun. Cut 4 slots in the other end
and bend the metal into four flat sections that are about 1/8" larger
than the part to be desoldered. Make a flat metal baffle plate that's
about 1/8" smaller than the part. Install the baffle in the square
hole you made in the tubing by welding or metal tabs thru holes.
This results in a slot around the perimiter so the heat goes to the
leads
and not the part.
You need a "snoot" for each size part you work with.
You also need a vacuum pick-up tool or tweezers that will open wide
enough to grab the part.

You have to experiment with the heat setting, distance to the part
and the heating time so you desolder the part without burning up the
part or the board.

A good way to practice is to buy a SMT VGA card. You can get them
for a buck at swap meets. Practice removing and replacing parts
and see if it still works.

Good luck,
miker

A second heat gun on the back side of the board helps consiserably.

4214. Professional Faceplates

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: Bob Hutson <bhutson@wchat.on.ca>
Message-ID: <3356D03E.69C@wchat.on.ca>
Source record: 94881

So many people have emailed me that I decided to give the
info this way.

For the faceplate of homebrew equip.
design your own using CAD and then plot it out
on " Fascal 700 " this is clear acrylic sheeting, sticky
on one side, with a peel off backing.
We get it from Unisource Canada (so they are probably
in other countries too).
It is .001" thick and designated T1S
We use Staedtler pens with our Hewlett-Packard GLII plotter.
Their part number for the HP is 31HP07K-3
That's a .7mm pen - felt tip - permanent.
They are also available in .3mm - all kinds of colours.
After the plot... let it sit for at least an hour.
Then.... wet the chassis (faceplate) with Windex (very wet)
as you peel off the Fascal ....wet the back (keep the front
dry or the ink will run!!)
That gives you an extra chance to position the Fascal.
If you don't wet the stuff .... and you try to re-position
the Fascal .... it will peel the paint right off!
We only plot the Titles and Control Legends (with neat
borders for groups of controls)
AND ... put little X's where you are going to drill holes.
This is so your rig ends up aligned.
We also plot the hole diameters ... because the guy doing
the driiling might not know what the hole is for!
Hope this all helps.
73'3
Bob

4215. wanted service manaul johnson

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: ken cubilo <kcubilo@freeway.net>
Message-ID: <3356C889.7E6B@freeway.net>
Source record: 94882

i am in need of a schematic,service manual or sams for a
johnson viking messenger one cb unit can anyone help me?
thanks kcubilo@freeway.net

4216. Re: Surface-Mount amateur kit recommendations???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: markm@banspam.mdhost.cse.tek.com
Message-ID: <33568546.242207304@goodnews.tek.com>
Source record: 94883

On Wed, 16 Apr 1997 10:13:33 -0500, David Wilkey
<dwilkey@ix.netcom.com> wrote:

>Can anyone recommend a kit or relatively simple magazine-article
>project for a receiver or a station accessory that would serve as
>an introduction to SMT? I wanna get some hands-on experience before
>my eyesight gets any worse... ;)
>
>Dave Wilkey, N9JIT
>dwilkey@ix.netcom.com
Dave,

As stated elsewhere, the real art is in removing and replacing parts.

But if you would simply like to put down a few surface-mount devices
for the fun of it and end up with something useful, let me suggest the
S&S Engineering "Digital VFO". It's a useful synthesized VFO circuit
with output to about 17 MHz (if memory serves), incorporating an
on-board low pass filter for antialiasing and an LCD display. It is
about 70% surface mount as I recall. S&S Engineering is on the web:

http://www.xmetric.com/sseng/

I decided to build one to use as the local oscillator for a KK7B
"miniR2" direct-conversion receiver. It worked as advertised after
being constructed using my patented "shaky-hands" parts placement
technique. I came away from the experience feeling that, in some
ways, it's quicker and faster to build SMT-based kits than
through-hole designs -- no leads to cut when the soldering is done.

Heaven help you, though, if you put a multi-lead SMT device down with
the wrong orientation! Unless you have the right demounting tools,
your rework technique may begin with ordering a new kit. :-)

Made a nice VFO for the R2, too!

I have no connection with S&S Engineering other than the one I made
through my VISA card.

Regards,

Mark

4217. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j60g4$li6@senator-bedfellow.MIT.EDU>
Source record: 94884
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <33563462.5258@crpl.cedar-rapids.lib.ia.us> sabinw@crpl.cedar-rapids.lib.ia.us writes:
> John Doty wrote:
> > and capacitors. Inside a capacitor, the field is almost entirely
> > electric. Inside an inductor, the field is almost entirely magnetic.
> Wrong again. Every inductor with an AC current has an associated
> electric field associated with it. Lenz's law is working at all times.

Nope, right again. Let us calculate:

From the Pico catalog, take an inductor, #69410, 25 uH, self resonant frequency 4 MHz. We may estimate total electric field energy storage within the component from its effective capacitance, which from the self resonant frequency is about 63 pF (a reasonable value for an inductor of this type).

Now, apply 1V RMS at 100 kHz. We may immediately calculate the total mean electric field energy within the component from the capacitive energy storage relation (.5 C V^2), or 32 picojoules.

The magnetic energy storage is a little trickier (since we applied a voltage). The reactance (2 Pi F L) is about 16 ohms, so the RMS current is about 64 mA. The average magnetic field energy (.5 L I^2) is thus 51 nanojoules.

Thus, this device has, on the average, more than 1000 times as much energy stored in magnetic fields than it has in electric fields. The electric field energy is only comparable to the magnetic field energy very briefly while the current changes sign. The electric field energy thus has no significant influence on the dynamics of this device: it may reasonably be considered an almost purely magnetic device at this frequency.

At 10 MHz the situation is very different, but no sensible engineer would call this thing an "inductor" at 10 MHz.

> The counter emf in an inductor is due to an electric field that is
> generated by a changing magnetic field.

No. The the key thing to remember about an inductor is that the E field along the wire is *zero* (ignoring resistance). This is the electric boundary condition for a conductor. Along the wire, there is a *potential gradient* that *cancels* the E field due to dB/dt. A potential gradient is not the same thing as an E field. In a practical inductor, this potential gradient leads to small electric fields perpendicular to the wire, but these are properly considered

parasitics to be minimized by the design of the winding.

The EMF may be calculated by integrating the potential gradient
along the wire (if you integrate the E field along the wire you
get *zero*). Of course, it's much easier just to use Faraday's Law
in its original (integral) form (and even easier to read the
inductance out of a catalog :-). You may also cheat and integrate
the E field that would be there if the wire wasn't present, but
that's doing violence to the physics of an inductor (although in
a betatron...).

> Inside a capacitor there is a displacement current. One can easily
> calclate an H field that is created by this displacement current.
> Textbooks contain exercises that ask us to calculate this H field.

But that H field has no appreciable influence on the dynamics of
most practical capacitor below VHF frequencies (OK, aluminum
electrolytics, yuk). The effect was so small in 19th century
circuitry that Maxwell had to predict its existence theoretically
before anyone could devise experiments to detect it. A capacitor,
operated within its intended frequency range, is a pure E field
device for nearly all practical purposes. You may estimate the
energy ratio in E and H fields by analogy with the inductive case
if you wish.

> I believe Farady, Lenz and Maxwell and Ampere decided all of that a long
> time ago. But now we see that all of that is being pitched out and
> reinvented.

It isn't me that's pitching it out, it's you! Have you built a
transformer with a dipole for a secondary yet?

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4218. Re: Microwave ovens to transmitters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: Paul Graham <paulg@imaxx.net>
Message-ID: <335690DC.7A48@imaxx.net>
Source record: 94885

Phil Owen wrote:

```
>
> Is a convertion from a microwave oven to a transmitter for Ham
> applications feasible? Can it be "Re-tuned"?
>
> It seems to me that if the frequency were tuned down a bit (I think
> the freq for wiggling water is ~2.1 GHz) and modulated somehow, a
> Tappan would make a dandy +100w transmitter.
>
> Phil...
>
> <><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
> From the mind | POwen@lynx.dac.neu.edu | Accept
> of | POwen@Edgewater.com | no
> Phil Owen | ~N1XLP~ | Substitutes!
> --------------------------------------------------------------------------
> Would you be prepared if gravity suddenly reversed itself?
> <><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
```

There was an article in 73 a few years ago concerning doing what you are asking about.

The transmitter would have the same output that tha Micro-wave oven had: 300 - 700 Watts. This is sufficient power not only to be heard a fair distance away but also enough to cause small birds to come falling out of the sky (medium rare) 1/4 Mile from your antenna.

If you really want to do this, please use EXTREME CAUTION.

Paul - K9ERG

4219. O'Scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: astone@erols.com
Message-ID: <3357032A.5B6@erols.com>
Source record: 94886

Looking for a good basic used scope (100 MHz or so, dual trace, etc.)
that doesn't cost much. Would like recommendations on specific models and
reliable sources for used test equipment. Thanks.

4220. Re: Microwave ovens to transmitters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-17 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierE8uFKG.7r1@netcom.com>
Source record: 94887

In article <5j3smv$vqg@chaos.dac.neu.edu>,
Phil Owen <powen@lynx.dac.neu.edu> wrote:
>Is a convertion from a microwave oven to a transmitter for Ham
>applications feasible? Can it be "Re-tuned"?
>
>It seems to me that if the frequency were tuned down a bit (I think
>the freq for wiggling water is ~2.1 GHz) and modulated somehow, a
>Tappan would make a dandy +100w transmitter.

The frequency isn't from any physical characteristics of water. Old microwave ovens ran at 915 MHz, and new ones run at 2.45 Ghz +/- 50 MHz. These are used because that's where the Industrial/Scientific/Medical allocations were made by the ITU Treaties. 915 MHz is right in the middle of a ham band and 2450 is (or was) on the edge of one. (Didn't they take part of that band (13 cm) away for other uses in the last year or two?)

If you could find a 25 or so year old Raytheon RadarRange you could have all sorts of fun jamming all the wireless LANS in town. (As I remember, they were huge suckers, about half the size of a refrigerator with a vertical sliding door.)

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

4221. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33577c27.8531840@netnews.worldnet.att.net>
Source record: 94800

On Thu, 17 Apr 1997 17:32:11 GMT, jfriley@airmail.net (J. Fred Riley)
wrote:

>Jim Tonne got interested and ran a spice analysis using the network
>shown and a regular old Pi net work. We get exactly the same
>voltage/current relationship at the drain of the FET whether we use
>sine wave drive or square wave drive. In all cases the voltage is min
>when the current is max & vice versa. Sine wave drive causes a tinsy
>bit of crossover at the trailing edge.
>
>More as time permits cuz right now we don't see anything novel about
>this circuit; looks like Class C, like you said.

Yes, I think I'll build one and measure waveforms. I'll bet it is a
simple class C, from the component values.

Do you know why they called it class E, or what the textbook
definition of class E is???

>Can you get a copy of Pspice somewhere; it's free. I'll send you the
>files on the analysis.

I have P spice, but I can't figure out how to use it.

73 Tom

4222. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33577e1b.9031848@netnews.worldnet.att.net>
Source record: 94801
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Thu, 17 Apr 1997 11:47:31 -0700, "Steve J. Quest"
<Squest@concentric.net> wrote:

>Gary Coffman wrote:
>> > Get right up next to a high power radiating element and say that!
>> >;) I'm sure there are a few hams who are reading this and smiling right
>> >now. :)
>>
>> If they are smiling, they are smiling at you. An electro*static* field
>> is what you get when you rub a cat's fur. It is what a Windhurst machine
>> or Van de Graaf generator produces. It is the field between the positive
>> and negative poles of a battery. By definition it is *static* which means
>> it is unvarying. There is no electrostatic component to a radio wave.
>
> There isn't an electrostatic component in an EM wave, however,
>there is always an electrostatic field around a radiating element, and
>an ionizing field if the power is high enough. Radiating elements
>present both dynamic as well as static energies. You have an
>electrostatic field about your body right now! To say there is _no_
>electrostatic component in anything would be in error.
>
>sq

The topic at hand is noise or QRN.

Please tell me what type of noise this static field produces.

A stable unchanging field must cause a VERY VERY low pitched sound.

;-)

73 Tom

4223. DRAKE TR-7 AUDIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: JM Bourdereau <F5LCI@wanadoo.fr>
Message-ID: <33572F31.7FEE@wanadoo.fr>
Source record: 94802

I hear very poor audio when receiving CW with narrow (300 Hz) filter on
my TR-7.
I know that some ringing is unavoidable, but so much distortion is a
pain to ears and does not happen with my other rig (TS-950S with 500 and
250 Hz filters).
This annoyance is still here after carefull realignment procedure from
the service manual.
Maybe the audio amp has too much gain (external filtering is of some
help).
No special advice obtained on this subject from Drake Co.
Any suggestion welcome.

If I'm in the wrong group, please e-mail.
Thanks.

Jean-Marc BOURDEREAU
99.5% CW
F5LCI@Wanadoo.fr

4224. Re: CD-Recordable Media for Sale at Good Prices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5j87nj$3ql@hpcvsnz.cv.hp.com>
Source record: 94803

eo[ruewoiu@as;oirjewo;i.com wrote:

: We have the following CD-R media and CD-Recorders for Sale:

What the devil this is doing in r.r.a.h, I have no idea, but the prices don't look any better than MEI has. Speaking as a satisfied customer, I can say that MEI has given me very good service, and doesn't feel a need to disrupt irrelevant newsgroups with advertising.

4225. FS: Yaesu FT-747GX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: kf4kjf@post1.com
Message-ID: <3359a718.15445555@news.icanect.net>
Source record: 94804
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi ,

I have a Yaesu FT-747GX to sell. Covers .5-30 mz. Its "as new" in the box not
a single mark on it. I would like to get $500.

.-.
/ \ .-. .-.
/ \ / \ .-. / \
/_Benjamin_Blavat_KF4KJF_kfkjf@post1.com
\ / \ / \ / \ /
\ / `-' `-' \ /
`-' `-'

4226. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <3357a824.65538487@news.airmail.net>
Source record: 94805

On Fri, 18 Apr 1997 14:50:00 GMT, W8JItom@worldnet.att.net (Tom Rauch) wrote:

>Do you know why they called it class E, or what the textbook
>definition of class E is???

I pulled the original patent application and, basically, its Class E cuz it doesn't have a complementary transistor to switch with. This is certainly simpler than an H bridge but this is a tuned amplifier whereas an H bridge is much simpler to couple.

>I have P spice, but I can't figure out how to use it.

If you hadda been listening instead of picking your nose in school you'd have been able to figure out that, for the component values given in the article, the efficiency of the amplifier, as described, would be 57%!! If you wanna do a quick fix, change C2 to 470 pf, C3 to 450 pf, and L2 to 1.8 uH. 440 Watts out @ 90%. It'd take a bit more time than I have to get the output at exactly 300 Watts with 100 Volts applied. All you gotta do to L2 is change to 11 turns instead of 9 turns; total coil length of about 3".

Later

Fred, W8OY
JFRILEY@AIRMAIL.NET
FREDWA8AJN@AOL.COM

4227. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j8a2f$47d@senator-bedfellow.MIT.EDU>
Source record: 94806
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <335566DE.3854@erols.com> Steve <thebizlk@erols.com> writes:
> I thought the "size" of the near field is determined by the aperature of
> the radiating antenna. So the near field could be greater than 5wl.

You're using the "official" definition of "near field". The other guys are using it more colloquially to mean something like "everything inside the induction zone". This usage is not uncommon (I've even seen it in textbooks), but it can be confusing.

The near/far field distinction is mainly useful for large antennas. The "zone" distinctions are mainly useful for small antennas, especially things that aren't intended to be antennas but emit EM fields anyway.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4228. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j8a9e$4gh@senator-bedfellow.MIT.EDU>
Source record: 94807
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <33561922.2C8@crpl.cedar-rapids.lib.ia.us> sabinw@crpl.cedar-rapids.lib.ia.us writes:
> Not correct. The Faraday shield prevents *capacitive coupling* between
> two circuits. It does not prevent Faraday coupling.

If it makes you happier, you may substitute the word "inductive" when I use "magnetic", and "capacitive" when I use "electric". However, if *I* did that routinely my colleagues would not understand me. The normal terminology is "electric" and "magnetic".

When physicists talk about "electric" effects and "magnetic" effects, we do not mean that the field isn't fully electromagnetic. Nevertheless, there is a real distinction between "electric" radiation and "magnetic" radiation. The recognition of this goes back to Hertz, who calculated radiation using combinations of electric and magnetic fields now known as "Hertz vectors". Hertz vectors come in two varieties: "electric" and "magnetic". An electric Hertz field describes the field of a small dipole antenna, while a magnetic Hertz field describes the field of a small loop. Each describes an electromagnetic field with both E and B, but THEY ARE NOT THE SAME THING.

For antennas separated by large distances, Hertz's results show that the distinction between magnetic radiation and electric radiation is simply polarization. I believe this is the result that you attempt to reason from. Nearby, however, the situation is more complex, since the static zone field of a magnetic radiator is predominantly B, while the static zone field of an electric radiator is predominantly E.

In the future if you choose to dispute this, I invite you to compute the energy in the E and B fields in question. Failure to do this will lead you to mistake minor parasitics for major effects. For example, at a radial distance of 0.02 wavelengths from a small loop emitting a field, the ratio of magnetic to electric field energy density is about 60 (although the formulas aren't terribly complex, it was easier to look up the tabulated field coefficients in Reference Data for Radio Engineers, square them, and divide).

The coupling works both ways. Since a small loop antenna generates only a magnetic field in its vicinity (the electric field energy is negligible), it must respond only to the magnetic field in its vicinity. One may therefore compute the differential terminal voltage of a small receiving loop directly from Faraday's law, ignoring electric fields, and if you check the literature on loop

antennas this is precisely how it is done in practice. This works regardless of whether the field is a quasi-static field from a nearby source or a fully electromagnetic field from a distance: the loop responds only to the magnitude of the magnetic field.

Similarly, a small dipole couples only to the electric field in its vicinity. Consider two small antennas, one a dipole and one a loop, matched to be equally efficient at receiving electromagnetic radiation from distant sources, and oriented to have the same polarization. If you place them 0.02 wavelength from a small loop emitting an EMI field, the dipole will see 18 dB less EMI than the loop, according to the above result. In a practical situation, this might well be worth exploiting.

Again, if you doubt this, I invite you to design a working transformer with a dipole in place of one of its windings. This *must* work if your argument is correct. Please address this issue.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4229. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j89v0$46l@senator-bedfellow.MIT.EDU>
Source record: 94808
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <1997Apr12.132209.8292@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman) writes:
> The energy of the wave is transferred back and
> forth between the electric and magnetic field components of the wave
> continously because one continuously generates the other as they travel
> through space. That's what allows an EM wave to propagate through space.
> And since energy must be conserved, the electric and magnetic field
> components *must* be of equal strength (though at different times as the
> energy oscillates back and forth between the electric and magnetic field
> vectors).

No. The energy does not oscillate back and forth between the E and B field in a traveling wave. The two are in fact *in phase*, so the energy density in one peaks at the same time as the energy density in the other, at any given point. I made your claim in class (as a high schooler taking a college level course in the summer) a few decades ago. Prof looked at me with pity and told me to read the book more carefully.

In standing waves you can have the oscillation you want, but not in traveling waves.

It *is* true that in a traveling wave the electric and magnetic field energies are equal (or to be fussy, the energies approach equality as the distance from the source approaches infinity).

> A *partial* shield can then have some effect in differentiating the
> fields from far sources as compared to near sources. But if the
> shielding is *complete* for either field, no EM signal will be
> received. That's why the shielded loop antenna must have a *break*
> in the shield.

An aluminum tube with a thin break is for all practical purposes as good an LF/MF/HF electric field shield as an unbroken tube, yet the unbroken tube is also an effective shield against magnetic fields while the broken one is not. You can verify this by comparing the effect of such a shield on a dipole antenna and a loop antenna (both well balanced to insure you're actually sensing the field at the antenna).

> Actually, what a loop (shielded or not) and whip do (when properly
> combined) is change the antenna pattern from bidirectional to cardioid,
> IE sharply unidirectional.

The half power beamwidth of a cardioid is something like a third
of a circle: I use cardioid pattern antennas pointed straight up
to receive spacecraft signals from horizon to horizon. A cardioid
is not "sharply" unidirectional.

> Note that the whip and loop must be physically small with respect
> to a wavelength for this to work. If they grow to be an appreciable
> fraction of a wavelength, then polarity raises its ugly head as an
> issue which must also be considered. Polarity can be exploited for
> other things, such as diversity reception, but it will have the effect
> of degrading the cardioid pattern of a loop and whip combination.

You're talking about phasing. This is used by some advanced MW
DXers, with pretty amazing results. These folks synthesize all sorts
of patterns (the idea is to null out interfering stations) by
combining the signals of different antennas of various types, from
loops to Beverages. One can, for example, take a Beverage with a
minor lobe pointed in an undesirable place and null out the unwanted
lobe by phasing in a little signal from a loop. The antennas need
not be small, although phasing works best when the antennas are so
close to ground level (as at MW) that only the vertically polarized
signal component is significant.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4230. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3357EA8C.3D23@crpl.cedar-rapids.lib.ia.us>
Source record: 94809
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
> In article <33561922.2C8@crpl.cedar-rapids.lib.ia.us> sabinw@crpl.cedar-rapids.lib.ia.us writes:
> > > Not correct. The Faraday shield prevents *capacitive coupling* between
> > > two circuits. It does not prevent Faraday coupling.
>
> If it makes you happier, you may substitute the word "inductive"
> when I use "magnetic", and "capacitive" when I use "electric".
> However, if *I* did that routinely my colleagues would not understand
> me. The normal terminology is "electric" and "magnetic".

My many professional engineer colleagues, many of whom take a back seat to no one, and a vast array of engineering literature, use inductive and capacitive. Thanks for telling us that we "may" do that. I am sure that all of those nice (but probably very commonplace) folks will be glad to know that they have the permission of an authentic *physicist*.

Bill W0IYH

4231. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3357E8AA.5843@crpl.cedar-rapids.lib.ia.us>
Source record: 94810
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
gary@ke4zv.atl.ga.us (Gary Coffman) writes:
> > The energy of the wave is transferred back and
> > forth between the electric and magnetic field components of the wave

> No. The energy does not oscillate back and forth between the E and
> B field in a traveling wave. The two are in fact *in phase*,

It's in the *standing* wave that energy is passed back and forth. The
standing wave is a reactive thing with a zero Poynting vector.

Bill W0IYH

4232. Re: Schematic maker for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: miker <mreiney@NOSPAMhevanet.com>
Message-ID: <3357E7B1.713F@NOSPAMhevanet.com>
Source record: 94811

daveaa1a@ssih.com wrote:
>
> Is there a default Electronic Schematic Maker that can be read by most anyone with a PC..??
> Thanks for your help
>
> de daveaa1a
You can use most any schematic capture to plot to a file in HPGL format.
This file can be read into a word for windows document and viewed.
There
are also other programs that can read HPGL.
Or you can convert it to PDF format and send it that way. Acrobat
reader
is free.

4233. Re: FS: Yaesu FT-747GX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: dussault@vipxlnet.com
Message-ID: <33580699.9544718@news.bellglobal.com>
Source record: 94812
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Fri, 18 Apr 1997 16:55:12 GMT, kf4kjf@post1.com (Benjamin Blavat)
wrote:

>Hi ,
>
>I have a Yaesu FT-747GX to sell. Covers .5-30 mz. Its "as new" in the box not
>a single mark on it. I would like to get $500.
>
> .-.
> / \ .-. .-.
> / \ / \ .-. / \
>/_Benjamin_Blavat_KF4KJF_kfkjf@post1.com
> \ / \ / \ / \ /
> \ / `-' `-' \ /
> `-' `-'
What kind of tubes does it use?
VE2ATD

4234. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: Willard Flagg <flagg@TFF.Com>
Message-ID: <33581059.388F659A@TFF.Com>
Source record: 94813
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I don't see a rec.radio.amateur.swap. I do see a rec.radio.swap and a rec.ham-radio.swap. Perhaps others don't get the sub-group either.

-will flagg, n1vlb

Marty Albert wrote:
>
> Has anyone else noticed all the WTB and For Sale ads in the groups
> lately? Seems to be getting bad again...
>
> This morning, out of 23 new articles in one group, 18 were
> inappropriate.
>
> Makes you wonder why we have rec.radio.amateur.swap for, eh?
>

4235. Thanks for the help!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <3357AEF9.5FDC@Bledsoe.net>
Source record: 94814

I just wanted to thank all those who replied to my post concerning questions about MASTR II useage for repeaters. All your help has relly paid off our club.
Also, if anyone has any spare crystals (in the 2 meter range for MASTR II's, I would be interested in purchasing them, if the frequency will fit in, in my area. Also, I could use another set of 2 meter duplexers, if the price is right.

Thanks,
Sam Johnson KF4GQS

4236. All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: marty@trucom.com
Message-ID: <3357a131.1626891@news.trucom.com>
Source record: 94815
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Has anyone else noticed all the WTB and For Sale ads in the groups
lately? Seems to be getting bad again...

This morning, out of 23 new articles in one group, 18 were
inappropriate.

Makes you wonder why we have rec.radio.amateur.swap for, eh?

Take Care & 73

Marty Albert - marty@trucom.com
Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

Heartland Internet Services

****
Interested in Amateur Radio?
http://www.trucom.com/ppages/marty
****

4237. Problems with 4-1000 on 17m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: Svein Henriksen <la3pu@sn.no>
Message-ID: <33586C0B.6FC6@sn.no>
Source record: 94816

Just finished an amplifier using a single 4-1000 with 4500v on the
anode. It works greate on all but one band frm 160 including 10m. On 17m
it is not possible to get it running. There are no parasitic ocillations
but i suspect that it may be ocillating on the operating frequency. I
have grid current flowing so its taking drive. Some power output is
indicated on the power meter, but IC is way to high wit only a 15 to 20
watt drive and the tube gets red hot in seconds. It is not possible to
dip the IC with the plate cap. The anode choke does not get warm so
there are no series resonances there. The configuration is grounded
grid. Drive on the cathode. I am still working on the problem and have
not given up, but any suggestions would be highly apreciated.
Thanks in advance.
73 de LA3PU
la3pu@sn.no

4238. Re: Ideas For Panel Labeling?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: ESPI35E@prodigy.com
Message-ID: <5j90bs$l1m@newssvr01-int.news.prodigy.com>
Source record: 94817

Brother also has a tape for the "P Touch that is a dry transfer type of ribbon. I've only had one cartridge of it, but it worked great. It saves all of the line-up time with Datak type of tranfers. It's not too available off the shelf, but it can be ordered through almost any distributor who handles the Brother products.

73
de N1FNE

4239. Re: LapLink Cable. What is in it?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: ESPI35E@prodigy.com
Message-ID: <5j90qi$l1m@newssvr01-int.news.prodigy.com>
Source record: 94818

Here's the pinout of the parallel laplink/interlink cable. I use DOS Interlink to do almost daily large copying of files back and forth between my laptop and desktop system. You can parallel interlink files MUCH faster than even copying them to floppies.

If you need help with Interlink, just go to the DOS prompt and type
help interlink
and
help intersvr.

73
de N1FNE

Laplink/Interlink Parallel/Parallel Adapter Pinout

For a DB-25 to DB-25 Male Cable
Case----------Case
1----------1
2----------15
3----------13
4----------12
5----------10
6----------11
10----------5
11----------6
12----------4
13----------3
15----------2
18 thru25----------18 thru 25

4240. Source for Cross band Repeater Controller

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: Andy Brinkley <brinkley@ols.net>
Message-ID: <33584BFA.5EEE@ols.net>
Source record: 94819

Some time ago I read an article in either 73 or QST about a cross band repeater controller that made use of speaker audio control the TX instead
of having to go inside the radio for a squelch control point.

If any one has a copy of the article or the date that it was printed , please
e-mail me. Will gladly pay mailing and copying cost.

TNX

Andy Brinkley
---
brinkley@ols.net

NC Certified Firefighter III / Instructor II / EMT-A
FCC Licensed Technician
Amateur Call N4ROX

4241. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j8vre$gog@senator-bedfellow.MIT.EDU>
Source record: 94820
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <3357EA8C.3D23@crpl.cedar-rapids.lib.ia.us> sabinw@crpl.cedar-rapids.lib.ia.us writes:
>> If it makes you happier, you may substitute the word "inductive"
>> when I use "magnetic", and "capacitive" when I use "electric".
>> However, if *I* did that routinely my colleagues would not understand
>> me. The normal terminology is "electric" and "magnetic".
>
>My many professional engineer colleagues, many of whom take a back seat
>to no one, and a vast array of engineering literature, use inductive and
>capacitive. Thanks for telling us that we "may" do that. I am sure that
>all of those nice (but probably very commonplace) folks will be glad to
>know that they have the permission of an authentic *physicist*.

You think I'm a physicist? I'll have to tell my boss: he can't figure out how to categorize my job that precisely :-).

The terminology is the same in engineering. I've never seen any reference to "inductive" or "capacitive" antennas in the engineering literature, but I've certainly seen "electric" and "magnetic" antennas, Hertz vectors, multipoles, etc.

In referring to EMI, the engineers I work with use "electric" and "capacitive" interchangeably (also "inductive" and "magnetic").

The main differences seem to be that many physicists prefer Gaussian units, in which Maxwell's equations are a bit simpler (none of this epsilon naught and mu nought stuff, just c), but the 4 Pi's show up in counterintuitive places. Also physicists tend to think of B as the "fundamental" magnetic field, and "H" as the derived one, EE's like it the other way (I have no opinion, seems unimportant, although I got in the habit of using B in grad school).

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4242. wiring connections

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: 106607.413@compuserve.com
Message-ID: <33586627.2D9E@compuserve.com>
Source record: 94821

help can anyone help with the wiring connections between an yeasu ft840 rig and an fc757 tuner 73 s mw0awm.

4243. fs. parts for experimenters and prototypers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: baggybob@townsquare.net
Message-ID: <baggybob-1704972120230001@206.173.111.48>
Source record: 94888
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

baggybobs' buck a bag bargain bonanza
brought to you by bob & kim.

all new surplus unless otherwise noted

Shipping to the USA
Small parts orders (less than $35 usd). I ship by priority mail. Cost is $3

Larger parts orders I will ship by UPS using an agent. Cost is $5
I ship UPS COD only upon receipt of $10 deposit. The UPS depot is 60 Km
away. I have to drive there and handle CODs myself. I cannot afford the
cost or hassle of refused COD shipments.

Really small parts orders (up to $5 surface mount parts only). Send me a
SASE with three stamps. I will put in some foam filler to prevent damage.
International orders require international money order or funds drawn upon
a US bank. We can determine together the best way to ship.
.
If you have tech questions please e-mail. I will answer in a day or two.

Address:
Kim Kelly
507 Broad St
Apt 144
Lake Geneva, WI 53147

Leaded parts. Surface mount parts for experimenters/prototypers are in a
different message

Digital-to-Analog IC DAC08030 from National Semi. 8 bit CMOS with double
buffered output. .05% linearity. 20 pin DIP package, works on single supply
Most parts have house marking but guaranteed to be as represented. $1 ea

15 pages of data sheets and suggested circuits $ .50 but no charge if you
purchase 10 or more parts.

Voice synthesizer. Phillips PCF8200 used in applications with
microprocessor. Speech code stored in memory. Programable speaking speed in
male or female voice. Single 5 v supply. 24 pin DIP
3/$1
data sheets and application notes 14 pages $.50 but no charge if you
purchase 15 or more parts.

Quad Op amp in 14 pin DIP package. Motorola MC33074L. 3/$1
Slew rate 13 V/us. Operates on 3 to 44 V supply

Allen Bradley 16 pin 1K DIP cermet resistor network (8-1K resistors)
12/$1

Schottky barrier diodes in quad ring configuration. Used for balanced mixer
at 800-900 MHz NEC part # ND487R1-3R. 10/$1.00
I can only find a 1 line description for this part in my NEC catalog. The
first person to send me a mfgr's data sheet on this part will get $10 of
parts for free. (your choice, not valid for shipping cost)

Transistors TO-92 plastic 10/$1 100/$8.00
Motorola
BC557B PNP VCEO=45, typ HFE=290@IC 2 mA, typ fT 320Mhz
BC547B NPN VCEO=45, typ HFE=290@IC 2 mA, typ fT 300Mhz

General Instrument yellow and green LEDs. T1 size with long 1 inch leads.
25/$1

Rectifiers
1Amp @ 200 V PIV Leads for PCB insertion. 60/$1
1 Amp @ 50 V PIV long leads 40/$1
1 AMP @ 100V PIV long leads glass 1N4002 25/$1
1 Amp @ 1000 V PIV long leads General Instrument RG1M (hi spec 1N4948)
fast recovery rectifier Trr= 500 nS marked 66H30 12/$1

PIN diode Siemens BA244 Vr=20,Ct= 2pF,Rs= 0.5 Ohm PCB leads 8/$1

Zeners
Volts Test current Pd Tolerance Lead length

27 4.6mA 400 mW 5%
long 10/$1
18 14 mA 1W 5%
long 10/$1
18 65mA 5W 10% long
1N5355A 8/$1
16 0.25 mA 1/4 W 5% long = to
1N4110 6/$1
10 25mA 1W 5%
PCB 20/$1
5.6 3mA 400mW 5% long
1N5524B 8/$1
3.9 20mA 400mW 5%
long 10/$1

Motorola MHW803-1 blue brick power amp module. new $8 each
30dB gain with 1mW input. Optimized for 850MHz but will still deliver 2
watts out at 900 MHz. 7.5 volt supply. Class C
Data sheet included.
I have MHW803-3 optimized for 890-940 MHz
for $12 each.

MHW913 14 watts out at 890-915 MHz class AB but can be pushed to 20 watts.
Minimum gain 21.5 dB @ 900 MHz. DC input 12 volt. Removed from
operational equipment, marked with house number but guaranteed to be as

represented. data sheet included (Only 30 pieces available so e-mail
before ordering) $8 each

Ferrite core choke for RF filtering. Quarter inch diameter by .4 inch
length. Has six holes. Use as supplied with 2 turns bare wire or clip &
wind your own. 12/$1.00

Smaller ferrite core with only one hole. Wound with #28 solid wire.
Covered with plastic shrink sleeve. 15/$1.00
yellow 2 turns
brown 3 turns
green 5 turns

Dipped mica caps. Most have leads clipped and formed for PCB insertion
Values range from 12pf to 10,000 pf with many gaps Inquire for values you
want. 12/1.00 for smaller sizes to 8/$1.00 for largest.

Disc ceramic caps these have leads clipped & formed for PCB insertion
mfg: MuRata & KCK-
value voltage tolerance diameter lead spacing
.01uF 100 Z .41" .25" (6.35MM)
.01uF 200 Z .45 .25
.02uF 200 Z .53 .25
.1uF 25 Z .5 .375 (9.5MM)

12 parts per bag - 2 bags for $1.00
quantity price $20.00 per thousand, .
.01uF @100V is $15.00 per thousand

Very small polyester film caps - leads clipped for PCB insertion
Wima MKS 2 or FKS2 series (100C) and Panasonic V series (85C) temp rating.
5MM lead spacing (.2")
Parts up thru .1uF measure .approx .275" square (7 MM)

value voltage % tolerance size
3300pf 100 5 7 x 7.2 mm
3900pf 100. 5
6800pf 63 5
.01 63 5
.018 63 5
.022 63 5
.03 63 5
.033 63 5
.039 63 5
.056 63 5
.068 63 5
.1 63 5
.15 63 5 8 x 7.2
.33 50 5 8 x 7.2
1.0 50 5 11 x 7.2

Above caps 12/$1.00 limited quantity on some values.
For some values 100 volt may be substituted for 63 volt.

Make your own assortment: 20% off on 6 or more bags.

POLYESTER FILM CAPACITOR ASSORTMENT
$5.00 each assortment
Nichicon YA series or similar for upright mounting on PC board. Coated with epoxy resin: rated for +85C. Tolerance 10% or better (most are 5%)
12 pieces each of 16 different values with bonus 30 disc ceramic caps, .01uf @100v and .1uf @25v. Over 200 total pieces.
typical assortment: some values may change
.value voltage tolerance
.001 100 10
.0015 100 5
.003 100 5
.0033 100 5
.0047 100 10
.01 100 10
.015 100 10
.018 100 5
.022 100 5
.033 100 5
.039 100 5
.047 50 10
.056 100 10
.068 100 5
.082 100 10
.1 100 5

Aluminum electrolytic caps
axial mount with leads suitable for PCB insertion
two bags for a dollar (2/$1)
VALUE QUANTITY PER BAG
1@100 8
1@50 10
5@300 5
10@25 10
22@35 10
47@35 10
47@50 10
75@15 VNP 5 non polarized
100@10 10
100@25 10
220@10 10
220@16 10
220@25 10
330@25 5
1000@50 5
1500@50 3

Tantalum caps dollar a bag
VALUE QUANTITY PER BAG
.1@35 12 dipped resin radial

.39@35 12 dipped resin radial
.68@50 12 molded resin radial Kemet T340 series
1@35 15 hermetic sealed axial
1@35 12 dipped resin radial
1@35 20 dipped resin radial short leads but fit thru PCB
3.3@16 12 dipped resin radial also available on tape
4.7@10 12 molded resin axial full length leads
4.7@25 12 molded resin radial Kemet T340 series
4.7@20 12 dipped resin radial
4.7@20 12 hermetic sealed axial
4.7@25 15 molded resin axial Kemet
6.8@20 15 dipped resin radial
10@25 12 dipped resin radial
15@20 12 dipped resin radial
15@25 15 molded resin axial
15@25 12 molded resin radial Kemet T340
15@35 15 molded resin axial
22@15 15 molded resin axial
22@16 12 dipped resin radial
47@10 12 dipped resin radial
47@20 8 dipped resin radial
68@20 8 dipped resin radial

Bourns cermet trimpots series 3386 3/8" square 5/$1
single turn linear taper
limited quantity on some values
1K side adj
2K top adj
5K side adj
5K top adj
10K top adj
25K side adj
50k top adj
100K top adj
200K side adj
500K top adj

10K 3/4" rectangular series 3069 cermet multi-turn 4/$1

Hirose microphone plug. Used on many imported HTs $6 ea
Hirose # SR30-10PE6P 6 pin plug with threaded lock. Has 5 notches on shell for indexing. Look in Digi-Key catalog for picture

Motorola 6 unit rack charger-battery conditioner for STX portable batteries. Model PLN 1193A. Also for MX radio Model PLN1157A. Like new.....never put into service. Copy of manual included. $200 ea plus UPS shipping.

Motorola Intellicharger desk charger for any flip phone or Elite. Rapid charges both NiCd and NiMh batteries and then switches to pulsed "top-off" mode to prevent overcharging. Holds two batteries. Very good condition includes wall transformer. $30

Motorola Intellicharger for brick phone. Works same as above but only one pocket. $30

Switching supply plugs directly into wall socket (US or Japan). About the same size as computer mouse. Well filtered output 1 Amp @ 7.5 V or programable up to 10.5 volts using external feedback resistor. Input 100 to 240 volt. Made by Anam, Daewoo, Phihong and others but no choice because I don't know who made what. Output cord is about 4 foot long with leads at end. May have cosmetic blemishes so I'm not calling these new. $8 ea or 2 for $15.

thank you
baggybob@cris.com
Motorola replacement transistors for 2 way radios.
These 4 parts were ubiquitous in Motorola equipment during the Micor/Maxar era and beyond. TO-92 plastic package

M9642 NPN (48-00869642)
M9643 PNP (48-00869643)

M9570 NPN (48-00869570)
M9571 PNP (48-00869571)
straight leads 8/$1.00
tape & reel 8/$1.00
formed leads for PCB insertion 15/$1.00
inquire for large quantity discount

The following types are 4/$1.00
All are unused old stock
greatly expanded selection of numbers coming soon ?

M9411 JFET-N M9491 NPN
M9528 NPN M9534 ? M9568 NPN M9576 NPN
M9594 NPN
M9619 PNP M9640 NPN M9641 PNP M9648 NPN
M9649 PNP M9658 NPN M9660 FET-P M9673 UJT
M9706 NPN Darlington
M9807 PNP M9839 JFET-N M9867 NPN

many other numbers available, most at same price

RF parts
MRF 844 NPN 800-960 MHz 30 Watts 12 V supply $12 ea
MRF 846 NPN 800-960 MHz 40 Watts 12 V supply $15 ea
limited supply

e-mail for further details baggybob@cris.com

4244. fs. surface mount parts for experimenters and prototypers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: baggybob@townsquare.net
Message-ID: <baggybob-1704972114290001@206.173.111.48>
Source record: 94889
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

baggybobs' buck a bag bargain bonanza
brought to you by bob & kim.

Surface mount parts for experimenters/prototypers
all new surplus unless otherwise noted

Shipping to the USA
Small parts orders (less than $35 usd). I ship by priority mail. Cost is $3

Larger parts orders I will ship by UPS using an agent. Cost is $5
I ship UPS COD only upon receipt of $10 deposit. The UPS depot is 60 Km
away. I have to drive there and handle CODs myself. I cannot afford the
cost or hassle of refused COD shipments.

Really small parts orders (up to $5 surface mount parts only). Send me a
SASE with three stamps. I will put in some foam filler to prevent damage.
International orders require international money order or funds drawn upon
a US bank. We can determine together the best way to ship.
.
If you have tech questions please e-mail. I will answer in a day or two.
Address:
Kim Kelly
507 Broad St
Apt 144
Lake Geneva, WI 53147

Motorola MRF 94llL NPN hi gain low noise small signal transistor
excellent broadband linearity with typ fT = 8 GHz.
4 pin SOT-143 package data sheet available at Motorola SPS web site.
5 / $1.00 80 for $10

Toshiba 2SC3606 NPN hi gain low noise transistor. Typical fT=7GHz, noise
figure @1GHz=1.1dB.
3pin EIAJ SC59 package; slightly larger than EIA SOT-23.
8/ $1.00 100 for $10 data sheet is at Toshiba web site in .pdf format

Toshiba 2SC5084 NPN RF transistor SC-59 pkg 8/$1
data sheet available

MMBFU310 N-channel FET SOT-23 8/$1
same electrical specs as J310

MMBF5460 P-channel FET SOT-23 8/$1
same electrical specs as 2N5460

Phillips BCP51 PNP or BCP54 NPN Both are SOT 223
VCEO=45, Ic= 1 Amp, hFE 40/250, fT= 50 Mhz
good for audio, DC control
8/$1.00 100 for $10

ROHM 2SB1132 PNP SOT-89 Equal to Phillips BCX51 VCEO=45,
IC=1Amp, VCEsat= .5 V data sheet included upon request.
10/$1.00

MMBT3904 NPN general purpose amp. SOT-23 version of 2N3904, one of the most common transistors ever made.VCEO=40. fT min =200 MHz, hFE >100<300 @ 10 ma. 10/$1

MMBTA56LT1(Motorola) or PMBTA56 if you prefer Phillips. PNP driver... both are SOT-23 version of MPSA56. VCEO=80, fT >50MHz, hFE> 50 @ 100mA 12/$1

MMBD352 Schottky (hot carrier) SOT-23 dual diode. Use for mixer or detector at UHF and upwards. V(BR)R= 7 volts, CT= 1pf @ 0 volts
6/$1

Motorola BAV99 dual diode series connected SOT 23 package
commonly used to prevent ESD latch-up damage on MOS inputs
VBR=70 volts, IF max =100 mA, PD=500 mW
12/$1.00

Tunning diodes SOT-23 6/$1.00
MMBV109 ratio 5:1 8-40pf
MMBV2105 ratio 2.5:1 Ct 15pf @ 4v

Quad analog switch 14066B in 14 pin SOIC pkg 4/$1

Sharp CMOS 5168HN-10L 8k x8 SRAM in TSOP 28 pkg 3/$1

surface mount diodes in round MELF package
Rohm RLRH100: same ratings as 1N4002 (1 AMP, 100 Volt)
12/$1.00

SMD zener diode 350mW Pd 5% tolerance in
SOT 23 package Motorola MMBZ5240 10 volt 12/$1.00
other zeners from same series 10/$1.00
3.9 V MMBZ5227
12 V MMBZ5242
18 V MMBZ5248

ROHM NPN digital transistor DTC114YK 10/1.00

excuse the poor artwork. There is a 10K in series with the base and 47K between base and emitter. Use as inverter with no external bias resistors required or as digital switch. IC=100 mA,VCC=50. Package is SC-59, pin spacing is same as SOT-23. data sheet available package stamping -- 64

Surface mount 1/8 watt resistor assortment.
paper strips of 20 each of 50 different values = 1000 resistors
all parts marked with standard 3 digit code
$10.00 each assortment

Chip capacitors -- 0.1uf 50 volt ,tolerance range Z
size 1206 (3.2mm x 1.5mm) packaged on paper tape
Y5V ceramic with nickel barrier terminations
MuRata pn GRM42-605Y5V104Z50
30/$1.00

I have other chip caps, mostly MuRata for same price
1206 size NPO (C0G) 50 volt 5%
1pf 2.7 3.3 4.7 5.6

20 22 24 27 30 39
56 75 150 180 300
560

220, 1000pf are 10% X7R ceramic

smaller size 0805 50 volt NPO also 30/$1.00

1.2 8.2pf, 11 12 30 100
.01uF X7R

Mica surface mount capacitor from Soshin Electric 1210 size unless
otherwise noted all are 500 volt , 5% tolerance. Yeah, this is a strange
one.
1, 3.5, 4.5pf, 5.5, 6.5, 7.5, 9.5, 11, 13, 15,16, 20, 22, 27, 30, 39, 51,
56, 62, 68, 75, 82, 91

the following are rated at 100 volt:110pf, 180, 200, 240

15/$1.00

Surface mount inductor (most are TDK 1210 size) 47,56,82, 220, 330, 560,
680,820 nH 10/$1.00

Surface mount resin molded tantalums made by Panasonic, Matsuo, NEC,
Sprague and possibly others.
A & B sizes 12/$1.00, C & D size 10/$1.00
A size stamping code
.1uf 35v A104
.22uf 35v V224
.33uf 35v V334
.47uf 25v E474
1 uf 16v C105
4.7uf 10v A475

B size
1uf @ 35v 4.7uf @ 10v 10uf @ 10v

C size
4.7uf @ 16v 10uf @ 16v 22uf @ 10v

Dsize
6.8uf @ 35v 33uf @ 16v

these tantalums are slightly smaller than a C size. They measure .185" L x
.1 W. 12/$1
.22uf 15v
.33uf 20v

smd LEDs 1206 size mixed mostly green with a few red or yellow or not
mixed all yellow 12/$1.00

Methode surface mount socket for 32 pin PLCC ICs 3/$1

also have some common & not so common leaded parts

e-mail for more info: baggybob@cris.com

4245. Re: The sex life of a DXer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: subs@ro.com
Message-ID: <3356e899.343402887@news.ro.com>
Source record: 94890
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

On Sun, 13 Apr 1997 07:16:07 -0400, Burt Fisher
<burtfisher@geocities.com> wrote:

>From: WA2RCB@N3ACL.#SEPA.PA.USA.NA
>To : K1OIK@K1UGM.#EMA.MA.USA.NA
>
>Yes, DX'ers are a unique breed of people Burt. My guess is that
>if their wife was next door in the kitchen gagging on a piece of
>fried chicken bone, and there was a rare-dx station on the air
>at *ezactly* the same moment, 98% of the DX'ers would choose to
>let their XYL's writhe on the floor and turn screen-saver VCR *blue*
>first before missing the opportunity to work Kuntakintae in Lower
>Gibipp. Reminds me of a funny event from a few years ago, when I was
>a Director in a radio club. Had a director's meeting at this guy
>house. After the business was over, went into this guy's shack.
>(He was a big-time DX'er here in NJ - having worked 300-something
>countries) He seemed to get somewhat irritated when I did not
>share his enthusiasm for DX. After the 3rd attempt to get me to
>pay some kind of hommige to him while sticking a *framed* QSL in
>my face from some filthy rich ham who runs a sweatshop in Puerto
>Rico who spends 98% of his time running to mud-huts in Africa in his
>Lear jet. I then told him I did not give a rat's --- about DX. (I only
>did this because he was so damm adamant about DX as being as important
>as the second comming or something...) Well, I thought he was going to
>toss me out of his QTH, but he seemed to not have the gutz for that, so
>I retired to his living room to drink as much soda and chips he put out
>and laugh about this whole incident with 2 friends of mine who were
>there and shared my humor ove this whole screwball funny incident.
>(he has put out several pint-size bottles of Coca-Cola...I had my CIA
>type trench coat with me, and pocketed 3 of them just for funzies...)
>So Burt, there U go, DX'ers: Ham radio's greatest mutual admiration
>society. Almost as bad as contesters who run illegal power...birds of
>a feather...
>
>73es George wa2rcb
>
>ps: Got on the Net. Not sure about how to E-Mail yet, as I'm new to this
> I-Net stuff, but, I am enjouing the discourse's on rec.radio Keep
> up the good woik Burt! :) :) :) :) :) :) :)
>
>
>
>--

>#================#===#
>| Burt Fisher | Teacher of video, broadcasting and electronics |
>| Amateur call | South Dennis, Ma. (Cape Cod) |
>| K1OIK | http://www.geocities.com/WallStreet/5169 |
>#================#===#
>|Visit my WWW site, it is like no other burt@rocketmail.com |
>#===#
This guy has to be a fag. Wonder if his wife knows?

4246. Re: Microwave ovens to transmitters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <336d1173.1529003150@news.sci.fi>
Source record: 94891

Paul Graham <paulg@imaxx.net> wrote:

,
>
>There was an article in 73 a few years ago concerning doing what you are
>asking about.
>
>The transmitter would have the same output that tha Micro-wave oven had:
>300 - 700 Watts. This is sufficient power not only to be heard a fair
>distance away but also enough to cause small birds to come falling out
>of the sky (medium rare) 1/4 Mile from your antenna.
>
>If you really want to do this, please use EXTREME CAUTION.
>
>Paul - K9ERG

The required waveguide cross section area at 2.45 GHz is about 50 cm2 and at 500 W RF power, the power density is about 10 W/cm2. If the waveguide is connected to a short horn antenna, the power densities close to the horn is about the same magnitude. The maximum recommended exposure for the uncontrolled environment (general public) is about 2 mW/cm2 around 2.5 GHz, so the exposure very close to the antenna is 5000 times too large. However, 2 mW/cm2 is 20 W/m2 so you are within limits, when the area illuminated by the beam has increased to 25 m2 (=500/20). To calculate the safe distance, you have to know the beam width of your antenna.

However, the microwave oven magnetron is a poor device for hunting birds, the power is too low and the frequency is also too low. To kill a flying birds, you need a high power density at a great distance and you can get this by using a narrower beam, using an antenna with higher gain. To get more gain, you can use a large parabolic reflector. When the reflector diameter goes up, so will the area increase, but the power density illuminating the reflector goes down. When the area in this case is 25 m2 (about 6 m diameter) the power density at the surface is as low as 20 W/m2 or within the exposure limits. In a correctly adjusted system with the radiator in the primary focus, the beam leaving the parabolic reflector has the same cross section as the reflector, increasing at the inverse square rule when the distance is increased. Thus, it is much more safe to walk near a large parabolic reflector than a small parabolic reflector if the transmitter power is the same. The most dangerous are the small horn antennas, which look innocent, but they can cause a very high power densities at short distances.

For hunting flying birds a much higher frequency is preferable, since to get a much higher power density at medium distances, much more gain is required and a larger antenna in terms of wavelengths must be employed. At higher frequencies, the physical size will be smaller and thus, the initial cross section of the beam will be smaller, resulting in a higher power density at medium distances.

Paul OH3LWR

4247. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j6ina$1qf@senator-bedfellow.MIT.EDU>
Source record: 94892
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <3352313a.216585@netnews.worldnet.att.net> W8JItom@worldnet.att.net writes:
> The total effect is that the shield becomes the receiving element.
> It's like you changed the diameter of the element slightly.

This is certainly true for the differential mode response of my
Kitt Peak antenna, or at least that's what my design calculations
said. I'm not, however, sure that this is true in all topologies.

> The only
> thing the Faraday shield really does is modify common mode capacitive
> coupling, something that general;ly isn't a problem anyway in a low
> impedance loop antenna.

The impedances of multi-turn tuned loops can be high, although the
builders might be well advised to bring them down by one of the
possible transformation techniques. Part of the difficulty is also
that small loops tend to be considerably less efficient than a
dipole of the same size, so the common mode output may be larger
than the differential mode.

> The "shield" only helps if direct capacitive common mode coupling
> exists to the feed system (via the loop), something that even the
> casual loop builder can easily avoid.

I'm not sure it's always as easy as you say. In any case, there
are usually two approaches to any common mode pickup problem: the
"series" approach and the "shunt" approach. In the series approach,
one attempts to reject common mode by preventing common mode current
from flowing into the system. Baluns and transformers are examples
of this approach. The series approach often works best when the
common mode impedance is low (not the case here).

In the shunt approach, one attempts to get the common mode current
to flow someplace harmless. This approach often works best when
the common mode source impedance is high. The Faraday shielding
techniques for transformers and loop antennas we've discussed are
examples of this approach.

In many years of chasing EMI problems, I've seen many more difficulties
with the series approach (which is what I believe you're advocating)
than the shunt approach. However, there are times when one or the
other is clearly better, and there a some times when you need both.
I have little experience with loop antennas, so it is difficult to
judge.

For the Kitt Peak antenna, the issue is lightning, which must
always be dealt with in shunt fashion. Tens of kiloamp pulses
can be conducted by ordinary cables, but no practical insulation
can stand off tens of millions of volts. The purpose of the shield
is thus to carry the lightning current safely to ground. Calculations
suggest that in the event of a direct strike, the antenna still
picks up substantial energy in differential mode, but the differential
current is within the capacity of a gas discharge tube (of which
there are three).

Small signal common mode rejection specs do not apply during
lightning strikes :-).

In any case, a WWV receiver has survived ten years of being hooked
up to this antenna, although the observatory has suffered much
other lightning damage in that interval. I must have done *something*
right here :-).

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4248. Re: Sunglasses for CCD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: n8blk@aol.com
Message-ID: <19970418081100.EAA16080@ladder01.news.aol.com>
Source record: 94893

In article <335384C2.2683@midstate.tds.net>, Michael Berg
<mikeberg@midstate.tds.net> writes:

>I'm using a micro CCD camera board as a "tower cam" at my QTH and was
>having a hard time getting a decent picture due to excessive light.
>As an experiment, I had an optical shop make up a non prescription
>photogrey saftey lens ($50). It's sized to fit the enclosure I've
>mounted the camera in (2" PVC vacuum tubing) and works quite well.

While this might work normally, how does it work when the light levels
drop,
like at twilight, or dawn? I also wonder what happens if it rains and the
rain spots the lens. (I wear glasses, if I don't clean them after being
caught
in the rain, I get spots on my glasses whether they're sun glasses or not.
I must say though that your idea of the sunglass lenses might be better
than other solutions. Also, I wonder how well infra red passes through
photogrey lenses, if it does, then probably turning on an led at night
aimed at
the tower might provide almost enough illlumination. -art clemons-

4249. WTB: QST's and ARRL Handbooks.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: ekugrad@mindspring.com
Message-ID: <5j6l4u$nme@camel4.mindspring.com>
Source record: 94894
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equiptment,rec.radio.amateur.boatanchors

I am looking for the following QST's and ARRL Handbooks for my personal collection:

QST's NEEDED

1936 JUL, DEC
1939 JUL, NOV
1942 JUL, AUG, SEP
1976 JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP, OCT, NOV, DEC
1977 JAN, FEB, MAR, APR, MAY, JUL, OCT, DEC
1978 APR,
1979 JAN, MAR, JUN, OCT, NOV,
1980 JAN
1981 JAN, FEB, APR, JUN, AUG, SEP, NOV, DEC
1982 JAN, FEB, MAR, MAY, JUN, SEP, NOV
1984 DEC
1985 NOV
1986 SEP, OCT, DEC
1988 MAY

HANDBOOKS: 40, 41, 42, 44, 45, 47, 49, 50, 52, 55, 56, 57, 58, 62, 65,

I also collect Pre 1970 ARRL Publications, Pre 1950's Amateur Radio Logbooks, and Pre 1950's QSL cards.

Thanks and 73's
David
KA4IKH

4250. Re: Sunglasses for CCD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: Michael Berg <mikeberg@midstate.tds.net>
Message-ID: <3357617E.3AA1@midstate.tds.net>
Source record: 94895

After using the photogrey lens in varying light and weather conditions,
I've found that low light capability is roughly the same as with a
plain glass lens in front. Dusk, dawn and cloudy days still give a
better picture than bright sunny ones. Prior to using the photogrey
lens, sunny daylight scenes were impossible.
A perfect solution? No. However it is as good of one as I need.

--
>~~~~~~~~~~~~~~~~~~~~~~~~~~<Mike Berg a.k.a. N0QBH
I oscillate - Therefore I am.
>~~~~~~~~~~~~~~~~~~~~~~~~~~<

4251. CD-Recordable Media for Sale at Good Prices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: eo
Message-ID: <5j7f3b$ni9@chile.earthlink.net>
Source record: 94896

We have the following CD-R media and CD-Recorders for Sale:

Brand: Pioneer
Type: Printable Media (Surface of cd is blank for printing or labels)
Type: Gold on Green
Size: 74 min (650 mb)
Price: $ 5.00
Packaging: Jewel Case
Minimum Order: 10

Brand: Maxell
Type: Gold on Gold
Size: 74 min (650 mb)
Price: $ 5.00
Packaging: Jewel Case
Minimum Order: 10

Brand: Maxell
Type: Unbranded (CD and Jewel Case is blank with no name on it)
Size: 74 Min (650 mb)
Price: $ 5.00
Packaging: Jewel Case
Minimum Order: 10

Brand: Maxell
Type: Unbranded (CD is blank with no name on it)
Size: 74 Min (650 mb)
Price: $ 4.75
Packaging: Spindled
Minimum Order: 50

Brand: TDK (IEC Nippon)
Type: Gold on Green
Size: 74 min (650 mb)
Price: $ 5.00
Packaging: Jewel Case
Minimum Order: 10

Brand: TDK
Type: Gold on Green
Type: Unbranded (CD is blank with no name on it)
Size: 74 Min (650 mb)
Price: $ 4.75
Packaging: Spindled
Minimum Order: 50

CD-Recorders

Brand: Yamaha
Speed: 4 Write X 4 Read (4 X 4)
Version: CD-R 100 Internal Version
Software: Gear 4.0
SCSI Card: Adaptec
Comes complete with All Cables and Software need for Installation.
Media: 5 Pieces of your choice
Price: $ 999.99 US

Please take note that our phone number as changed from (213) 650-1680 to: (714)-461-5150
and our fax number has changed from: (213)-650-9110 to: (714) 461-5155

The Copy Cat Shop has all your CD duplication, replication, recorders,
software, and media needs.

If you have any questions feel free to call.

Cordially,

The Copy Cat Shop
714-461-5150
714-461-5155 Fax

Ask for Shelly when calling.

4252. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <335772B0.1B12@crpl.cedar-rapids.lib.ia.us>
Source record: 94897
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
>
> We may estimate total electric field energy storage
> within the component from its effective capacitance,

Previously you said an electric field is not present in the inductor. Now you talk about *energy* in the inductor fields. Which do you really mean? They are not synonymous. One way to win an argument, of course, is to keep changing the subject.

> No. The the key thing to remember about an inductor is that the E
> field along the wire is *zero* (ignoring resistance). This is the
> electric boundary condition for a conductor.

It is a boundary condition for voltages due to charges. For emf's due to induction it is not true. Faraday's law is specific about that, and every reference that I have ever seen verifies it.

> Along the wire, there
> is a *potential gradient* that *cancels* the E field due to dB/dt.

A potential gradient is due to an E field. There is no such thing as a potential gradient that does not have an associated E field.

E = -del V never goes on holiday.

Conversely, without the E field there is no voltage gradient. If you start at one end of the wire, integrate the voltage gradient to the other end and then integrate the E field back to the original end, of course you get zero. That does not mean that there is no E field. It is an electromagnetically *induced* E field and also an *induced* voltage gradient. They are *completely* indistinguishable from each other.

The idea that there can be no E field in a perfect conductor is one of the most misunderstood ideas that there is. It is ridiculous. A perfect conductor is not a perfect conductor unless it is perfectly conducting, in other words a short circuit (or it extends to infinity). Then and only then there is no E field. For an electromagnetically induced voltage, a piece of wire is not a short circuit. If you slide one of a voltmeter's leads along the wire the voltage increases uniformly. Whether you call it voltage gradient or E field is totally irrelevant and I defy anyone to tell which is being measured.

> > Inside a capacitor there is a displacement current. One can easily
> > calclate an H field that is created by this displacement current.

> > Textbooks contain exercises that ask us to calculate this H field.
>
> But that H field has no appreciable influence on the dynamics of
> most practical capacitor below VHF frequencies

I never said that it did. But your statement was that the "field in a cpacitor is all electric". That was false. Changing the ground rules again.

> Have you built a
> transformer with a dipole for a secondary yet?

Baloney.

> "You can't confuse me, that's my job."

I believe that.

Bill W0IYH

4253. Schematic maker for PC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: daveaa1a@ssih.com
Message-ID: <5j7s1r$vh@usenet88.supernews.com>
Source record: 94898

Is there a default Electronic Schematic Maker that can be read by most anyone with a PC..??
Thanks for your help

de daveaa1a

4254. Seeking simple SW receiver designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-18 00:00:00 UTC
From: jjknap@skcla.monsanto.com
Message-ID: <1997Apr18.083107.1@skcla.monsanto.com>
Source record: 94899

I have a group of cub scouts and I thought it would be nice to have
them build a simple shortwave receiver. Im looking for a design that would be
cheap to build, use commonly available parts and would be functional enough
that the the boys could have some fun using it. I can make circuit boards, no
problem. Ideally the design should not use impossible-to-find coils or any
other hard to find parts. Maybe varactor tuning would keep things simple.
Regenerative or NE602 based would be OK. Open to any suggestions.
I am quite experienced in electronics tho not in radio. Ive seen some
simple designs but most seem to have some flaw - expensive, sensitive or hard
to obtain parts etc. If anyone could direct me to some designs that they think
may fill the bill I would be grateful.
Thanks
Friendly Regards,
Jerome Knapp jjknap@skcla.monsanto.com

4255. Re: Surface-Mount amateur kit recommendations???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <335938f3.316368@news.mnsinc.com>
Source record: 94750

Yes - there was one last year in (I THINK!) QST describing how to
build a little SMT audio amplifier.

Horrible little things. I wouldn't touch them. Stick with VALVES
(tubes to you) - you will never regret it, he he!

David Wilkey <dwilkey@ix.netcom.com> eloquently wrote:

>Can anyone recommend a kit or relatively simple magazine-article
>project for a receiver or a station accessory that would serve as
>an introduction to SMT? I wanna get some hands-on experience before
>my eyesight gets any worse... ;)

>Dave Wilkey, N9JIT
>dwilkey@ix.netcom.com

4256. Re: Microwave ovens to transmitters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33593a0a.595606@news.mnsinc.com>
Source record: 94751

Yeah - sems likely a good source for making a 400-600 watt xmtr for
900 MHz or 1296 MHz or so!

Sir Robin <nexus15@flash.net> eloquently wrote:

>Phil Owen wrote:
>>
>> Is a convertion from a microwave oven to a transmitter for Ham
>> applications feasible? Can it be "Re-tuned"?
>>
>> It seems to me that if the frequency were tuned down a bit (I think
>> the freq for wiggling water is ~2.1 GHz) and modulated somehow, a
>> Tappan would make a dandy +100w transmitter.
>>
>> Phil...

>Check out RF Design magazine a few years ago. A ham did just that!

>Rick W5RH

Now if they would just make a way to convert it over to 500 watts
of CW on 40m !!

Bry, AF4K <bry@mnsinc.com>

4257. Re: 10.7 mhz Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33593923.364921@news.mnsinc.com>
Source record: 94752

Labgear / PYE used to make some pretty awful 10.7 MHz crystal filters over in England. You should contact G3UUR and ask him where to get some.

If you can't find Dave's address let me know & I will look it up for you.

Bry AF4K / G3XLQ <bry@mnsinc.com>

"j.valdes" <jvaldes@whoi.edu> eloquently wrote:

>I'm looking for a source for narrow band +/- 5 Khz 3300 ohm IF filters.
>I've searched the WEB, I located FOX and PTI however they are about $100
>++ each!! Guess they don't like small quantities!! Anyone know who might
>stock something like this?
>Thanks
>Jim WA1GPO

4258. FS Yaesu FT-2500M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: "Larry J. Brock" <larry666@gdi.net>
Message-ID: <33592979.5472@gdi.net>
Source record: 94753
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello,
I have 2 Yaesu FT-2500M's for sale.

Both are in mint condition,low hours,mil-spec construction,alpha
display,31 memories,3 power levels (5,25,50 watts).

Asking $200 each and I will ship anywhere in the continental US.

I can be reached at larry666@gdi.net

73,
Larry Ke4rur

4259. BA LIST INFORMATION:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33593ad5.798279@news.mnsinc.com>
Source record: 94754

There is a new LISTSERV e-mail list for BOATANCHORS enthusiasts that I just discovered! The best part is that it is FREE!!
To subscribe, send an e-mail message to:

LISTSERV@LISTSERV.TEMPE.GOV

with no subject, and the text:

subscribe boatanchors <Your Full Name>

The only odd thing is that it wants you to send you name with a middle initial otherwise it rejects the subscription.

For example, I had to send:

subscribe boatanchors Brian J. Carling

See you there!

4260. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <5jbihp$t4q@dfw-ixnews8.ix.netcom.com>
Source record: 94755

In <5japfq$dfn@maw.montana.com> bowman@montana.com (bowman) writes:
>
>In article <33577c27.8531840@netnews.worldnet.att.net>,
W8JItom@worldnet.att.net (Tom Rauch) says:
>>
>>Do you know why they called it class E, or what the textbook
>>definition of class E is???
>
>i believe the difference is C exhibits some degree of linearity, while
>E is a completely saturated switch. moot point ,imho.

Here are some definitions from one textbook...

The following is from SOLID STATE RADIO ENGINEERING, by Krauss,
Bostian, & Raab, Chapter 14 "High Efficiency Power Amplifiers."

in the chapter's intro:

"In 'switching-mode' PAs this (increased efficiency - Jeff) is
accomplished by employing the active devices (BJTs, FETs, or vacuum
tubes) as switches rather than as current sources. Since an ideal
switch has either zero voltage across it or zero current through it at
all times, it dissipates no power. Other high-efficency PAs (Classes
F, G, and H) use special circuit techniques, including harmonic
resonators and multiple power-supply voltages, to reduce the collector
voltage-current product."

Later in the text...

"A Class D amplifier employs a pair of active devices and a tuned
output circuit. The devices are driven to act as a two-pole switch
that defines either a rectangular voltage or rectangular current
waveform. The output circuit is tuned to the switching frequency and
removes its harmonics, resulting in a sinusoidal output."

And still later...

"A Class E power amplifier employs a single transistor driven to act as
a switch and connected to a passive load network. The
least-complicated load network consists of a series tuned circuit
connecting the collector to the load and a capacitance C shunting the
collector to ground." (This is identical to the topology in Fig. 3 of
the QST article).

Later yet...

"Class F is porbably the oldest practiced method of improving PA efficiency, and is also known by such terms as 'biharmonic,' 'polyharmonic,' 'Class CD,' 'single-ended Class D,' 'high-efficiency Class C,' and 'multiresonator.' A Class F amplifier is characterized by a load network that has resonances at one or more harmonic frequencies as well as at the carrier frequency. The active device usually operates primarily as a current source or a saturating current source, as it does in the Classical Class C PA. (The authors place Tyler's amp in the Class F category)

There's also this warning: "The reader is cautioned that these terms (classes D, E, F, G, H, and S - Jeff) are not universal; in particular, the terms 'Class D' and 'Class S' are often reversed or used interchangeably by other authors."

- Jeff, WA6AHL

4261. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: jarad@nbnet.nb.ca
Message-ID: <jarad.133.0122B440@nbnet.nb.ca>
Source record: 94756
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <slrn5li0qb.678.mulveyr@ll.aa2ys.ampr.org> mulveyr@ll.aa2ys.ampr.org (Rich Mulvey) writes:
>From: mulveyr@ll.aa2ys.ampr.org (Rich Mulvey)
>Subject: Re: All The WTB & SALE Ads Here
>Date: 19 Apr 1997 17:45:46 GMT

>On 19 Apr 1997 16:32:02 GMT, Peter Gottlieb <peter_gottlieb@msn.com> wrote:
>>Marty Albert <marty@trucom.com> wrote in article
>><3357a131.1626891@news.trucom.com>...
>>>
>>>
>>> Has anyone else noticed all the WTB and For Sale ads in the groups
>>> lately? Seems to be getting bad again...
>>
>>
>>
>>I like the ads here.

> In spite of your personal preferences, the various rec.radio.* newsgroup
>charters specify that the WTB and FS ads are supposed to go into
>rec.radio.swap. It helps to keep the noise level down.

>--
>--
>Rich Mulvey
>mulveyr@frontiernet.net Rochester, NY USA
>http://www.frontiernet.net/~mulveyr
>Amateur Radio: aa2ys@amsat.org, aa2ys@wb2wxq.#wny.ny.usa

Yeah i like ads too
jarad

4262. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: kb2rmi@pop3.frontiernet.com
Message-ID: <5jbbh1$1f12@node2.frontiernet.net>
Source record: 94757
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

mulveyr@ll.aa2ys.ampr.org (Rich Mulvey) wrote:
> In spite of your personal preferences, the various rec.radio.* newsgroup
>charters specify that the WTB and FS ads are supposed to go into
>rec.radio.swap. It helps to keep the noise level down.

A lot of newcomers may or may not know this. Hell, they may not know
hat a FAQ is, or where to look. The title of the group should be
rec.radio.amateur.equipment.discussion or something similar. If you
were new, and saw the title as it is now, wouldn't you think this is
the place to sell equipment? Also some servers may or may not access
all the groups.

On the subject of "noise level", some would think that the HRO and cat
pee threads, as well as old what's his name the teacher (Who
thankfully has been absent of late) might well be considered noise
level by many.

It would be a simple matter to set up a killfile for any ads
containing "FS, WTB",. etc.

Bill
kb2rmi@frontiernet.com

4263. www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: vbook@vbook.com
Message-ID: <5jbjs0$f5o$1@kanga.accessone.com>
Source record: 94758
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Under terms of the Report and Order in ET Docket 96-8, released April 10, 1997,
the FCC has announced that it will allow high gain antennas
for unlicensed transmitters operating in the 2400 and 5800 MHz
Part 15 allocations. These bands are shared with the Amateur Radio Service.

Under the new rules, very high gain antennas may be deployed at 2400 and
5800 MHz. Certain transmitter power reduction restrictions apply at 2400 MHz
but unlimited gain systems may be installed at 5800 MHz. These systems will
enable high speed Internet access using unlicensed systems. You can expect to
see these systems deployed rapidly as soon as 1998 to provide non-commercial
and commercial services on these frequencies.

The complete story, including the Report and Order, is now available online at:

http://www.hamradio-online.com

Ed (KF7VY) and Kim (N7VPL) Mitchell
email to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

4264. Bug catcher antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: Mucho Gusto <mchogsto@ix.netcom.com>
Message-ID: <335996EE.203FFD83@ix.netcom.com>
Source record: 94759

I recently installed an Icom 706 in my pickup. I operate mostly on 75 meters with the antenna either mounted on the bed of the truck or on top of our cab-over camper. I have been less than thrilled with the Hamstick antenna I have been using, and have heard good reports on the "bug catcher antenna". I assume this to be a center loaded unit with a large (high Q) loading coil. Can anyone tell me where to obtain one of these antennas or find design information so I can build one? I would be interested in hearing of experiences with the bug catcher or any other 75 meter mobile antenna. Does anyone know if B&W Mini-ductor is still available and where it can be obtained?

73....Jim....KD6QM.....mchogsto@ix.netcom.com

4265. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5jc1rgivc1@nnrp01.primenet.com>
Source record: 94760
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Well, I have finally gotten around to joining in on this most worthwhile discussion. I've been experimenting with multi-turn electric field loops for a while now, as well as the problem of remote tuning and active antenna amplifiers. Therefore...

John Doty <jpd@space.mit.edu> wrote:

: The impedances of multi-turn tuned loops can be high, although the
: builders might be well advised to bring them down by one of the
: possible transformation techniques. Part of the difficulty is also
: that small loops tend to be considerably less efficient than a
: dipole of the same size, so the common mode output may be larger
: than the differential mode.

Less efficient, yes. But, if the length of wire in the antenna as about 3/4 wavelength, the efficiency approaches 80%. At 3/8 wavelength, this decreases to 40% at best. Most loop antennas being used have a total wire length of less than 1/4 wavelength, at which point the efficiency is less than 5%. These numbers are well documented in several professional papers, if anyone is interested.

: I'm not sure it's always as easy as you say. In any case, there
: are usually two approaches to any common mode pickup problem: the
: "series" approach and the "shunt" approach.

<*** TERMINAL SNIPPING ***>

I have stuck with the "shunt" approach, tuning the antenna with either a parallel capacitor or inductor, more often the latter as remote tuning can be easily accoplished with a transductor (saturated reator) which will not generate harmonics or intermodulation at "normal" signal levels.

The even-mode EMI problem is overcome by designing a properly conditioned first stage of amplification, employing common-node feed back to eliminate the common-mode signals, as well as any second harmonics from the amplifier. The amplifier quickly becomes the Achilles Heel in an active antenna design, and I am using some unusual feedback techniques (lossless feedback and current-sourced bootstrapping) to ensure that the intermodulation is kept under close control. Most of the amplifiers that I have seen fail to adequately address this issue, although I will admit that I have not seen anything.

A previous posting in a similar thread mentioned using GaAs FETs
in the antenna amplifier, which I agree with. The follow-up postings
were mostly concerned with noise figure, and I don't believe that the
issue of intermodulation was ever brought up. If it was, I missed it.
GaAs FETs can give very good intermodulation performance, particularly
the NEC NE25339 Dual-Gate GaAs FET when the second gate is connected to
the source (Vg2-s = 0.0). It is also very easy to bias, being a deple-
tion mode device. Philips makes a Dual-Gate MOSFET, the BF990, which
will deliver similar performance, although the biasing requirements are
somewhat more demanding due to it being an enhancement mode device.

The final design for my antenna is still in the works, and when
it is finished I hope to submit an article to Communications Quarterly
for publication.

I gotta go.

Regards,

Chris

,----------------------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _______,--------------'
_ |/
oo\ Chris Trask / N7ZWY
(__)\ _ Principal Engineer
\ \ .' `. ATG Design Services
\ \ / \ P.O. Box 25240
\ '" \ Tempe, Arizona 85285-5240
. ( ) \
'-|)__| :. \
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com

Graphics by Loek Frederiks

4266. Re: Seeking simple SW receiver designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580001904972217460001@news.europa.com>
Source record: 94761

A superregenerative receiver would be perfect. With a good design, you should be able to cover 0.5mhz to 400mhz with plug in coils. With switched coils maybe 0.5mhz to 100mhz.

My first shortwave listening was done with a Radio Shack kit bought in the early 70's. Using only 3 transistors and superregenerative detector, it was plenty sensitive enough.

Rob.

4267. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: marty@trucom.com
Message-ID: <33582b09.18400472@news.trucom.com>
Source record: 94762
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 18 Apr 1997 20:22:49 -0400, Willard Flagg <flagg@TFF.Com>
wrote:

>I don't see a rec.radio.amateur.swap. I do see a rec.radio.swap and a
>rec.ham-radio.swap. Perhaps others don't get the sub-group either.
>
>-will flagg, n1vlb

rec.radio.amateur.swap has been around for well over a year now.
Sounds like your ISP is falling down on the job of getting new groups
added.

Marty Albert - marty@trucom.com
Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

Heartland Internet Services

****
Interested in Amateur Radio?
http://www.trucom.com/ppages/marty
****

4268. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <335902D3.309F@icss.net>
Source record: 94763
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Marty, what is getting bad? Is the equipment getting bad and hams want
to sell it? Is the introduction of new radios getting so bad that hams
have to sell their 4-month old "state-of-the-art" stuff to buy this
weeks Yae-com-wood intruduction? Maybe we should just buy radios and
not sell them - like guns, you can never have too many!
I would rather see folks selling stuff than the inane "whats the mod (so
I can transmit on COP frequencies or listen to cellular phones) posts?
And let us not forget the "Teddy Bear" posts that just wouldn't stop.
So, gosh, someone is trying to sell a radio. Should we also be
concerned that others are trying to find or buy, as in WTD and WTB,
radios as well?
I'll probably feel a little guilty for responding to this, but sometimes
you feel like a nut...
Brian/N0iMD

Marty Albert wrote:
>
> Has anyone else noticed all the WTB and For Sale ads in the groups
> lately? Seems to be getting bad again...
>
> This morning, out of 23 new articles in one group, 18 were
> inappropriate.
>
> Makes you wonder why we have rec.radio.amateur.swap for, eh?
>
> Take Care & 73
>
> Marty Albert - marty@trucom.com
> Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM
>
> Heartland Internet Services
>
> **
> Interested in Amateur Radio?
> http://www.trucom.com/ppages/marty
> **

4269. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: jpd@space.mit.edu
Message-ID: <5j91ur$hf8@senator-bedfellow.MIT.EDU>
Source record: 94822
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Enough theory and disagreement, how about some real data:

I have compared the EMI response of two different antennas directly attached to my Drake R8 receiver. One is a 4 foot vertical whip attached to the high impedance input, and one is a loop 8 feet in circumference, oriented in a vertical plane (more or less), attached to the low impedance input. These sizes were chosen because they are small and because (by experiment) their response to broadcast signals around 1 MHz is approximately equal.

The receiver sits on my desk, between my computer and my printer.

WBZ on 1030 kHz reads about S8 on either antenna.

There is a strong EMI signal at 1020 kHz on the loop antenna, about S7. On the other hand, this signal barely twitches the S-meter on the whip antenna. Moving the whip around, I can tell this signal comes from the printer (right rear corner, in fact). One "S" unit on the Drake is supposed to be about 5 dB: I've checked it previously and it's a bit less at the low end. Nevertheless, the difference in the pickup of this EMI between the two antennas must be something like 25 dB.

Given that the measurements themselves were performed in a space of a few thousandths of a wavelength, this must be about the purest magnetic field you might ever expect to encounter at RF!

This particular narrow band EMI is nearly the strongest thing audible on the loop in the vicinity of 1 MHz. Many other narrow band EMI signals and much broadband hash are audible on the loop. Little of this is audible on the whip.

There is, however, a buzz at 960 kHz that is S2 on either the loop or the whip. This is not coming from the computer or the printer (turning them off makes no difference). It is also, however, not radiated energy: it is inaudible on my outdoor antenna (there's a big pileup of broadcast signals in its place). Grounding the receiver to the outdoor antenna's ground system reduces the strength of this signal on the whip a bit. All these characteristics suggest that this is common mode EMI coupled through the AC line. I do not know where it originates.

At higher frequencies it is more difficult to be quantitative because there are no steady broadcast signals to cross calibrate the antenna responses accurately. Fading is a real problem. Nevertheless, I can report a few things:

Most of the EMI at my desk comes from my computer.

In this EMI field, the loop yields a poorer signal to noise ratio than the whip in most cases. However, this effect decreases with increasing frequency. By 10 MHz, it is noticeable, but not large.

Above 10 MHz, the EMI pickup on either indoor antenna is so large that no broadcast signals are audible as comparison standards.

Conclusions:

The computer EMI is nearly as purely magnetic as physics allows, given the distance and frequency. Electric and magnetic energy are balanced in the 960 kHz EMI, which appears to be common mode. No predominantly electric field EMI was seen.

Loops are no miracle cure for EMI. On my desk, a loop is the *worst* possible choice. Nevertheless, there is a choice to be made, and it can make a difference. The difference is greater at lower frequencies.

The only sure cure is to get the antenna away from EMI fields, together with precautions to prevent common mode from conducting the EMI to the antenna.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4270. Re: TAIT T500

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: Ted Minchin <tedm@xtra.co.nz>
Message-ID: <3358079F.5961@xtra.co.nz>
Source record: 94823

Trevor Day wrote:
>
> Hi Guys,
> Sorry this is not strictly homebrew but I don't know where else
> to post it.
> Does anyone know the arrangement of the diode matrix board on the Tait
> T500? I need to alter it's frequency coverage within the original band,
> in this case circa 170 MHz
> The info doesn't appear to be available in the UK and I have just spent
> an hours phone time searching the Web with no joy.
> Thanks... Trev ...-.-
>
> --
> Trevor Day G3ZYY
> trev@southwestuk.demon.co.ukHi,
Tait radios were built here in New Zealand and that would be youyr best
source I think.....
I dont know the address but this may help....
Tait Electronics Ltd
Christchurch
New Zealand....
Hope thatis of some help
Ted Minchin ZL1MT
tedm@xtra.co.nz

4271. Re: Microwave ovens to transmitters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc4c6d90928940b1102399@peter->
Source record: 94824

Paul Kein&#65533;nen <keinanen@sci.fi> wrote in article
<336d1173.1529003150@news.sci.fi>...
> However, the microwave oven magnetron is a poor device for hunting
> birds, the power is too low and the frequency is also too low. To kill
> a flying birds, you need a high power density at a great distance and
> you can get this by using a narrower beam, using an antenna with
> higher gain. To get more gain, you can use a large parabolic
> reflector. When the reflector diameter goes up, so will the area
> increase, but the power density illuminating the reflector goes down.

But it's difficult to rapidly move the large parabolic antennas, and they must be build very ruggedly to withstand the high accelerations that you will need to track the bird (since your beamwidth is small). Also, once you try this you will find you need to be able to move your feedpoint so that you can focus the 2nd focus point not at infinity but at the range of the target bird.

In the end, the cost of the magnetron is small compared to the rest of the system, so, yes, you are right that this is an inferior bird hunting system.

4272. Need Heathkit SB104 Extender board.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <5j9ed8$gb6@news.asu.edu>
Source record: 94825

I need a Extender board for a Heathkit SB104. If anyone has one in
their junkbox I would like to get it. Thanks.

73 George, KQ7C

--

4273. Re: 10.7 mhz Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: commquart@aol.com
Message-ID: <19970419044301.AAA02937@ladder01.news.aol.com>
Source record: 94826

In article <5j55ho$8hi@lacy.zippo.com>, geotek@comwerx.net (George Carlson) writes:

>
>>I'm looking for a source for narrow band +/- 5 Khz 3300 ohm IF filters.
>>I've searched the WEB, I located FOX and PTI however they are about $100
>>++ each!! Guess they don't like small quantities!! Anyone know who might
>>stock something like this?
>>Thanks
>>Jim WA1GPO

The big question -- Why is the impedance
so critical? What kind of stop bands and slope factor are you looking
for?

If you can live with a 13-kHz bandwidth, and are willing to add some
matching circuits, surplus fm receiver filters should be relatively cheap.
I think they are bit lower in impedance than 3.3K-ohms, though.

I would place a want ad in this newsgroup with the exact filter specs.
you need and I will bet you are flooded with replies. If I can be of
any further help, drop me a reply.

73

Pete

Peter Bertini K1ZJH
Senior Technical Editor, Communications Quarterly Magazine
"The Radio Connection," Popular Communications Magazine
-- proud members of the CQ family --

4274. WTB: Drake R-4B Tuning Knob

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: John Lockhart <jlockj@minn.net>
Message-ID: <01bc4c69$260a0840$afc99dcc@default>
Source record: 94827

Anyone have one or two spare main tuning knobs
for the Drake B Line? (Could use just the center
inserts to fix up my knobs)

Thanks,

John W0DC

4275. 2m homebrew???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: Magnus Nilsson <sm7vgu@algonet.se>
Message-ID: <01bc4c9f$10869de0$bd1864c3@vgu>
Source record: 94828

Hi,
I�m looking for a 2m FM-receiver project to build or similar, so if you know any simple (?) projects, I would be grateful if you answer me.

```
(Is there any good homebrew-URL's ???)

/73 de Magnus
```

4276. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: la8ak <la8ak@online.no>
Message-ID: <33589B1B.5824@online.no>
Source record: 94829

hi
Thomas G. McWilliams wrote:

>
> Silver oxide is conductive; there is no need to remove it.

yes, it is a chance that you make more trouble for yourself. local TV inspector required that we washed the anode circuits in 5...10kW TV and FM broadcast transmitters, and after it, it was very much trouble to get the transmitters operating properly again!
--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS, Norway
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB opr.
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4277. Re: 2m homebrew???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: la8ak <la8ak@online.no>
Message-ID: <33589C0F.10C0@online.no>
Source record: 94830

Magnus Nilsson wrote:
>
> Hi,
> I�m looking for a 2m FM-receiver project to build or similar, so if you
> know any simple (?) projects, I would be grateful if you answer me.
>

yes, I have seen many, but I believe it is bad economy to build it when
it is so extremely much ufb surplus available, in Sweden - as it is in
Norway. You should not have much problems to locate all you desire....
Hei og 73

--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS,
Norway
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
opr.
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4278. * CALL ANYWHERE WORLDWIDE 25 CENTS/MIN

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: thetruth@cozmic.com
Message-ID: <E8vrBn.Is4@nonexistent.com>
Source record: 94831

INTERNATIONAL CALLING
Your Passport to International Savings
JUST 25 CENTS / MIN
CALL: ASIA ANYTIME
MIDDLE EAST
AFRICA PASSPORT (tm) CALLING CARD
LATIN AMERICA No Upfront Charges
EUROPE Pay Only For Time Used
ANYWHERE ELSE
CALL : 810 - 932 - 0464 (24 hrs)

4279. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3358B0A3.66A1@crpl.cedar-rapids.lib.ia.us>
Source record: 94832
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>

> The main differences seem to be that many physicists prefer Gaussian
> units, in which Maxwell's equations are a bit simpler (none of this
> epsilon naught and mu nought stuff, just c), but the 4 Pi's show up in
> counterintuitive places. Also physicists tend to think of B as the
> "fundamental" magnetic field, and "H" as the derived one, EE's like it
> the other way (I have no opinion, seems unimportant, although I got in
> the habit of using B in grad school).

In EE-land the SI (MKS) system works very nicely and fits in with henries, farads, ohms, volts-per-meter, farads-per-meter, amperes-per meter, ohm-meter, henries-per-meter, circuit design, EM fields, waves, filters, transmission lines, the Z0 (377 ohms) of space, and what have you. And it all ties together smoothly and consistently.

Inductive coupling, capacitive coupling, electric fields (E) and magnetic fields (H) get the delineation and uniqueness that they need in order to prevent the kinds of misunderstandings that we have seen here.

My favorite EM text is Kraus "Electromagnetics" 4th edition 1992 and he makes it all consistent with SI (MKS) units. Getting basic principles into the bone marrow is tough enough without having to go through a lot of gymnastics about units and unit conversions.

Bill W0IYH

4280. Re: O'Scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: Paul Graham <paulg@imaxx.net>
Message-ID: <33588416.6302@imaxx.net>
Source record: 94833

astone@erols.com wrote:
>
> Looking for a good basic used scope (100 MHz or so, dual trace, etc.)
> that doesn't cost much. Would like recommendations on specific models and
> reliable sources for used test equipment. Thanks.

After going the route of used, surplus, etc. 'scopes, andd having them
break down after 6 months to a year, and the required parts no longer
available, I looked at what these "bargains" had really cost, and
decided to buy an inexpensive new 'scope.

I suggest you contact C & S Sales 800-292-7711. What you are looking
for will probably cost you $500-$1000 but it will be worth it to get a
NEW 'scope with warantee, etc.

Paul - K9ERG

4281. Re: Problems with 4-1000 on 17m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3358b834.1665193@netnews.worldnet.att.net>
Source record: 94834

On Fri, 18 Apr 1997 23:54:03 -0700, Svein Henriksen <la3pu@sn.no>
wrote:

>Just finished an amplifier using a single 4-1000 with 4500v on the
>anode. It works greate on all but one band frm 160 including 10m. On 17m
>it is not possible to get it running. There are no parasitic ocillations
>but i suspect that it may be ocillating on the operating frequency. I
>have grid current flowing so its taking drive.

Does it ever show increased anode current or grid current without
drive???

>Some power output is
>indicated on the power meter, but IC is way to high wit only a 15 to 20
>watt drive and the tube gets red hot in seconds. It is not possible to
>dip the IC with the plate cap.

Sounds like the anode is not hitting resonance, and the anode
impedance is very low..

>The anode choke does not get warm so
>there are no series resonances there.

There still might be a series resonace there, even though it does not
get hot. Did you check the choke for series resonances??

>The configuration is grounded
>grid. Drive on the cathode. I am still working on the problem and have
>not given up, but any suggestions would be highly apreciated.

The only other thing I can think of is an unwanted series resonance in
the tank. Did you check the tank?

On occasion we can have a high impedance presented to the cathode by
the input at the odd harmonics of the excitation, and that will cause
a large efficiency reduction, but that does not fit your description.

I assume you have a conventional system with the grids grounded
directly and no idiotic trick circuitry in the grids??

73 Tom

4282. Test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: nick@mnsinc.com
Message-ID: <3358eaac.4283104@news.mnsinc.com>
Source record: 94835

```
This is a test
```

4283. WTB: Collins 516-F2 part

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970419144500.KAA00105@ladder01.news.aol.com>
Source record: 94836

Need octal (8 pin) socket for Collins 516-F2 power supply. This is NOT a standard socket because it has a narrower diameter and shorter mounting tabs than a standard socket. Prefer new but used is acceptable.

Evan
K9SQG@AOL.com

4284. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: "John L. Broughton" <wb9vgj@mcs.net>
Message-ID: <3358DF58.4BC2@mcs.net>
Source record: 94837
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Mark Brown wrote:
>
> T.L.Bryant wrote:
> ha..ha..ha..ha..in the event of a national disaster please dial 0 for
> > >help! Nah! you'll Always need a pool of people who could put their gear
> > >back togather and get on the air. If an Earthquake hit I'd be on the
> > >air, all the local cell sites would be down! Did you see "Independence
> > >day" ? Hams are pretty much self contained units. We dont need the
> > >NETWORK....N8XYN
> >
> > Burt responded to this scenario recently. I believe the response was:
> >
> > Cell Phones: 240
> > Ham Radio : 2
> >
> > Tom - N8ECW
>
> Hi all
> Just a comment from flooded Minnesota, the Red Cross & Salvation
> Army relied on amateur radio operators for communications out of Granite
> Falls when all power was lost, the phone system was under water & the
> cell sites went down. Burt needs to get a life.
> Mark

A few years back a tornado devestated part of Plainfield, Illinois.
Many amateurs volunteered for emergency communications. I spent a day
assigned to the Will County Sheriff's command headquarters that was
the overall command post for the relief effort. Three different
times an officer told me that without the hams, they would NOT have been
able to do their jobs; we were the only communicators who could provide
communications between ALL agencies involved. Also, those with cell
phones learned they don't work well after the cell sites have been
destroyed, power has been knocked out, phone lines destroyed, etc.

In emergencies and disasters, many agencies are involved: local, state
and federal agencies, the American Red Cross, the Salvation Army,
private
business (someone has to provide fuel trucks for generators, food for
victims and volunters, etc.) and many others. We amateurs are in a
unique position as we are the ones able to provide personnel with
radios to all those involved enabling every agency/group/business to
communicate with everyone else. Technology will not eliminate our
importance to emergency communications.

73, WB9VGJ

--
==========
John L. Broughton wb9vgj@mcs.net http://www.mcs.net/~wb9vgj/
==========

4285. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: bowman@montana.com
Message-ID: <5japfq$dfn@maw.montana.com>
Source record: 94838

In article <33577c27.8531840@netnews.worldnet.att.net>, W8JItom@worldnet.att.net (Tom Rauch) says:
>
>Do you know why they called it class E, or what the textbook
>definition of class E is???

i believe the difference is C exhibits some degree of linearity, while E is a completely saturated switch. moot point ,imho.

4286. Re: WTB: Eimac 8930

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <5jaqtd$4ar$1@news3.microserve.net>
Source record: 94839

In article <5j3mj3$1ip@news-central.tiac.net>, w1ksz@juno.com says...
>
>Looking for an Unused Eimac 8930 for a spare. Anyone have one ??
>Tnx es 73 de Dick, W1KSZ
>
You can find them at Daily Electronics new in the box for just over
$100. I searched the internet for several months and found a good
used pair for $50 each. Run them on 20 mtrs at about 650w pep.

Best luck KD3SH

4287. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc4cde$ce8f9be0$a40f2399@peter->
Source record: 94840
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Marty Albert <marty@trucom.com> wrote in article
<3357a131.1626891@news.trucom.com>...
>
>
> Has anyone else noticed all the WTB and For Sale ads in the groups
> lately? Seems to be getting bad again...

I like the ads here.

4288. Re: Gumm Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: stoskopf@tri.NET
Message-ID: <335901A2.C885D8D0@tri.net>
Source record: 94841

Thanks to Gumm for an excellent note on his design.

Now look at Communications Quarterly, Winter 1996, p 47. (Reprinted from a talk a RF Expo, East, 1994 and RF Design)

After you manage to work through the references to wrong Figures and cryptic language and a noticeable bias toward using modern integrated circuits, you find that "According to our simulation analysis, both circuits only provide +4 dBm. We weren't able to confirm the +17 dBm measurement reported by the authors."

Well, as I've commented before, every model I've built from the original Hayward book gave an output similar to that published. In this case I'll go with the solder data. (And for anyone interested, somewhere in my large junk box is an all-pass filter for the input of a Dentron MLA-2500, built from a Ham Radio Magazine article, that would have worked better if built totally out of solder!)

N0UU

4289. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: mulveyr@ll.aa2ys.ampr.org
Message-ID: <slrn5li0qb.678.mulveyr@ll.aa2ys.ampr.org>
Source record: 94842
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 19 Apr 1997 16:32:02 GMT, Peter Gottlieb <peter_gottlieb@msn.com> wrote:
>Marty Albert <marty@trucom.com> wrote in article
><3357a131.1626891@news.trucom.com>...
>>
>>
>> Has anyone else noticed all the WTB and For Sale ads in the groups
>> lately? Seems to be getting bad again...
>
>
>
>I like the ads here.

In spite of your personal preferences, the various rec.radio.* newsgroup
charters specify that the WTB and FS ads are supposed to go into
rec.radio.swap. It helps to keep the noise level down.

--
--
Rich Mulvey
mulveyr@frontiernet.net Rochester, NY USA
http://www.frontiernet.net/~mulveyr
Amateur Radio: aa2ys@amsat.org, aa2ys@wb2wxq.#wny.ny.usa

4290. Looking for ceramic IF filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es>
Message-ID: <3358F664.504CDB27@sat.cide.upm.es>
Source record: 94843

Hello all

I'm looking for a 10.7 MHz, 50-100 kHz bandwith ceramic filter that it is near to impossible to find in Spain.

Anyone know for a source to take this small device? I know that muRata and Panasonic manufactures them, but I don't believe they sell unities...

Thanks in advance,

--
Rafael,
Madrid (Spain)

4291. Yaesu 757 GX and GX II Spectrum Analyser Software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: dthimm@unix.newnorth.net
Message-ID: <3358f9aa.16561904@news.newnorth.net>
Source record: 94844

Hello Everyone.

Well, after several modifications feature additions and improvements,
I have finally completed the software and am making it available to
whoever would like it.

Some of it's new features are:

Track and Hold
Hi Speed scanning and logging
Automatic Station logging
Grapical Analysis and review
Quick "Return to" active frequency
Windows Environment
Funtional Radio Control Panel

To find out how to get a copy of this software please visit my
website at:

http://unix.newnorth.net/~dthimm
Robots, Rockets and More!"

Also, I haven't forgotten all of you with computer capable Rigs other
than Yaesu.... I am going to be working on those versions shortly,
but go ahead and take a look at this one , just run it in demo mode to

get a feel for what your rig's version will be able to do!

Thanks Again for all of your support.

Dan T.
N9IPV

4292. Re: O'Scopes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: J-M Noeding <la8ak@online.no>
Message-ID: <33591037.2A1@online.no>
Source record: 94845

Paul Graham wrote:

>
> After going the route of used, surplus, etc. 'scopes, and having them
> break down after 6 months to a year, and the required parts no longer
> available, I looked at what these "bargains" had really cost, and
> decided to buy an inexpensive new 'scope.
>
> Paul - K9ERG
yes, indeed!
I believe it is the time to look for something new, LCD scopes from
Fluke and others are reasonable priced, and will work upwards 100MHz,
but of course if you are making bad soldering inside you should look for
some old rubbish
--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS,
Norway
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
opr.
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4293. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: "Cecil A. Moore" <cecilmoore@delphi.com>
Message-ID: <3359284C.476C@delphi.com>
Source record: 94846
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Peter Gottlieb wrote:
MA > Has anyone else noticed all the WTB and For Sale ads in the groups
MA> lately? Seems to be getting bad again...
> I like the ads here.

Doesn't matter who likes it - it is against r.r.a.* newsgroups
rules. Wonder how many posters haven't bothered to read the rules?

73, Cecil, W6RCA, OOTC

4294. Re: Surface-Mount amateur kit recommendations???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: Bob <rfhaas@sunlink.net>
Message-ID: <335924BF.7BB3@sunlink.net>
Source record: 94847

Mark McPherson wrote:
> .... let me suggest the
> S&S Engineering "Digital VFO". It's a useful synthesized VFO circuit
> with output to about 17 MHz (if memory serves), incorporating an
> on-board low pass filter for antialiasing and an LCD display. It is
> about 70% surface mount as I recall. S&S Engineering is on the web:
>
>

Yeah, I also built one of those for my first foray into SMT. Hot Damn, and it works, too!

I've got terrible nerves and the SMT was a little nerve-racking. I'd suggest you clean your glasses (you WILL need them!) and inspect each joint with a jeweler's loupe before going to the next. Be especially careful with the SMT chips so that you don't bridge any contacts. That happened to me and the VFO didn't work the first time out. Another inspection found the bridge. A quick hit with a solder sucker and I was in business.

Bob

4295. REAL 2m homebrew wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: pkpatrick@aol.com
Message-ID: <19970419203900.QAA25301@ladder01.news.aol.com>
Source record: 94848

Does anyone have plans for a 2m rig similar to the Ten-Tec kit but with 50W. I'd like to built a 2m rig from scratch. I need a schematic and parts list with specs and all. I need a good radio design with parts I can buy from Digi-Key or the like. I would like to keep parts as low price as possible. Has anyone ever done this? I am interested in your unfinished kits too. Please EMAIL me.

4296. Re: HEATHKIT (for Leon Snider, KE4GG)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-19 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <3359386a.179549@news.mnsinc.com>
Source record: 94849

Leon:

Try posting this in the HEATHKIT USERS E-mail list!!

Here's what I have:

From: "L-Soft list server at LISTSERV.TEMPE.GOV (1.8c)"
<LISTSERV@LISTSERV.TEMPE.GOV>
Subject: You are now subscribed to the HEATH list
To: Brian Carling <bry@mnsinc.com>
Send reply to: HEATH-request@LISTSERV.TEMPE.GOV

Tue, 25 Mar 1997 06:00:30

Your subscription to the HEATH list (Heathkit Owners and Collectors
List)
has been accepted.

Please save this message for future reference, especially if this is
the
first time you subscribe to an electronic mailing list. If you ever
need
to leave the list, you will find the necessary instructions
below.
Perhaps more importantly, saving a copy of this message (and of
all
future subscription notices from other mailing lists) in a special
mail
folder will give you instant access to the list of mailing lists that
you
are subscribed to. This may prove very useful the next time you go
on
vacation and need to leave the lists temporarily so as not to fill
up
your mailbox while you are away! You should also save the
"welcome
messages" from the list owners that you will occasionally receive
after
subscribing to a new list.

To send a message to all the people currently subscribed to the
list,
just send mail to HEATH@LISTSERV.TEMPE.GOV. This is called "sending
mail
to the list", because you send mail to a single address and
LISTSERV

makes copies for all the people who have subscribed. This
address
(HEATH@LISTSERV.TEMPE.GOV) is also called the "list address". You
must
never try to send any command to that address, as it would be
distributed
to all the people who have subscribed. All commands must be sent to
the
"LISTSERV address", LISTSERV@LISTSERV.TEMPE.GOV. It is very important
to
understand the difference between the two, but fortunately it is
not
complicated. The LISTSERV address is like a FAX number that connects
you
to a machine, whereas the list address is like a normal voice
line
connecting you to a person. If you make a mistake and dial the FAX
number
when you wanted to talk to someone on the phone, you will quickly
realize
that you used the wrong number and call again. No harm will have
been
done. If on the other hand you accidentally make your FAX call
someone's
voice line, the person receiving the call will be
inconvenienced,
especially if your FAX then re-dials every 5 minutes. The fact that
most
people will eventually connect the FAX machine to the voice line to
allow
the FAX to go through and make the calls stop does not mean that
you
should continue to send FAXes to the voice number. People would just
get
mad at you. It works pretty much the same way with mailing lists,
with
the difference that you are calling hundreds or thousands of people
at
the same time, and consequently you can expect a lot of people to
get
upset if you consistently send commands to the list address.

You may leave the list at any time by sending a "SIGNOFF HEATH"
command
to LISTSERV@LISTSERV.TEMPE.GOV. You can also tell LISTSERV how you
want
it to confirm the receipt of messages you send to the list. If you do
not
trust the system, send a "SET HEATH REPRO" command and LISTSERV will
send

you a copy of your own messages, so that you can see that the message
was
distributed and did not get damaged on the way. After a while you
may
find that this is getting annoying, especially if your mail program
does
not tell you that the message is from you when it informs you that
new
mail has arrived from HEATH. If you send a "SET HEATH ACK
NOREPRO"
command, LISTSERV will mail you a short acknowledgement instead,
which
will look different in your mailbox directory. With most mail
programs
you will know immediately that this is an acknowledgement you can
read
later. Finally, you can turn off acknowledgements completely with
"SET
HEATH NOACK NOREPRO".

Following instructions from the list owner, your subscription
options
have been set to "NOFILES REPRO" rather than the usual LISTSERV
defaults.
For more information about subscription options, send a "QUERY
HEATH"
command to LISTSERV@LISTSERV.TEMPE.GOV.

Contributions sent to this list are automatically archived. You can
get a
list of the available archive files by sending an "INDEX HEATH"
command
to LISTSERV@LISTSERV.TEMPE.GOV. You can then order these files
with a
"GET HEATH LOGxxxx" command.

This list is available in digest form. If you wish to receive
the
digested version of the postings, just issue a SET HEATH DIGEST
command.

Please note that it is presently possible for other people to
determine
that you are signed up to the list through the use of the
"REVIEW"
command, which returns the e-mail address and name of all
the
subscribers. If you do not want your name to be visible, just
issue a
"SET HEATH CONCEAL" command.

More information on LISTSERV commands can be found in the
LISTSERV
reference card, which you can retrieve by sending an "INFO
REFCARD"
command to LISTSERV@LISTSERV.TEMPE.GOV.

I hope that helps!

Bry
==========

snider96@aol.com (SNIDER96) eloquently wrote:

>need to buy, 12 volt dc/dc power supply(kit or built) for a HA-14. Thanks,
>Leon Snider, KE4GG

4297. ATV magazine

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: rulrich@euronet.nl
Message-ID: <rulrich-2004970230460001@bij.veronica.nl>
Source record: 94764

Eind volgende week zal Repeater 2/1997 uitkomen. Repeater is een onafhankelijk tijdschrift voor iedereen die ge�nteresseerd isin amateurtelevisie.
Enkele onderwerpen uit Repeater 2:

- Een bezoek aan PI6EHV
- Theorie omtrent het ontwerpen van ringhybrids
- een 40 Watt eindtrap voor 23 cm
- 10 GHz-ontvangst met Ku-band LNB's.
- ontvangstrapporten,
- frequentielijsten

en nog veel meer leuke en wetenswaardige artikelen.

Repeater verschijnt vier keer per jaar in full/color en een abonnement kost slechts 40 gulden per jaar.

U kunt zich opgeven als abonnee bij:
CCH Media
Gibbon 14
1704 WH Heerhugowaard
Tel.072-5720993
Fax.072-5720992
of e-mail: rulrich@euronet.nl

4298. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5jbvgh$et7@sjx-ixn3.ix.netcom.com>
Source record: 94765
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In <5jbjs0$f5o$1@kanga.accessone.com> vbook@vbook.com (Ed Mitchell)
writes:
>
>Under terms of the Report and Order in ET Docket 96-8, released April
10, 1997,
>the FCC has announced that it will allow high gain antennas
>for unlicensed transmitters operating in the 2400 and 5800 MHz
>Part 15 allocations. These bands are shared with the Amateur Radio
Service.
>
>Under the new rules, very high gain antennas may be deployed at 2400
and
>5800 MHz. Certain transmitter power reduction restrictions apply at
2400 MHz
>but unlimited gain systems may be installed at 5800 MHz. These systems
will
>enable high speed Internet access using unlicensed systems. You can
expect to
>see these systems deployed rapidly as soon as 1998 to provide
non-commercial
>and commercial services on these frequencies.

This is actually a good thing.

First semantics, in a physics sense there is no such thing as a "gain
antenna" the best an antenna can do for you is to reshape the pattern
putting more of the energy radiated into a smaller cone.

A very high "gain" antenna directs most of the radiated energy towards
the intended receiver lessening the chance for inadvertant
interference. The long and the short of it is this order is to the hams
benefit. We will also benefit from the research and engineering that go
into these systems.

Jerry
>
>The complete story, including the Report and Order, is now available
online at:
>
>http://www.hamradio-online.com
>
>
>------------------------

>Ed (KF7VY) and Kim (N7VPL) Mitchell
>email to vbook@vbook.com
>Visit Ham Radio Online, it's free! at
>http://www.hamradio-online.com
>

4299. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Pom E Granate <seno417b@themall.net>
Message-ID: <01bc4d34$e5319000$0fa42399@94387684762264>
Source record: 94766
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

...perhaps better to stick a fork in "ham radio" instead of
the ham operator. Just got back from a hamfest (my 3rd)
and I've never seen more overweight, slopply dressed, chain
smoking greezeballs in any one place. My guess is that if
you stuck a fork in a few of the ones I saw this day, they'd
likely fly off into the air like an un-corked party balloon.
(SFX follows, imagine : Plink-Ponk! PPPFHHBLTTTTTT!!!!!!)

Sorry guys, I't's only my 3rd visit to a hamfest, and it was
just as scary as visits # 1 and # 2. Some real space-cases
were there too....Oy!

PomEGranate

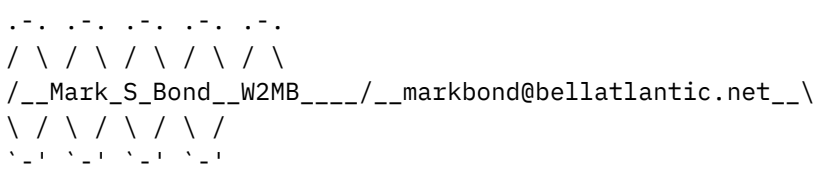
4300. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: markbond@bellatlantic.net
Message-ID: <markbond-ya023680002004970011340001@news.bellatlantic.net>
Source record: 94767
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <slrn5li0qb.678.mulveyr@ll.aa2ys.ampr.org>,
mulveyr@frontiernet.net wrote:

> >> Has anyone else noticed all the WTB and For Sale ads in the groups
> >> lately? Seems to be getting bad again...

> In spite of your personal preferences, the various rec.radio.* newsgroup
> charters specify that the WTB and FS ads are supposed to go into
> rec.radio.swap. It helps to keep the noise level down.

I plead guilty, but i think the noise that the ads are creating is drowned
out by a lot of the other less than useful dialog here.
--


4301. START a FREE Online Business TODAY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: glucas@netusa1.net
Message-ID: <5jbu5m$8p1@news.netusa1.net>
Source record: 94768

FREE TURNKEY ONLINE BUSINESS

Build a residual income from time you spend on the Internet placing FREE advertisements.

Successful Internet company wants you to help them market their services online. Place FREE advertisements and get paid residual commissions on any sales that you bring to the company. NO cost to start immediately, and all you have to do is place pre-written ads online in your sparetime. Complete training and instructions will be provided to you FREE.

You can even choose to get other online entrepreneurs involved and build your own "sales organization" where you can even earn commissions from the work of others.

You can get started TODAY absolutely FREE, and you can even check the status of your sales ONLINE!

PLEASE WRITE THIS DOWN: GD2854

You will need the above code to join this FREE program.

For more information, retrieve an auto-reply from OVERVIEW@NETOPP.COM, or visit: http://www.netopp.com.

This message is being brought to you by Dynamic Mail software - the powerful online marketing tool to explode your business easier and faster. For more information please visit our web site at :
http://www.australia.net.au/~apexpi/dynamail.htm

4302. P.I.D. control program for 8085 needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <5jc8r2$d05$2@news3.microserve.net>
Source record: 94769

Hello from KD3SH,
Anyone know of a good machine code pid control program for an 8085.
I have an 8 bit set point and an 8 bit fluid level readback. Now I
need a P.I.D. type program to keep things from running away. Anyone
experienced in this field?
73 KD3SH

4303. Elector eprom programmer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: robp@pi.bns.com.au
Message-ID: <3359cb15.1379120@news.sa.iinet.net.au>
Source record: 94770

Hi all,

I wonder if someone could please help.

I have just read the March 97 edition of "Elector Electronics" and it features an eprom programmer that looks easy enought to build.

It has some the controll software "prommer.exe " from the cd rom "Elektor software 96-97" and they mention a slightly different version on a cd rom entitled " competition cd rom" complete with pcb diagram.

These are very hard to obtain in Australia and I would be very grateful if someone who has either of these cd's would please be kind enough to e-mail me a copy of either of the above if possible.

Also has any one built this and what success have they had with it ????.

Thanks,

Rob Payne VK5PR

robp@pi.bns.com.au

4304. Re: 10.7 mhz Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <qr08qDAVueWzEwiY@ddwyer.demon.co.uk>
Source record: 94771

In article <33550385.2F88@whoi.edu>, "j.valdes" <jvaldes@whoi.edu>
writes
>I'm looking for a source for narrow band +/- 5 Khz 3300 ohm IF filters.
>I've searched the WEB, I located FOX and PTI however they are about $100
>++ each!! Guess they don't like small quantities!! Anyone know who might
>stock something like this?
>Thanks
>Jim WA1GPO
10.7 MHz crystal filters are the most easily available of all. OEMs only
pay a few $ for them, you dont state the stop band you require at 5kHz
however 7 pole will give excellent results.
The 3k3 termination is critical as the termination impedance is part of
the design of the filter. try to get the termination cap right also.
Watch out for breakthrough take great care with ground planes as many
filters capable of 70db stop bands only achieve 40db because thr radio
designer never got the ground plane right.
Narrow band Xtal filters have a lot of group delay a small amount of
ripple varies the phase response over th pass band and really mucks up
data. If you are interested in good group delay response try this idea I
used some years ago and which is seldom implimented.
Buy 10.7MHz monolithic duals employ as many duals as your stop band
dictates, select the termination to give correct pass band then place a
gain/isolating stage between each filter.
Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

4305. Re: FS: Big Amp. Parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: luuk@hotmail.com
Message-ID: <3359f4f4.5708422@news>
Source record: 94772

hallo

Is there any one how knows if 26.995 MHz is an open freq. In Australia
or is a license requied????

Nead to know

luuk

4306. 26.995

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: luuk@hotmail.com
Message-ID: <3359f5e8.5951806@news>
Source record: 94773

hi

Is there anyone out there how can tell me if 26.995 MHz is an open
freq. In Australia???
Or is a license required????

luuk

4307. Re: 2m homebrew???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: bry@mnsinc.com.spam.stinks
Message-ID: <335a0c2b.5497443@news.mnsinc.com>
Source record: 94774

On 19 Apr 1997 08:53:38 GMT, "Magnus Nilsson" <sm7vgu@algonet.se>
wrote:

>Hi,
>I m looking for a 2m FM-receiver project to build or similar, so if you
>know any simple (?) projects, I would be grateful if you answer me.
>
>(Is there any good homebrew-URL's ???)

Magnus - try:

http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

AND:

http://www.mnsinc.com/bry/hamfiles.htm

Regards - Bry, AF4K / G3XLQ

To reply to this message, you MUST remove ".spam.stinks" from my address. It is there to fool annoying unsolicited e-mail advertising robots!
Send replies ONLY to: bry@mnsinc.com
VISIT: http://www.mnsinc.com/bry/

4308. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: bry@mnsinc.com.spam.stinks
Message-ID: <335a0dcb.5913225@news.mnsinc.com>
Source record: 94775
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 19 Apr 1997 17:45:46 GMT, mulveyr@ll.aa2ys.ampr.org (Rich Mulvey)
wrote:

>On 19 Apr 1997 16:32:02 GMT, Peter Gottlieb <peter_gottlieb@msn.com> wrote:
>>Marty Albert <marty@trucom.com> wrote in article
>><3357a131.1626891@news.trucom.com>...
>>>
>>>
>>> Has anyone else noticed all the WTB and For Sale ads in the groups
>>> lately? Seems to be getting bad again...
>>
>>
>>
>>I like the ads here.
>
> In spite of your personal preferences, the various rec.radio.* newsgroup
>charters specify that the WTB and FS ads are supposed to go into
>rec.radio.swap. It helps to keep the noise level down.

>Rich Mulvey

Problem is that the FS and WTB ads in the r.r.s group are SO NUMEROUS!

A few specialized ads in boatanchors for example, are VERY welcome by
the majority of readers.

We do not want to wade through 150 ads for dual band VHF/UHF whatsits
and packet terminals trying to find a DX-100!

Why not take this thread to r.r.a.policy?

To reply to this message, you MUST remove ".spam.stinks" from my address. It is there to
fool annoying unsolicited e-mail advertising robots!
Send replies ONLY to: bry@mnsinc.com
VISIT: http://www.mnsinc.com/bry/

4309. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <335d10f0.129711468@eskinews.eskimo.com>
Source record: 94776

```
>
>>
>> Silver oxide is conductive; there is no need to remove it.
>
<><><><><><><><><><><><><><><><><><><><><><><><><><><><>
Back in the '50s, TV sets had tuners with a large rotating drum which
had silver contact points and silver fingers to contact them. One of
my first jobs as a young apprentice was cleaning the oxidation off of
them. Silver oxide may be a conductor in theory, but those contacts
were very erratic if there was much of it there. I'd clean it off.
Ordinary silverware type polish was what we used and it worked fine.

73, Bill W7TI
```

4310. Heathkit SB104 Extender board

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <5jd5cf$hnq@news.asu.edu>
Source record: 94777

Does anyone have a Heathkit SB104 extender board laying around.
Please let me know if you do. Will buy or trade.

73 George in Phoenix

--

4311. ACCESS to HOMEBREW information!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: bry@mnsinc.com.spam.stinks
Message-ID: <335a18c1.8718574@news.mnsinc.com>
Source record: 94778

Access literally thousands of pages of DATA, PICTURES, BARGAINS, TIPS
and LINKS to HOMEBREW information on the WorldWideWeb at:

http://www.mnsinc.com/bry/hamlynx.htm

Enjoy!

73 from AF4K / G3XLQ - Bry

To reply to this message, you MUST remove ".spam.stinks" from my address. It is there to
fool annoying unsolicited e-mail advertising robots!
Send replies ONLY to: bry@mnsinc.com
VISIT: http://www.mnsinc.com/bry/

4312. Re: Problems with 4-1000 on 17m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R2004970655430001@news.vcnet.com>
Source record: 94779

In article <33586C0B.6FC6@sn.no>, la3pu@sn.no wrote:

> Just finished an amplifier using a single 4-1000 with 4500v on the
> anode. It works greate on all but one band frm 160 including 10m. On 17m
> it is not possible to get it running. There are no parasitic ocillations
> but i suspect that it may be ocillating on the operating frequency. I
> have grid current flowing so its taking drive. Some power output is
> indicated on the power meter, but IC is way to high wit only a 15 to 20
> watt drive and the tube gets red hot in seconds.
IMO, it is quite definitely bad luck to say that there are no parasitic
oscillations.
If you have grid current when the drive is removed, you may have a
parasitic oscillation. You can check for a parasitic oscillation with a
neon lamp connected to the end of a plastic rod. Bring the neon lamp near
the anode. If the energy is at 17m, the light will be orange. If the
energy is in the VHF range, the light will somewhat purple.
>It is not possible to
> dip the IC with the plate cap. The anode choke does not get warm so
> there are no series resonances there.
True.....If the choke was the problem, at this power level, you have had a
choke fire.

Are you shorting the unused turns in the tank L?

Rich---

--
--Rich-- ---805-386-3734, ag6k

4313. Re: Longwire or Randomwire? (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Steve <semann@nr.infi.net>
Message-ID: <335A24B0.1A26@nr.infi.net>
Source record: 94780
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve J. Quest wrote:
>
> Steve wrote:
> > > I don't consider my antenna to be a random length antenna,
> > > it is on the long side of my house, and is cut to half wavelength for
> > > the 30 meter band (10 Mhz). The longwire is 48.5 feet long, therefore
> > > it is a longwire for the 30 meter band, and a random wire for
> >
> > > All random wire antennas are longwires if you find the
> > > right spot on your all-band radio. ;) Like I said, there isn't much
> > > of a difference.
> >
> > > As I hope you can see there are reasons for specifying frequency
> > > as even a "1 foot chunk of wire" is a longwire for 486 Mhz.....sq
> >
> > As this is rec.radio.shortwave I was using the FCC definition of
> > shortwave: 3-30 MHz. So the 486 MHz is a non sequitur. ;)
>
> I think you missed my point. Is your randomwire antenna, or
> have you ever used a randomwire antenna that was longer than 16 feet?
> If this is true, then your antenna was cut for longwire lengths WITHIN
> the HF band (close to 30 Mhz).
>
> sq
>
> (I was only using the 486 Mhz as a wild example that even a foot of wire
> is a longwire for _some_ frequency. 16' 2 1/2" of wire is a longwire
> for 30 Mhz, maybe this is a better example? :)

Wow! Too many Steves here!

I think I get your point. My Motorola flip phone's pull up 5 inch
antenna would work as a long wire on some frequency. However, that's no
reason to call it a long wire. In fact, it would be kinda silly, don't
you think?

Let me quote from the A.R.R.L. Handbook, Thirteenth Edition, page 165,
the chapter entitled "Long-Wire Antennas".

"Since a wire is not "long," even at 28 MHz, unless
its length is at least equal to a half wavelength
on 3.5 MHz, any long-wire antenna can be used on all
amateur bands that are useful for long distance

communication.

As between two directive antennas having the same
theoritical gain, one a multielement array and the
other a long-wire antenna, many amateurs have found
that the long-wire antenna seems more effective in
in reception."

Note three things from this: (1) A wire must be approximately 134 feet long to be called a long wire below 30 MHz. (2) A long wire is directive. (3) A long wire has gain in reception.

If you're interested in gain figures from end fed wires of any length, see page 27-9 of Reference Data For Radio Engineers, Sixth Edition.

This discussion started when I read a note from SQ that he was thinking of replacing his "longwire" with a dipole to get better performance. Sine a long wire reputedly has gain over a dipole, this sounds funny to me. I feel certain that he was calling a random length of wire a long wire without being aware that there is a difference.

By the way, I am also Steven_Mann@UNCG.EDU. Our news server is down for repairs at the university so I'm replying from home this time!

Steve

4314. Re: Bug catcher antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Gary Danaher <gdanaher@flash.net>
Message-ID: <335A26DF.6549@flash.net>
Source record: 94781

Mucho Gusto wrote:
>
and have heard good reports on the
> "bug catcher antenna". I assume this to be a center loaded unit with a
> large (high Q) loading coil. Can anyone tell me where to obtain one of
> these antennas or find design information so I can build one? I would
> be interested in hearing of experiences with the bug catcher or any
> other 75 meter mobile antenna. Does anyone know if B&W Mini-ductor is
> still available and where it can be obtained?
>
> 73....Jim....KD6QM.....mchogsto@ix.netcom.com
Contact WB5TYD who manufactures the Texas Bug Catcher. See Ads in QST or
give him a call and place your order. Don't have his phone humber in
front of me but he's in the book.

4315. Re: 10.7 mhz Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Dave Stuart <dastuart@i1.net>
Message-ID: <335A2FE8.2AAC@i1.net>
Source record: 94782

George Carlson wrote:

This is a Test> Thisa is only a test

-- Dave Stuart --- K B 0 S L Y
dastuart@i1.net

4316. Re: 10.7 mhz Filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Dave Stuart <dastuart@i1.net>
Message-ID: <335A31FB.2220@i1.net>
Source record: 94783

Dave Stuart wrote:
>
> George Carlson wrote:
>
> This is a Test> Thisa is only a test
>
Sorry about that. My netscape is messing up.

4317. 6m Transverter for RCI 2970/50

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: carll@intrepid.net
Message-ID: <5jdf06$771$1@news3.texas.net>
Source record: 94784

Looking for a homebrewed transverter for 6m to the 2950 or 70.

Carl
WL7AF

4318. Re: Microwave ovens to transmitters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <335A4CC4.6E8D@arrl.org>
Source record: 94785

Brian Carling wrote:

> >> It seems to me that if the frequency were tuned down a bit (I think
> >> the freq for wiggling water is ~2.1 GHz) and modulated somehow, a
> >> Tappan would make a dandy +100w transmitter.

Actually, the water absorption frequency is around 22 GHz.
But, this frequency is much too high for an effective
microwave oven, since this wouldn't cook deeply enough.

Microwave ovens are typically designed for 2.45 GHz, though
the older ones were around 900 MHz. Politics typically
determines the precise frequencies (Not in My Back Yard).

People have successfully used frequencies as low as 2 meters
for cooking hot dogs and hamburgers.--Zack Lau W1VT zlau@arrl.org

4319. Re: P.I.D. control program for 8085 needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc4db7$46528ba0$1d102399@peter->
Source record: 94786

gudmundur <dcowey@cyberia.com> wrote in article
<5jc8r2$d05$2@news3.microserve.net>...
> Hello from KD3SH,
> Anyone know of a good machine code pid control program for an 8085.

Signetics/Philips used to have an app note with code examples for this some
time
back. I have also seen examples on the net, in micro newsgroups, and on
some
of the programming CD-ROMs.

If that search fails, look at the Motorola uPs, they certainly have that
code. But
you will have to rewrite for the 8085.

4320. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5jduem$gii@news.Hawaii.Edu>
Source record: 94787
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Cecil A. Moore <cecilmoore@delphi.com> wrote:
>Peter Gottlieb wrote:

>MA > Has anyone else noticed all the WTB and For Sale ads in the groups
>MA> lately? Seems to be getting bad again...

>> I like the ads here.

>Doesn't matter who likes it - it is against r.r.a.* newsgroups
>rules. Wonder how many posters haven't bothered to read the rules?

Hi Cec - I'm reading your remark on r.r.a.boatanchors, and as I recall,
the charter for .boatanchors does allow for BA ads.

I wonder who the goofball was (M.A. maybe?) who originally included so
so many newsgroups? Neither .misc nor .homebrew have a problems with
lots of ads - only .equipment does, so followups should be directed
just to that group.

Jeff

4321. FT-2500M's have been sold

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: "Larry J. Brock" <larry666NOSPAM@gdi.net>
Message-ID: <335A8A6D.6D3B@gdi.net>
Source record: 94788
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Hello,
I would like to thank everyone,but I have sold both radios.

Take care and 73,
Larry Ke4rur (All writtens passed to Extra.Now I am working on CW)

4322. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: tgold@microvst.demon.co.uk
Message-ID: <861572224snz@microvst.demon.co.uk>
Source record: 94789
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <3378609f.37930378@news.cyberhighway.net>
address@sig "Glen Quarnstrom" writes:

> tgold@microvst.demon.co.uk ("Anthony R. Gold") wrote:
>
> >In article <3352A7C2.980@usaor.net> freq@usaor.net writes:
> >
> >> Burt Fisher wrote:
> >
> >> > antenna towers. However ham towers could be seized as the FCC has
> >> > decided that the amateur radio service no longer serves the public
> >> > necessity.
> >
> >> It would have nice if you listed the frequencies re the above info.
> >
> >Serves the public necessity? This stuff must be straight from the
> >pen of someone who teaches illiteracy in the public education system.
>
> Ever heard of PICON? If not, find out about it and get back to us.

Sorry but I confess that I disobeyed your command to find out about
PICON. Maybe you will tell me whether it is a special Civil Service
dictionary which confuses a necessity a need.

(Hint: A necessity is something which satisfies a need.)

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

4323. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.154.002B1643@phoenix.net>
Source record: 94790
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <861572224snz@microvst.demon.co.uk> tgold@microvst.demon.co.uk ("Anthony R. Gold") writes:
>From: tgold@microvst.demon.co.uk ("Anthony R. Gold")
>Subject: Re: FCC to get rid of hams
>Date: Sun, 20 Apr 97 21:37:04 GMT

>In article <3378609f.37930378@news.cyberhighway.net>
> address@sig "Glen Quarnstrom" writes:

>> tgold@microvst.demon.co.uk ("Anthony R. Gold") wrote:
>>
>> >In article <3352A7C2.980@usaor.net> freq@usaor.net writes:
>> >
>> >> Burt Fisher wrote:
>> >
>> >> > antenna towers. However ham towers could be seized as the FCC has
>> >> > decided that the amateur radio service no longer serves the public
>> >> > necessity.
>> >
>> >> It would have nice if you listed the frequencies re the above info.
>> >
>> >Serves the public necessity? This stuff must be straight from the
>> >pen of someone who teaches illiteracy in the public education system.
>>
>> Ever heard of PICON? If not, find out about it and get back to us.

>Sorry but I confess that I disobeyed your command to find out about
>PICON. Maybe you will tell me whether it is a special Civil Service
>dictionary which confuses a necessity a need.

>(Hint: A necessity is something which satisfies a need.)

>Regards,
>--
> Tony - G3SKR / W2TG email: tgold@panix.com
lettus not figet th ol testaclament outlawed ham butus the cristworshpers sez
it ok to eat.. snakevetom

4324. Re: FCC to get rid of hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.155.002C5F02@phoenix.net>
Source record: 94791
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <861572224snz@microvst.demon.co.uk> tgold@microvst.demon.co.uk ("Anthony R. Gold") writes:
>From: tgold@microvst.demon.co.uk ("Anthony R. Gold")
>Subject: Re: FCC to get rid of hams
>Date: Sun, 20 Apr 97 21:37:04 GMT

>In article <3378609f.37930378@news.cyberhighway.net>
> address@sig "Glen Quarnstrom" writes:

>> tgold@microvst.demon.co.uk ("Anthony R. Gold") wrote:
>>
>> >In article <3352A7C2.980@usaor.net> freq@usaor.net writes:
>> >
>> >> Burt Fisher wrote:
>> >
>> >> > antenna towers. However ham towers could be seized as the FCC has
>> >> > decided that the amateur radio service no longer serves the public
>> >> > necessity.
>> >
>> >> It would have nice if you listed the frequencies re the above info.
>> >
>> >Serves the public necessity? This stuff must be straight from the
>> >pen of someone who teaches illiteracy in the public education system.
>>
>> Ever heard of PICON? If not, find out about it and get back to us.

>Sorry but I confess that I disobeyed your command to find out about
>PICON. Maybe you will tell me whether it is a special Civil Service
>dictionary which confuses a necessity a need.

>(Hint: A necessity is something which satisfies a need.)

>Regards,
>--
> Tony - G3SKR / W2TG email: tgold@panix.com
ham if well cooked is not too harmful to most but IS high in salt..

4325. SABER DVP MODULES

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Arthur Garabedian <westernmobiletel@worldnet.att.net>
Message-ID: <335AC709.4EFD@worldnet.att.net>
Source record: 94792
Cross-posted to:
rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.noncomm,rec.radio.amateur.boatanchors

Saber DVP modules $90 ea. or $50 ea. in bunches of 10.
Regards, ARTHUR KC6KUK . . .

4326. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5jea40$4hd@lana.zippo.com>
Source record: 94793

"Lee St. Clair" <w7ax@montananet.com> wrote:

>Hello Charles,I use 0000 steel wool to clean the inductors. It is silver
>oxide and it removes easily. Don't go further than to just remove the
>oxide though. It is actually a silver plating. 73
>--

Boy, are you asking for trouble. Not only will the steel wool ruin
the silver plating, but you could leave hundreds of tiny steel fibers
on the coil and inside the equipment. If you feel the need to use an
abrasive around electronic parts, use Scotch Brit, not steel wool.
This includes cleaning PCB's before stuffing.

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

4327. WTB chart recorder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Clark M Wockner <clark@localline.com>
Message-ID: <335AF321.5F9@localline.com>
Source record: 94794

```
Looking for drum type chart recorder
Respond to clark@localline.com
Thanks Clark
```

4328. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: marty@trucom.com
Message-ID: <335a95ac.3424332@news.trucom.com>
Source record: 94795
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 19 Apr 1997 17:45:46 GMT, mulveyr@ll.aa2ys.ampr.org (Rich Mulvey)
wrote:

>
>On 19 Apr 1997 16:32:02 GMT, Peter Gottlieb <peter_gottlieb@msn.com> wrote:
>>
>>I like the ads here.
>
> In spite of your personal preferences, the various rec.radio.* newsgroup
>charters specify that the WTB and FS ads are supposed to go into
>rec.radio.swap. It helps to keep the noise level down.
>
>

As Rich points out, the ads here are a violation of the non-*.swap
group charters.

I suppose that those who want the ads here could file the needed
actions to get the charter changed, but I doubt that will ever
happen... If they are too complacent to post in the appropriate
groups, it is doubtful that they will bother with the paperwork.

Take Care & 73

Marty Albert - marty@trucom.com
Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

Heartland Internet Services

****
Interested in Amateur Radio?
http://www.trucom.com/ppages/marty
****

4329. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: marty@trucom.com
Message-ID: <335a3dc2.2299474@news.trucom.com>
Source record: 94796
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Fri, 18 Apr 1997 20:22:49 -0400, Willard Flagg <flagg@TFF.Com>
wrote:
>
>>I don't see a rec.radio.amateur.swap. I do see a rec.radio.swap and a
>>rec.ham-radio.swap. Perhaps others don't get the sub-group either.
>>
>>-will flagg, n1vlb

Just did a little checking of a number of the inappropriate WTB and
For Sale ads being posted...

Most are being cross-posted to rec.radio.swap and/or
rec.radio.amateur.swap as well as spamming them to the wrong groups.

Seems that the idea of the *.swap groups not being on someone's server
just don't hold water.

Take Care & 73

Marty Albert - marty@trucom.com
Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

Heartland Internet Services

****
Interested in Amateur Radio?
http://www.trucom.com/ppages/marty
****

4330. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Brian <burkefam@icss.net>
Message-ID: <335A3446.7360@icss.net>
Source record: 94797
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

robbin decker wrote:
>
> mulveyr@ll.aa2ys.ampr.org (Rich Mulvey) wrote:
> > In spite of your personal preferences, the various rec.radio.* newsgroup
> >charters specify that the WTB and FS ads are supposed to go into
> >rec.radio.swap. It helps to keep the noise level down.
>
> A lot of newcomers may or may not know this. Hell, they may not know
> hat a FAQ is, or where to look. The title of the group should be
> rec.radio.amateur.equipment.discussion or something similar. If you
> were new, and saw the title as it is now, wouldn't you think this is
> the place to sell equipment? Also some servers may or may not access
> all the groups.
>
> On the subject of "noise level", some would think that the HRO and cat
> pee threads, as well as old what's his name the teacher (Who
> thankfully has been absent of late) might well be considered noise
> level by many.
>
> It would be a simple matter to set up a killfile for any ads
> containing "FS, WTB",. etc.
>
> Bill
> kb2rmi@frontiernet.com
Bill, where do I find the FAQ? And how many Hail Mary's for my sins?
Brian

4331. _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-20 00:00:00 UTC
From: Markus Baertschi <"Markus Baertschi">
Message-ID: <335AA02A.490F@markus.org>
Source record: 94798

A friend of mine is looking for instructions to build a small
2m transmitter. The transmitter should be as small as possible
and use the leas power possible. He would like to attach it
to the collar of his cat and dog and e able to follow them
around with a mobile 2m receiver.

Has somebody a source for suitable schematics ?

I thought of an quartz-controlled oscillator and a cmos
circuit turning it on for 1s every 3-4s. But i don't know
were to find a quartz of the correct frequency (2m HAM band).

Thanks Markus

4332. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: vk7cs@vision.NET.AU
Message-ID: <199704210153.LAA22131@saturn.vision.net.au>
Source record: 94651

```
subscribe
```

4333. Dan's new kit ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: hduff@ica.net
Message-ID: <335ad284.0@lightning.ica.net>
Source record: 94652

I'm looking to build a QRP transceiver...wondering what's out there ?
Prefer board only as I have a large 'junkbox' but am considering full
kits.
Anyone have any details on the new 75m SSB/CW transciever kit that
Dan's Small Parts is now offering ? Does the RX have AGC ?
Any other details ?

Please reply by e-mail: hduff@ica.net

4334. Re: Seeking simple SW receiver designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: "Tony T. Hwang" <oolong@netcom.ca>
Message-ID: <5jep0h$l99@tor-nn1-hb0.netcom.ca>
Source record: 94653

In article <jupiter-ya023580001904972217460001@news.europa.com>,
jupiter@europa.com wrote:

>
>A superregenerative receiver would be perfect. With a good design, you
>should be able to cover 0.5mhz to 400mhz with plug in coils. With switched
>coils maybe 0.5mhz to 100mhz.
>
>My first shortwave listening was done with a Radio Shack kit bought in the
>early 70's. Using only 3 transistors and superregenerative detector, it
>was plenty sensitive enough.
>
>Rob.

IMHO, super-regenerative RX won't do it. It does not have good selectivity.
Try regenerative circuit instead.

Tony, VE6CGX

4335. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: archer@netgate.net
Message-ID: <335cea11.1059590@nntp.netgate.net>
Source record: 94654
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On 19 Apr 1997 20:17:04 -0700, Christopher Trask <ctrask@primenet.com>
wrote:

[snip loop antenna discussion, to which I have nothing intelligent to
add!]
> A previous posting in a similar thread mentioned using GaAs FETs
>in the antenna amplifier, which I agree with. The follow-up postings
>were mostly concerned with noise figure, and I don't believe that the
>issue of intermodulation was ever brought up.

That was my post, RE: GaAsFET. I'm leaning away GaAsFETs at an
outdoor location right now as they are much more static-sensitive than
JFETs, and , and the noise figure is probably not enough better than a
quiet JFET to matter at HF (I'm thinking of using a J310 low-noise
N-channel JFET, 1.5dB NF at 450Mhz) to justify the extra cost and
difficulty of the slightly-quieter MOSFET. I keep thinking of all the
posts of people who have blown (MOS)FETs in their radios!

Now you bring up a new issue -- namely IMD (and implicitly, dynamic
range considerations.) I've heard that FETs are better than bipolars,
in general, for overload resistance, but are you saying that GaAsFETs
are superior to standard junction FETs in this regard? And if so, is
it "a lot" better -- knowing that's a subjective questions?

Do you have any opinion on dynamic range of a good VHF/UHF JFET
such as the J310 in comparison with a good GaAs MOSFET (I was using
MRF966, BF(R)998, etc.)?

Thanks for any feedback you have.

Ross

>
> Regards,
>
> Chris
>
> ,----------------------.
> / If you understand it, \ Circuit Design for the
> / then it's obsolete! / RF Impaired
> \ _______,--------------'
> _ |/
> oo\ Chris Trask / N7ZWY
>(__)\ _ Principal Engineer

> \ \ .' `. ATG Design Services
> \ \ / \ P.O. Box 25240
> \ '" \ Tempe, Arizona 85285-5240
> . ( ) \
> '-|)__| :. \
> | | | | \ '.
> c__; c__; '-..'>.__ Email: ctrask@primenet.com
>
> Graphics by Loek Frederiks
>

4336. Re: Seeking simple SW receiver designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <335b1d35.0@cheese.pcug.org.au>
Source record: 94655

jupiter@europa.com wrote:
>A superregenerative receiver would be perfect. With a good design, you
>should be able to cover 0.5mhz to 400mhz with plug in coils. With switched
>coils maybe 0.5mhz to 100mhz.
>
>My first shortwave listening was done with a Radio Shack kit bought in the
>early 70's. Using only 3 transistors and superregenerative detector, it
>was plenty sensitive enough.
>
>Rob.

I've heard of superregenerative receivers for use on 27 MHz, but never seen them described for use on the lower frequencies. I'd imagine their selectivity wouldn't be much good, and they would not be able to resolve SSB/CW signals (as is possible on a regenerative set). Also there is the possibility of their oscillations causing interference.

For casual SW listening, a regenerative receiver would be OK. If you're more interested in the amateur bands, it's hard to go past a good direct conversion receiver (NE602 mixer, transistor VFO, 741 audio, LM386 audio) - this provides good SSB/CW reception and can cope with strong signals better than a regenerative set. It would also be easier than a regen receiver to make stable, and it's easy to add a CW or DSB transmitter to a DC receiver if required - this can't be done with a regen or super regen receiver.

73,

Peter

--

____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
____

4337. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: vbook@vbook.com
Message-ID: <5jebe1$5ar$1@kanga.accessone.com>
Source record: 94656
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In article <5jbvgh$et7@sjx-ixn3.ix.netcom.com>, kc5egg@ix.netcom.co says...
>
>In <5jbjs0$f5o$1@kanga.accessone.com> vbook@vbook.com (Ed Mitchell)
>writes:
>>
>>Under terms of the Report and Order in ET Docket 96-8, released April
>10, 1997,
>>the FCC has announced that it will allow high gain antennas
>>for unlicensed transmitters operating in the 2400 and 5800 MHz
>>Part 15 allocations. These bands are shared with the Amateur Radio
>Service.
>>
>>Under the new rules, very high gain antennas may be deployed at 2400
>and
>>5800 MHz. Certain transmitter power reduction restrictions apply at
>2400 MHz
>>but unlimited gain systems may be installed at 5800 MHz. These systems
>will
>>enable high speed Internet access using unlicensed systems. You can
>expect to
>>see these systems deployed rapidly as soon as 1998 to provide
>non-commercial
>>and commercial services on these frequencies.
>
>This is actually a good thing.
>
>First semantics, in a physics sense there is no such thing as a "gain
>antenna" the best an antenna can do for you is to reshape the pattern
>putting more of the energy radiated into a smaller cone.
>
>A very high "gain" antenna directs most of the radiated energy towards
>the intended receiver lessening the chance for inadvertant
>interference. The long and the short of it is this order is to the hams
>benefit. We will also benefit from the research and engineering that go
>into these systems.
>
> Jerry
>>
>>The complete story, including the Report and Order, is now available
>online at:
>>
>>http://www.hamradio-online.com

Yes indeed. I touch on that in the story that I wrote on this. Directional antennas can and are used to minimize interference. Also, as I note in the story, the 2.4 GHz band is home to consumer microwave ovens which are a source of significant interference already. The one issue this does change is that unlicensed operations would now be likely to use external antennas, putting their signals out into the real world, as compared to typical unlicensed operation using "low level" antennas inside buildings. The most likely scenario is an increase in the noise floor in the 2.4 GHz and 5.7 GHz allocations. More troubling, perhaps is that we can expect many commercial systems to use these bands for microwave links (look at the list of who filed comments) due to the expected much lower cost of just setting up a link without the costs of licensing and the engineering, environmental and RF safety studies required to apply for a licensed link. On the plus side, more gear would be available for use by Amateurs in these bands.

Ed (KF7VY) and Kim (N7VPL) Mitchell
email to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

4338. GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <335B432B.364@concentric.net>
Source record: 94657
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Ross Archer wrote:
>
> That was my post, RE: GaAsFET. I'm leaning away GaAsFETs at an
> outdoor location right now as they are much more static-sensitive than
> JFETs, and , and the noise figure is probably not enough better than a
> quiet JFET to matter at HF (I'm thinking of using a J310 low-noise
> N-channel JFET, 1.5dB NF at 450Mhz) to justify the extra cost and
> difficulty of the slightly-quieter MOSFET. I keep thinking of all the
> posts of people who have blown (MOS)FETs in their radios!

GaAsFET is not necessarily any more or less sensitive than a JFET
and is definately less sensitive than a MOSFET to ESD (electrostatic
discharge). You can protect against any ESD from harming these devices
simply. The voltage input from the antenna is less than 700mv, correct?
The voltage required to damage these devices is much greater than 700mv,
also correct? Just stick two high-speed rectifier diodes, capable of
conducting forward several amperes of current, back to back, and you are
protected. All voltages exceeding 700mw will be clipped thusly.

(defined: connect two rectifiers, parallel, in opposite polarity, shunt
to ground so that regardless of the signal polarity, any voltage into
the gate of the device exceeding 700mv will be shunted to ground.)

>
> Now you bring up a new issue -- namely IMD (and implicitly, dynamic
> range considerations.) I've heard that FETs are better than bipolars,
> in general, for overload resistance, but are you saying that GaAsFETs
> are superior to standard junction FETs in this regard? And if so, is
> it "a lot" better -- knowing that's a subjective questions?

GaAsFET's are better for GHZ frequencies. The only advantage of
a GaAsFET over a MOSFET or a JFET is frequency range, they support higher
frequences which ARE UNIMPORTANT to the HF amplifier design! The
advantage of the MOSFET over the JFET in the HF amplifier design is the
fact that the MOSFET has lower input impedance, thus it will amplify
weaker signals than a JFET. With proper protection, two rectifiers wired
inversely parallel, the static sensitivity of the MOSFET is reduced, so
its higher gain due to lower input impedance is enhanced.

>
> Do you have any opinion on dynamic range of a good VHF/UHF JFET
> such as the J310 in comparison with a good GaAs MOSFET (I was using
> MRF966, BF(R)998, etc.)?
>
> Thanks for any feedback you have.

Use any MOSFET with diode protection. HF is not that fast, max frequency is 30Mhz which is a crawl today. :) I always use the most for the least myself, and my RF amp on my loopstick employs a MOSFET transistor, what ever the TO92 device that Radio Shack sells.....sq

4339. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5jfatf$h39$1@nadine.teleport.com>
Source record: 94658

```
In article <335d10f0.129711468@eskinews.eskimo.com>,
wrt@eskimo.com (Bill Turner) wrote:
>>
>>>
>>> Silver oxide is conductive; there is no need to remove it.
>>
><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
>Back in the '50s, TV sets had tuners with a large rotating drum which
>had silver contact points and silver fingers to contact them. One of
>my first jobs as a young apprentice was cleaning the oxidation off of
>them. Silver oxide may be a conductor in theory, but those contacts
>were very erratic if there was much of it there. I'd clean it off.
>Ordinary silverware type polish was what we used and it worked fine.
>
>73, Bill W7TI

I don't know about silver oxide, but the black stuff on exposed silver is
more likely to be silver sulfide. Its resistivity is about 2 mohm-m, or
about 100,000 times as resistive as copper. A thin coating of this probably
wouldn't adversely affect a conductor carrying RF, but you wouldn't want it
as a surface film on contacts carrying zero or very low current. That's why
low-current contacts on quality switches and connectors are gold, not
silver. (Contacts carrying considerable current clean themselves by burning
through the surface layer.)

Roy Lewallen, W7EL
```

4340. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: gelleric@kafka.informatik.uni-stuttgart.de
Message-ID: <5jff2u$3of@zdi.informatik.uni-stuttgart.de>
Source record: 94659
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <slrn5li0qb.678.mulveyr@ll.aa2ys.ampr.org>, mulveyr@ll.aa2ys.ampr.org (Rich Mulvey) writes:
|> On 19 Apr 1997 16:32:02 GMT, Peter Gottlieb <peter_gottlieb@msn.com> wrote:
|> >Marty Albert <marty@trucom.com> wrote in article
|> ><3357a131.1626891@news.trucom.com>...
|> >>
|> >>
|> >> Has anyone else noticed all the WTB and For Sale ads in the groups
|> >> lately? Seems to be getting bad again...
|> >
|> >
|> >
|> >I like the ads here.
|>
|> In spite of your personal preferences, the various rec.radio.* newsgroup
|> charters specify that the WTB and FS ads are supposed to go into
|> rec.radio.swap. It helps to keep the noise level down.
|>

I agree with that statement. We have a "sell-newsgroup" and everyone should use it. However, as there is a _lot_ of traffic in r.r.a.swap, how about splitting this group into a WBT and a FS part?

73, Wolfgang

4341. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: gelleric@kafka.informatik.uni-stuttgart.de
Message-ID: <5jff71$3of@zdi.informatik.uni-stuttgart.de>
Source record: 94660
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <jarad.133.0122B440@nbnet.nb.ca>, jarad@nbnet.nb.ca (Jarad Kardkoff) writes:
|>
|> Yeah i like ads too
|> jarad

I also read the ads from time to time. But, what's wrong with going to
r.r.a.swap for reading them? It is good that there is one newsgroup for
ads, but do we need ten of them?

73, Wolfgang

4342. What do I need to start?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: Greg <dbsbcbgb@gvi.net>
Message-ID: <5jeh1rapn1@handy.gvi.net>
Source record: 94661

help me! I want to start, but don't know what i 'llneed. please help with any info or brecomemded books to get thanks.

Greg

ap1224k@hotmail.com
or
dbsbcbgb@gvi.net

4343. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <335b5c1d.5287932@netnews.worldnet.att.net>
Source record: 94662
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On 19 Apr 1997 20:17:04 -0700, Christopher Trask <ctrask@primenet.com>
wrote:

> Less efficient, yes. But, if the length of wire in the antenna
>as about 3/4 wavelength, the efficiency approaches 80%. At 3/8 wave-
>length, this decreases to 40% at best. Most loop antennas being used
>have a total wire length of less than 1/4 wavelength, at which point
>the efficiency is less than 5%. These numbers are well documented in
>several professional papers, if anyone is interested.

My experience, having built and measured dozens and dozens of
transmitting and receiving loop antennas for medical and
communications use, disagrees with yours.

Total wire length has very little to do with efficiency, and I would
bet money you could never get 80% efficiency with a small (less than
05 wl diameter) loop.

It is the physical area of the loop and overall surface area of the
conductor that determine efficiency, not the number of turns.

If you had 80 percent efficiency, you wouldn't be using a
pre-amplifier.

73 Tom

4344. Re: Class ab-1 versus Class C Amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <335b5e2e.5817563@netnews.worldnet.att.net>
Source record: 94663

On 19 Apr 1997 22:55:53 GMT, jeffa@ix.netcom.com(Jeff Anderson) wrote:

>There's also this warning: "The reader is cautioned that these terms
>(classes D, E, F, G, H, and S - Jeff) are not universal; in particular,
>the terms 'Class D' and 'Class S' are often reversed or used
>interchangeably by other authors."
>
>- Jeff, WA6AHL

Thank's Jeff. They all sound like class C to me, hi.

73 Tom

4345. TS450 IF232 Protocol?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: McCoy <rmccoy@nospamhere.com>
Message-ID: <01bc4e5a$c85b96c0$31aa3bc6@hotel.intranet.asctmd.com>
Source record: 94664
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'm designing a repeater interface to my TS450 using the IF232 port on the rig. Does anyone know where I can find the communication protocol across this port??

Please respond via email via the following address:
rmccoy@alb.asctmd.com

Don't reply to this post as it is intended to filter the spam mailers.

Thanks,
Russ

4346. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: donrm@sr.hp.com
Message-ID: <5jg8m8$i5m@canyon.sr.hp.com>
Source record: 94665

George Carlson (geotek@comwerx.net) wrote:

> Boy, are you asking for trouble. Not only will the steel wool ruin
> the silver plating, but you could leave hundreds of tiny steel fibers
> on the coil and inside the equipment. If you feel the need to use an

George is absolutely right...keep the steel wool off the workbench
and away from equipment. Meter (unsealed) and speaker magnets attract
it, it gets picked up by fan intakes and is a general nuisance because
you can't see it. When I was in engineering school, we had a lab TA
that would throw you out and give you an "F" for the day if he saw steel
wool in your toolbox. If you have to use it, do it outside and clean
everything thoroughly, including your clothes.

73 from Don K6LTS
donrm@sr.hp.com

4347. Re: Problems with 4-1000 on 17m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: "Tony T. Hwang" <oolong@netcom.ca>
Message-ID: <5jgdbh$913@tor-nn1-hb0.netcom.ca>
Source record: 94666

In article <measures-ya02408000R2004970655430001@news.vcnet.com>,
measures@mail.vcnet.com (R. L. Measures) wrote:

>In article <33586C0B.6FC6@sn.no>, la3pu@sn.no wrote:
>
>> Just finished an amplifier using a single 4-1000 with 4500v on the
>> anode. It works greate on all but one band frm 160 including 10m. On 17m
>> it is not possible to get it running. There are no parasitic ocillations
>> but i suspect that it may be ocillating on the operating frequency. I
>> have grid current flowing so its taking drive. Some power output is
>> indicated on the power meter, but IC is way to high wit only a 15 to 20
>> watt drive and the tube gets red hot in seconds.
>IMO, it is quite definitely bad luck to say that there are no parasitic
>oscillations.
> If you have grid current when the drive is removed, you may have a
>parasitic oscillation. You can check for a parasitic oscillation with a
>neon lamp connected to the end of a plastic rod. Bring the neon lamp near
>the anode. If the energy is at 17m, the light will be orange. If the
>energy is in the VHF range, the light will somewhat purple.
>>It is not possible to
>> dip the IC with the plate cap. The anode choke does not get warm so
>> there are no series resonances there.
>True.....If the choke was the problem, at this power level, you have had a
>choke fire.
>
>Are you shorting the unused turns in the tank L?
>
>Rich---
>
>--
>--Rich-- ---805-386-3734, ag6k

Try to dip the tank ckt even without pwr applied. How about bypass caps?
Tony, VE6CGX

4348. Help: Need values for equipment.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: pdslowik@execpc.com
Message-ID: <335bc5af.8978362@news>
Source record: 94667

I am thinking of selling the following equipment and would like to verify some current values I've been given. If anyone can assist me I'd be forever greatful.

- 4-1000 tube (previously tested at 830 watts @ 50Mhz and "looks" great)
- cooling socket for above tube w/ attached fan hose
- pyrex glass chimney.

TIA, please email me directly.

Peter
pdslowik@execpc.com

4349. Re: Help: Need values for equipment.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: pdslowik@execpc.com
Message-ID: <335bd705.13417310@news>
Source record: 94668

pdslowik@execpc.com (Peter D. Slowik) wrote:

I'd even be more "grateful". Geesh.

4350. Re: Problems with 4-1000 on 17m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: davej@sptekwv6.vnd.tek.com
Message-ID: <5jg4u3$4nk$1@bvadm.bv.tek.com>
Source record: 94669

I built a 4-1000 amp last year and had this problem on 10mtrs.
I was using a roller inductor. I solved the problem by shorting
a couple turns on the inductor.

The problem with a roller inductor is at high frequencies
you are using only 1 or 2 turns with the other 20 turns of inductor
essentially opencircuited. This additional L resonated at 10mtrs
(in my case) presenting a very low impedance to the tank circuit.
It worked fine on 12mtrs.
If you are using a bandswitching scheme you must short unused turns to
avoid this problem.

Regards,
Dave Jordahl
N7RM

Email - davej@mda.vnd.tek.com

4351. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: anthonys@ix.netcom.com
Message-ID: <5jgnm4$pue@sjx-ixn4.ix.netcom.com>
Source record: 94670

In <5jea40$4hd@lana.zippo.com> geotek@comwerx.net (George Carlson)
writes:
>
>"Lee St. Clair" <w7ax@montananet.com> wrote:
>
>>Hello Charles,I use 0000 steel wool to clean the inductors. It is
silver
>>oxide and it removes easily. Don't go further than to just remove the
>>oxide though. It is actually a silver plating. 73
>>--
>
>
>Boy, are you asking for trouble. Not only will the steel wool ruin
>the silver plating, but you could leave hundreds of tiny steel fibers
>on the coil and inside the equipment. If you feel the need to use an
>abrasive around electronic parts, use Scotch Brit, not steel wool.
>This includes cleaning PCB's before stuffing.
>
>
>George Carlson KC5RCC
>
>Houston Home Metal Shop Club
>http://www.comwerx.net/biz/geotek/hmsc/index.htm
>

Very, very true, George. Steel wool should be avoided like
a plague in any electronic equipment. The Scotch nylon pads are
best IMEO, with care. The white variety is the least abrasive,
green is much coarser, and black is _very_ coarse. There may be
intermediate grades, too, that I'm not aware of. Some are difficult
to find.

-=Tony=- W6ANV

4352. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5jg6e7$rl4@abyss.West.Sun.COM>
Source record: 94671
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <335B432B.364@concentric.net>,
Steve J. Quest <Squest@concentric.net> wrote:
>You can protect against any ESD from harming these devices
>simply. The voltage input from the antenna is less than 700mv, correct?
>The voltage required to damage these devices is much greater than 700mv,
>also correct? Just stick two high-speed rectifier diodes, capable of
>conducting forward several amperes of current, back to back, and you are
>protected. All voltages exceeding 700mw will be clipped thusly.

Yeah, a lot of designs do this, and there is a huge problem - those
diodes effectively mix any strong signals present at the antenna
input and the mixing products will be radiated out the antenna.

In other words, diodes strapped across an antenna input are an
intermod factory just waiting to happen. Even at a residential
location, enough RF can be present to generate RFI, and receivers
with front-end diodes are *very much* unwelcome in commercial
radio sites.

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

4353. Noise blanker / speech proc KWM-380

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: Loek d'Hont <ldhont@ti.com>
Message-ID: <01bc4e94$e73ea520$8f0aaa9d@pc-tir22.pac.sc.ti.com>
Source record: 94672
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.swap

I have searched for the KWM-380 noise blanker board and speech processor board for almost a year now, it seems they cannot be purchased any more. It is just impossible.

Therefore I am planning to build these boards from scratch for my KWM-380

I would like to keep them as close as possible to the original, of course. For that purpose, I am looking for the original Collins documentation: schematic diagrams, part lists and PWB layout, and what else there might be.

Therefore, can any-one get me copies of the original documentation ?

Also, if there is people out there who are interested in this project and want to share the PWB board costs (and the results!) with me, please be my guest. I plan to have these (bare) boards done at a professional PWB manufacturer, which won't be cheap. So the more people we can find, the better.

Maybe someone else picked up this project in the past already. If you know that person, I would appreciate it if you send me his/her name.

LDHONT@ti.com

4354. FARINON SS2000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: Radio Tech 1 <ccameron@nt.sympatico.ca>
Message-ID: <335C2F02.BB7@nt.sympatico.ca>
Source record: 94673

I have aquired a number of old Farinon SS2000 Local oscillators in the 2.0 Ghz band. They apparently can be tuned right up to 2370 Mhz, according to the manual. The crystal in in the upper 90 Mhz region and comes in a 'can' transistor style package. Does anybody have any experience with these oscillators, or where one could find some replacement crystals that will work in the amateur band? It sure would be interesting to get a 300 Channnel Analog radio on the air. Lots of bandwidth to play around with.

Regards

Chris

...Please respond to 'ccameron@nwtel.ca' ..without quotes.

4355. FARINON SS2000

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: Radio Tech 1 <ccameron@nt.sympatico.ca>
Message-ID: <335C2F06.691@nt.sympatico.ca>
Source record: 94674

I have aquired a number of old Farinon SS2000 Local oscillators in the 2.0 Ghz band. They apparently can be tuned right up to 2370 Mhz, according to the manual. The crystal in in the upper 90 Mhz region and comes in a 'can' transistor style package. Does anybody have any experience with these oscillators, or where one could find some replacement crystals that will work in the amateur band? It sure would be interesting to get a 300 Channnel Analog radio on the air. Lots of bandwidth to play around with.

Regards

Chris

...Please respond to 'ccameron@nwtel.ca' ..without quotes.

4356. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: jarad@nbnet.nb.ca
Message-ID: <jarad.136.0146A09E@nbnet.nb.ca>
Source record: 94675
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <5jbbh1$1f12@node2.frontiernet.net> kb2rmi@pop3.frontiernet.com (robbin decker) writes:
>From: kb2rmi@pop3.frontiernet.com (robbin decker)
>Subject: Re: All The WTB & SALE Ads Here
>Date: Sat, 19 Apr 1997 22:57:01 GMT

>mulveyr@ll.aa2ys.ampr.org (Rich Mulvey) wrote:
>> In spite of your personal preferences, the various rec.radio.* newsgroup
>>charters specify that the WTB and FS ads are supposed to go into
>>rec.radio.swap. It helps to keep the noise level down.

>A lot of newcomers may or may not know this. Hell, they may not know
>hat a FAQ is, or where to look. The title of the group should be
>rec.radio.amateur.equipment.discussion or something similar. If you
>were new, and saw the title as it is now, wouldn't you think this is
>the place to sell equipment? Also some servers may or may not access
>all the groups.

>On the subject of "noise level", some would think that the HRO and cat
>pee threads, as well as old what's his name the teacher (Who
>thankfully has been absent of late) might well be considered noise
>level by many.

>It would be a simple matter to set up a killfile for any ads
>containing "FS, WTB",. etc.

>Bill
>kb2rmi@frontiernet.com

Yeah i agree

jarad

4357. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: kb2rmi@pop3.frontiernet.com
Message-ID: <5jgj6h$1lei@node2.frontiernet.net>
Source record: 94676
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

gelleric@kafka.informatik.uni-stuttgart.de (Wolfgang Gellerich) wrote:
>I agree with that statement. We have a "sell-newsgroup" and everyone should
>use it. However, as there is a _lot_ of traffic in r.r.a.swap, how about
>splitting this group into a WBT and a FS part?
Good point, although the same effect might be better served by
separating the commercial gear. I am sure that the motorola guys are
as sick of sifting through the TS520's as I am of downloading 75
headers to find that 55 of them are for
trunking/sabre/jobcomm/phoenix/whatever commercial band rigs that
don't interest the average ham. How about rec.radio.commercial.swap,
and let r.r.s. pick up the rest of the SW/ham/scanner/CB/etc. gear?
Bill

4358. Re: Bug catcher antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: Dick Pascoe <Dick@kanga.demon.co.uk>
Message-ID: <s8B5iwA1pyWzEwCM@kanga.demon.co.uk>
Source record: 94677

In article <335A26DF.6549@flash.net>, Gary Danaher <gdanaher@flash.net>
writes
>
>Mucho Gusto wrote:
>>
> and have heard good reports on the
Snip.....>
>Contact WB5TYD who manufactures the Texas Bug Catcher. See Ads in QST or
>give him a call and place your order. Don't have his phone humber in
>front of me but he's in the book.

I have one of these and used it for couple of years.
It works very well considering. Up to 85mph, (Yes we're
allowed in DL and it had twine support in front)

I can recommend it. They beat all others I have tried
including the Hustler.

TTFN de ..
--
Dick Pascoe G0BPS/G0ROO Kanga Products
Dick@kanga.demon.co.uk Seaview House,
http://www.kanga.demon.co.uk Crete Road East.
ARCI DX membership person Folkestone. Kent. CT18 7EG.UK
Ham Radio Today QRP Columnist Tel / Fax 44 (0)1303 891106

4359. Blackout's Box REAL AUDIO pranks are hilarious!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: Blackout <Blackout@wizlink.net>
Message-ID: <5jgpat$11c@wiznet.wiznet.net>
Source record: 94678

Ok, it may not go in this group but I have to get the word out somehow so
I am letting you know here.

The funniest web site EVER has now officially opened using REAL AUDIO technology.

Blackout's Box
WWW.BLACKOUT.COM

You will laugh, you will cry, you will pee on yourself... you will cough up your lunch
from the intense amount of laughter you will be experiencing.

You MUST check out Blackout's Box at

http://www.blackout.com

Hear the most insane stuff you have ever heard, broadcast to your
computer instantly over the net with REAL AUDIO 3.0 which you can DL
for FREE if you don't have it already. This is not a commercial site or a business
or any other type of advertisement. It is just a very funny and very FREE site that I
want Everyone to know about. If you like Monty Python, Jerky Boys, Howard Stern,
Kids In The Hall, The State, Robin Williams, Who's Line Is It Anyway,
or anything like that - you will love Blackout's Box, there is nothing like it on the net.
Don't let the words 'prank call' scare you away.. this is no 12 year old fun, this is
intensely funny candid phone call radio drama that critics on and off the net are giving
two thumbs up.

Blackout's Box simply kicks ASS, stop whatever work you are doing,
take a break, and check it out now! Life is short - LAUGH some.

Blackout's Box
Insanity On the Net
http://WWW.BLACKOUT.COM

4360. Re: Bug catcher antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <GdmO6CAD89WzEwUr@two-way.demon.co.uk>
Source record: 94679

We run a Bugcatcher with an SGC amp, it get out brilliant and is the
first antenna we've used where there 's no coil heating!

73

Phil G4ZOW/extreme mobile.In article <335A26DF.6549@flash.net>, Gary
Danaher <gdanaher@flash.net> writes
>
>Mucho Gusto wrote:
>>
> and have heard good reports on the
>> "bug catcher antenna". I assume this to be a center loaded unit with a
>> large (high Q) loading coil. Can anyone tell me where to obtain one of
>> these antennas or find design information so I can build one? I would
>> be interested in hearing of experiences with the bug catcher or any
>> other 75 meter mobile antenna. Does anyone know if B&W Mini-ductor is
>> still available and where it can be obtained?
>>
>> 73....Jim....KD6QM.....mchogsto@ix.netcom.com
>Contact WB5TYD who manufactures the Texas Bug Catcher. See Ads in QST or
>give him a call and place your order. Don't have his phone humber in
>front of me but he's in the book.

--
philip de cadenet

4361. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: marty@trucom.com
Message-ID: <335aed2f.1404478@news.trucom.com>
Source record: 94680
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On 20 Apr 1997 02:37:05 GMT, kc5egg@ix.netcom.com(Gerald Schmitt)
wrote:
>This is actually a good thing.

True.

>First semantics, in a physics sense there is no such thing as a "gain
>antenna" the best an antenna can do for you is to reshape the pattern
>putting more of the energy radiated into a smaller cone.

Again, true Details, details... :)

>A very high "gain" antenna directs most of the radiated energy towards
>the intended receiver lessening the chance for inadvertant
>interference.

Unless you are in the beam of one the antennas.

>The long and the short of it is this order is to the hams
>benefit.

Most likely.

>We will also benefit from the research and engineering that go
>into these systems.

Sad part is that Hams _should_ have been doing for many years now
instead of waiting for someone else to do it.

> Jerry

Take Care & 73

Marty Albert - marty@trucom.com
Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

Heartland Internet Services

****
Interested in Amateur Radio?
http://www.trucom.com/ppages/marty
****

4362. Re: 6L6 transmitters?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-21 00:00:00 UTC
From: bry@mnsinc.com.spam.stinks
Message-ID: <335ab765.9763742@news.mnsinc.com>
Source record: 94799
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.misc

On 20 Apr 1997 20:35:29 GMT, cnw@HiWAAY.net (Carol N. Wright) wrote:

>Hey Gang,
>I have two 6L6 tubes, a 6L6GA and a 6L6G. I want to make a transmitter or
>receiver on 80 or 40 meters. Probably QRP, low power. Any help is
>greatly appreciated. Thanks and Best 72/73 DE Matt, AE4JM
>please reply to cnw@HiWAAY.net

Got just what you need right on the WWW!

I have several 6L6 transmitter articles and schematics etc.
available at:

http://www.mnsinc.com/bry/hamfiles.htm

E-mail me and let me know how you are doing. I have several such
transmitters here and we also have an e-mail discussion group for
folks that like to build small tube transmitters.

It is called GLOWBUGS.

To subscribe, just send an E-mail to:

majordomo@www.atl.org

With NO SUBJECT, and the text:

subscribe glowbugs YOUR-E-MAIL-ADDRESS

==========

EVERYONE IS INVITED TO JOIN US!!

Then you just send your messages to the group to:

glowbugs@www.atl.org and they will all see it and
you will get a few messages a day that are interesting.
I have had a LOT of great help from this group!

I hope that helps!! Come on in, Carol!!

Bry, AF4K
To reply to this message, you MUST remove ".no.ads" from my address.
It is there to fool those annoying unsolicited e-mail advertising robots!
Send replies ONLY to: bry@mnsinc.com
VISIT: http://www.mnsinc.com/bry/

4363. info needed on Kenwood TR-9500 440 rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970422012001.VAA29939@ladder01.news.aol.com>
Source record: 94681

A friend of mine is a new ham and wants to know if the Kenwood TR-9500 can be modified to cover the entire 440 band.

Thanks,

Evan
K9SQG@AOL.com

4364. NEED A TRANSFOMER HELP ME!!!!!!!!!!!!!!!!!!1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: jkanejr182@aol.com
Message-ID: <19970422023700.WAA06567@ladder01.news.aol.com>
Source record: 94682

I NEED A 2800 VOLT TRANSFOMER GIVE OR TAKE A 100 VOLTS
AT ABOUT 1 AMP CAN YOU HELP ME THANKS
JKanejr182@aol.com

4365. Info WTD: B&W-852 Tapped Inductor for Pi Network

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Jacqui <Jacqui@Realestatelady.com>
Message-ID: <335C4D90.3241@Realestatelady.com>
Source record: 94683
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc

I would like to find out any data on a B&W 852. It is a tapped inductor for a Pi Network, Looks like 5KV or better. Would like to know the rating and the inductance at the taps. This unit has a built in rotary switch to change taps. Thanks for the help N1DVE, Jacqui

4366. Info WTD: E.F.Johnson 226-5 Roller Inductor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Jacqui <Jacqui@Realestatelady.com>
Message-ID: <335C4F39.6E5@Realestatelady.com>
Source record: 94684
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc

I am looking for any info anyone may have on an E.F.Johnson Roller
Inductor model # 226-5.
Thanks in advance for any specs you may provide ! N1DVE, Jacqui

4367. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <335C988F.4DCA@concentric.net>
Source record: 94685
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Dana Myers wrote:
>
> In article <335B432B.364@concentric.net>,
> Steve J. Quest <Squest@concentric.net> wrote:
> >You can protect against any ESD from harming these devices
> >simply. The voltage input from the antenna is less than 700mv, correct?
> >The voltage required to damage these devices is much greater than 700mv,
> >also correct? Just stick two high-speed rectifier diodes, capable of
> >conducting forward several amperes of current, back to back, and you are
> >protected. All voltages exceeding 700mw will be clipped thusly.
>
> Yeah, a lot of designs do this, and there is a huge problem - those
> diodes effectively mix any strong signals present at the antenna
> input and the mixing products will be radiated out the antenna.

This is true, but only if you live right on top of a commercial
broadcasting antenna farm. I pity anyones shortwave reception that does!
Best way around this tho is to notch filter out the local high power
signals, which unless you live near a major antenna farm, will be no
more than just one or two filters.

>
> In other words, diodes strapped across an antenna input are an
> intermod factory just waiting to happen. Even at a residential
> location, enough RF can be present to generate RFI, and receivers
> with front-end diodes are *very much* unwelcome in commercial
> radio sites.

It has to exceed 700mv and let's say that it does, use two
high speed rectifiers in series, now the breakover voltage is 1400mv,
which should protect against intermod and mixing yet still provide good
ESD protection in RF-RICH locations.

sq

(there is _always_ a solution to a technical problem.....)

4368. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Robert Ganter 3039 <ganter@ens.ascom.ch>
Message-ID: <335C5E1F.2709@ens.ascom.ch>
Source record: 94686
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Dana Myers wrote:
>
> In article <335B432B.364@concentric.net>,
> Steve J. Quest <Squest@concentric.net> wrote:
> >... Just stick two high-speed rectifier diodes, capable of
> >conducting forward several amperes of current, back to back, ...

> Yeah, a lot of designs do this, and there is a huge problem - those
> diodes effectively mix any strong signals present at the antenna
> input and the mixing products will be radiated out the antenna.
>
> In other words, diodes strapped across an antenna input are an
> intermod factory just waiting to happen. Even at a residential
> location, enough RF can be present to generate RFI, and receivers
> with front-end diodes are *very much* unwelcome in commercial
> radio sites.

I have seen a solution to this problem in a german book describing high end HF receivers (e.g. from Rohde & Schwarz). Several designs use BFT66 (or similar) transistors with their base connected to the collector. The collector/base is the anode, the emitter the cathode of the new 'diode'. If You connect the base directly, You get a very fast diode with 0.7V forward voltage drop. If You connect it via a resistor, You get some kind of a very fast Z-diode with more than 0.7V voltage drop. As mentioned by Steve, two of these are backed antiparallel, to protect the input in both directions.

I once have tried to simulate this. Results were, that, even with a resistor between base and collector, the transistor starts to conduct at 0.7V, but it is not saturated yet. I assume, that this does not avoid *all* IMD, but greatly reduces it.

Regards

Robert (HB9NBY)

4369. Panel Lettering: Datak or laser lettering?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: jackg@one.net
Message-ID: <5jh6vs$iip@news.one.net>
Source record: 94687

Hi,

I want to letter a panel with black lettering. I have used Datak lettering in the past with good results, but now I can't find any dealers who carry Datak lettering. Anyone have their address, or know of a dealer who carries their lettering kits?

I also have a laser printer and several drawing programs. Has anyone done any transferring from a sheet designed for transfer to a panel? If so, how well did the process work, how is the durability, what sort of clear finish was applied over the lettering, etc?

Thanks, Jack WB8BFS

4370. Boy is this your LUCKY DAY!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Enoch Simpson <enochsimpson@hotmail.com>
Message-ID: <335C9F8F.651A@hotmail.com>
Source record: 94688
Body handling: 1 inline base64-encoded payload block was not displayed

```
[Inline base64-encoded payload not displayed]

Content-Disposition: inline; filename="Money Mail"
```

4371. Re: Info WTD: B&W-852 Tapped Inductor for Pi Network

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: "Chuck (Jack) Hawley" <c-hawley@uiuc.edu>
Message-ID: <335CAC5E.7963@uiuc.edu>
Source record: 94689
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc

Hi,

>From the B&W catalog, the taps are 7, 3.72, 2.34, 1.34, and 0.95 uH. The recommended capacity to resonate each band is 268, 144, 73, 48.5, and 36 pF. Suitable tube types for a pi network using this tube are 4cx1000a, and 2ea 3-400z. Plate load impedance range 1500 - 3000 ohms. Plate supply voltage 2000 - 4000.

Chuck, KE9UW

Jacqui wrote:
>
> I would like to find out any data on a B&W 852. It is a tapped inductor
> for a Pi Network, Looks like 5KV or better. Would like to know the
> rating and the inductance at the taps. This unit has a built in rotary
> switch to change taps. Thanks for the help N1DVE, Jacqui

4372. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: "Ian White, G3SEK" <G3SEK@ifwtech.demon.co.uk>
Message-ID: <6JCNYGAfgFXzEwbH@ifwtech.demon.co.uk>
Source record: 94690

KC5RCC wrote:
>If you feel the need to use an
>>abrasive around electronic parts, use Scotch Brit, not steel wool.
>>This includes cleaning PCB's before stuffing.

I agree with using Scotchbrite on new PC boards, but returning to the oriinal question I'd never use ANY abrasive on silver-plated materials.

A chemical cleaning method is by far the best solution (pun intended). Use the clear liquid which is intended for dipping small items of jewelry. In Britain it's called "Goddard's Silver Dip" but no doubt there's a US equivalent - can anybody help?

Rub the solution on gently using a cotton bud - damp, not wet - and the silver sulphide comes right off, leaving a clean surface. Wipe over with a tissue and you're done.

73 from Ian G3SEK Editor, 'The VHF/UHF DX Book'
'In Practice' columnist for RadCom (RSGB)

4373. Re: NEED A TRANSFOMER HELP ME!!!!!!!!!!!!!!!!!!1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: jedent@phoenix.net
Message-ID: <jedent.158.00286332@phoenix.net>
Source record: 94691

In article <19970422023700.WAA06567@ladder01.news.aol.com> jkanejr182@aol.com (JKanejr182) writes:
>From: jkanejr182@aol.com (JKanejr182)
>Subject: NEED A TRANSFOMER HELP ME!!!!!!!!!!!!!!!!!!1
>Date: 22 Apr 1997 02:38:29 GMT

> I NEED A 2800 VOLT TRANSFOMER GIVE OR TAKE A 100 VOLTS
> AT ABOUT 1 AMP CAN YOU HELP ME THANKS
>JKanejr182@aol.com
what you need is an old PT (potential transformer) from a 2400 volt motor controler. Call a local electrical contractor that does industrial work. Or call Westinghouse, GE, Allis Chalmers, industrial division they may be able to point you to used stuff.

4374. WANTED: filter choke, 8 - 12 Henries @ 100 mA, or similar

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: k5dh@dlep1.itg.ti.com
Message-ID: <5jicom$d0t@sf18.dseg.ti.com>
Source record: 94692
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Greetings, Boatanchor and GlowBug fans!

I need a small filter choke for the low B+ line in a transmitter
power supply I'm building. Something around 8 to 12 Henries at
100 mA or so should do the trick. Needs to be fairly small in
size (limited space in the chassis).

Okay guys, check your junkboxes...

--
Dean W. Hemphill, K5DH Email: k5dh@qsl.net
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033

4375. Re: WTB: QST's and ARRL Handbooks.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <335CE7D8.18A2@ix.netcom.com>
Source record: 94693
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equiptment,rec.radio.amateur.boatanchors

David Robbins wrote:
>
> I am looking for the following QST's and ARRL Handbooks for my
> personal collection:
>

> HANDBOOKS: 40, 41, 42, 44, 45, 47, 49, 50, 52, 55, 56, 57, 58, 62,
> 65,
>
> I also collect Pre 1970 ARRL Publications, Pre 1950's Amateur Radio
> Logbooks, and Pre 1950's QSL cards.
>
> Thanks and 73's
> David
> KA4IKH

I have a 1950 handbook. In ok condx - spine is partially separated,
small tear in top right cover. Also have a '36 in poor condx - no cover
and a '33 in very good condx - cover separated from book - needs to be
rebound. Any interest or are you looking for top condx handbooks?

73 Ron, WA1UWZ

4376. Re: Help: Need values for equipment.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <335C9E47.6184@atl.org>
Source record: 94694

Peter D. Slowik wrote:
>
> I am thinking of selling the following equipment and would like to
> verify some current values I've been given. If anyone can assist me
> I'd be forever greatful.
>
> - 4-1000 tube (previously tested at 830 watts @ 50Mhz and "looks"
> great)
> - cooling socket for above tube w/ attached fan hose
> - pyrex glass chimney.
>
> TIA, please email me directly.
>
> Peter
> pdslowik@execpc.com

PETER

I've been listing :
1 x NOS 4-1000 (this is an unused tube)
1 x used 4-1000 (works)
1 x 4-1000 socket (used)
1 x NOS filament transformer for single 4-1000
All for $200.
Have only received on good bite but it didn't sell.
Bet it would go in a minute for $100 but I'm not
selling for that :-)
Would trade toward an EFJ Navigator transmitter

-bob
wb4mnf

4377. Re: TS450 IF232 Protocol?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Hank Oredson <hank_oredson@mentorg.com>
Message-ID: <335CED73.4912@mentorg.com>
Source record: 94695
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

McCoy wrote:
>
> I'm designing a repeater interface to my TS450 using the IF232 port on the
> rig. Does anyone know where I can find the communication protocol across
> this port??
>
> Please respond via email via the following address:
> rmccoy@alb.asctmd.com
>
> Don't reply to this post as it is intended to filter the spam mailers.
>
> Thanks,
> Russ

Contact Kenwood.
Ask for the manual for the IF232 interface for the TS-450 radio.
They will probably charge you $10 for this manual.
It describes everything you ever wanted to know about the interface.

If you want responses, leave your email address intact.

A lot of us just won't bother to reply if we have to spend
the time locating and editing that email address ...

--
Mentor Graphics Library Products Group - "Parts 'R Us!"
Work: hank_oredson@mentorg.com Home: HOredson@aol.com
Work: http://www.eparts.com Home: http://members.aol.com/W0RLI

4378. HP COUNTER MOD 5326B

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Marco Feliciotti <feliciotti_marco@alitalia.it>
Message-ID: <335D6E33.6C76@alitalia.it>
Source record: 94696

I am looking for the manual of an old HP counter mod 5326B
My counter is s/n 1139Gxxxxxx and I have a manual for s/n 1124A until
1555U but I discovered that my counter have a lot of not marginal
difference inside.
Is there anybody that knows such counter to help me ????

BY Marco I0ZXB

4379. HW-8 Call to Experts.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <335D14ED.6E57@qsl.net>
Source record: 94697
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hello Everyone: I recently acquired an nice QRP station
from another HAM. HW-8, tuner, qrp wattmeter, speaker,
and power supply. This rig is outstanding in the 80/40
bands but somewhat less so at 20; Nothing at 15 Meters.

Using my pixie2 as a frequency spotter, I have verified
correct frequency readings on all bands but it is the only
thing I pick up on 21.120 MHz (3rd Harmonic of 7.040 xtal)
from my pixie2.

I have replaced the antenna connector (RCA) with a high
quality RF-type BNC. The old connector was intermittent.
Reception has improved slightly on all band, with an increase
in noise the only observation on 15 Meters.

I have a good compilation of articles regarding the HW-8 describ-
ing a sensitivity weakness at 15 Meters, but this is ridicul-
ous! It's gotta be better than this! I'm going to run thru
the unit with a commercial rf detecting probe tonight. (The
first 2 alignments I used a basic detecting diode as described
with the manual.)

I appreciate any help given.
TIA
-Ed Loranger

--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee (First and Last callsign!)
OHR-100, Pixie2, Johnson Viking II w/VFO.
mailto:we6w@qsl.net QRP-L member #1068.
http://www.qsl.net/we6w

4380. looking for 2BP1 CRT info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Malcolm Latorre <mal@nortel.ca>
Message-ID: <335D0D5E.30A9@nortel.ca>
Source record: 94698

Hi:

I have been following the Lightning detection thread and am somewhat interested. To that end this past weekend I was at a scrap dealer and came across a CRT (2BP1). I have looked at my references and cannot find the specs for this tube. Could someone please help me with the following?

I would need:
1) the tube base pin description (twelve pins on base, ten of which make it into the glass envelope) and
2) the typical operating conditions (voltages, heater voltage/current, ...)

Please email the info to me, and if requested I will post the info back to the news group.

Thanks for your time.
Malcolm Latorre.
mal@nortel.ca

4381. Re: HW-8 Call to Experts.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: tgold@microvst.demon.co.uk
Message-ID: <861742462snz@microvst.demon.co.uk>
Source record: 94699
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <335D14ED.6E57@qsl.net> we6w@qsl.net "Ed Loranger" writes:

> Hello Everyone: I recently acquired an nice QRP station
> from another HAM. HW-8, tuner, qrp wattmeter, speaker,
> and power supply. This rig is outstanding in the 80/40
> bands but somewhat less so at 20; Nothing at 15 Meters.

Make sure the band is really open before tearing the rig apart.

Regards,
--
Tony - G3SKR / W2TG email: tgold@panix.com

4382. Re: Info WTD: B&W-852 Tapped Inductor for Pi Network

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002204971407250001@news.europa.com>
Source record: 94700
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.misc

In article <335C4D90.3241@Realestatelady.com>, Jacqui@Realestatelady.com wrote:

:I would like to find out any data on a B&W 852. It is a tapped inductor
:for a Pi Network, Looks like 5KV or better. Would like to know the
:rating and the inductance at the taps. This unit has a built in rotary
:switch to change taps. Thanks for the help N1DVE, Jacqui

These are really nice units. They could easily run at 5kW. I think B&W is extremely conservative in their power ratings.

I ordered mine for an 8877 linear back in 87. Took them a few months to deliver, mainly because unit was at plating shop for so long. But was worth wait. Think I paid about $120 for it back then.

They also sent along extra switch hardware and contacts. A real class act.

But, don't do what I first did before I decided on B&W: I bought one of those silver plated roller inductors using spiraling rectangular conductors. Insulation was lucite or plexiglas. On 10m the insulators started to bubble and explode like fire crackers. It might work for antenna tuners, but not in amp tanks.

Rob.

4383. Exciting way to make $$$ at home.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: "news.dreamscape.com" <DAND350@DREAMSCAPE.COM>
Message-ID: <01bc4f77$58675200$64b972ce@default>
Source record: 94701
Body handling: Inline uuencoded payload not displayed: Testimon.txt

```
--
Curious?
Read the following attachment.

[Inline uuencoded payload not displayed: Testimon.txt]
```

4384. Re: Seeking simple SW receiver designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Charlie Panek <charlier@lsid.hp.com>
Message-ID: <335CDF3A.49C@lsid.hp.com>
Source record: 94702

jjknap@skcla.monsanto.com wrote:
>
> I have a group of cub scouts and I thought it would be nice to have
> them build a simple shortwave receiver. Im looking for a design that would be
> cheap to build, use commonly available parts and would be functional enough
> that the the boys could have some fun using it.

I second the idea of a regen circuit. I came across a design
a couple of years ago that I put together for fun, and I thought at the
time that it would make a great project for kids. I found the circuit
in the August 18, 1994 issue of EDN magazine, p 98. It uses 3 transistors
(2N2222's), a few ordinary diodes, one germanium diode (1N34), plus a handful
of resistors and caps. The
coil is wound on a plastic pill bottle, and it uses a small variable cap
(250pf, although I used a 365pf unit from an old AM receiver) This particular
design has a very low power regen stage, so radiation should not be
a problem if it oscillates in use. Sensitivity is surprisingly good,
even with just a short whip antenna. I fact, if you want to attach a "real"
antenna, you need to couple it very lightly into the tank with a 2-5pf cap.
The tuning was a bit fast, but managable for young hands, and I had no
problem tuning in individual stations with it.

The circuit draws less than 10mA, and should run quite a while on a 9V
battery. You could even run it off of a small solar cell array, I suspect..

Jerome, if you can't find that issue of EDN, let me know and I'll see
if I can send you a copy of the article.

--
Charlie Panek KX7L Hewlett Packard Company
mailto:charlier@lsid.hp.com Lake Stevens Division
Everett, Washington

4385. Re: WANTED: filter choke, 8 - 12 Henries @ 100 mA, or similar

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <335D7584.1938@erols.com>
Source record: 94703
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Dean Hemphill K5DH wrote:
>
> Greetings, Boatanchor and GlowBug fans!
>
> I need a small filter choke for the low B+ line in a transmitter
> power supply I'm building. Something around 8 to 12 Henries at
> 100 mA or so should do the trick. Needs to be fairly small in
> size (limited space in the chassis).
>
> Okay guys, check your junkboxes...

==========

I know you'd rather have an old dirty one from a Junque' Box;
however, Antique Electronic Supply has a few pretty decent
chokes at a reasonable price.

10 H. / 100 ma,
2-3/16" mounting centers,
Mfd by Hammond (PT-158M),
$17.80

The one I needed for my Ocean Hopper was a little cheaper.

73 Dave K7HMP

>
> --
> Dean W. Hemphill, K5DH Email: k5dh@qsl.net
> 211 Addison Place
> PO Box 328 Home: (817) 497-5365
> Lake Dallas, Texas 75065-0328 Work: (972) 462-2033

4386. 2 M CW QPR XCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Steve Allen <sallen@madriver.com>
Message-ID: <335D8558.2E57@madriver.com>
Source record: 94704

Looking for info regarding schematic (kit) for a 2 meter QRP CW transceiver. Any help would be appreciated. Please contact:

Steve Allen, KD1UP at sallen@madriver.com

TNX

de KD1UP

4387. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <335cea2a.11249940@news.atl.bellsouth.net>
Source record: 94705

On Tue, 22 Apr 1997 07:18:07 +0100, "Ian White, G3SEK"
<G3SEK@ifwtech.demon.co.uk> wrote:
>I agree with using Scotchbrite on new PC boards, but returning to the
>oriinal question I'd never use ANY abrasive on silver-plated materials.
>
>A chemical cleaning method is by far the best solution (pun intended).
>Use the clear liquid which is intended for dipping small items of
>jewelry. In Britain it's called "Goddard's Silver Dip" but no doubt
>there's a US equivalent - can anybody help?

It is available under the brand name "Tarnx".

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4388. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <335ce89a.10848896@news.atl.bellsouth.net>
Source record: 94706
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On Mon, 21 Apr 1997 04:22:04 GMT, archer@netgate.net (Ross Archer)
wrote:

>On 19 Apr 1997 20:17:04 -0700, Christopher Trask <ctrask@primenet.com>
>wrote:
>Now you bring up a new issue -- namely IMD (and implicitly, dynamic
>range considerations.) I've heard that FETs are better than bipolars,
>in general, for overload resistance, but are you saying that GaAsFETs
>are superior to standard junction FETs in this regard? And if so, is
>it "a lot" better -- knowing that's a subjective questions?

Ordinary receiving GASFETs are generally somewhat better than
JFETs in regard to strong signal handling, but *power* GASFETs
are *great*, and still have a superior noise figure. (Most concerns
about NF at HF are probably in the realm of overkill, however,
atmospheric noise will dominate.)

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4389. ICs 4$ale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Brian Mork <mork@usa.net>
Message-ID: <335D8FD9.1B27@usa.net>
Source record: 94707
Cross-posted to: rec.radio.amateur.homebrew,co.ads,co.cos.ads,sci.electronics.repair,alt.comp.hardware.homebuilt

I used to do a lot of prototyping with these, but not so
much anymore. My inactivity is your gain. I'm selling
the following integrated circuits.

17cnt 2Kx8 Static memories. Desoldered, $15
(mix of MB8128-15, TMS4016-20, TMM2016P-1/2)

Z80 Support Chips. New, $5
Z8536 Counter/Timer & Parallel I/O Unit
Z8530PS SCC Serial Communications Controller

9 8251/8251A/8251AP Program. Comm. Interface (USART). Desoldered, $18

7 8085A/AC/AH/AP CPUs. Desoldered, $16

8 8255A. Desoldered, $17

18 8212/3212 (74S412) 8-bit I/O buffers. Desoldered, $35

7 8253-5, Intel & NEC mixed. Desoldered, $15

9 Fairchild U5R7723393 voltage regulators, desoldered, $5

Prices above are flexible, but do not include shipping. I'd
like to sell groups of chips, but let me know your interest.
I'm posting this notice in several locations; please let me
know where you found it.

--
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available

4390. Intersil 7226 Freq Cntr 4$ale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Brian Mork <mork@usa.net>
Message-ID: <335D9058.6BE5@usa.net>
Source record: 94708
Cross-posted to: rec.radio.amateur.homebrew,co.ads,co.cos.ads,misc.forsale.non-computer,alt.comp.hardware.homebuilt,rec.radio.amatuer.swap,rec.radio.swap

```
Intersil 7226-based frequency counter for sale.
Yes, it counts frequency (up to 10 MHz),
but it does more:

. intervals between two signals
. pulse counting
. ratios of two inputs
. periods of one signal

This is an un-encase 8" x 3" board, with no power supply
(requires 5 volts). Circuit is taken straight out of the
Intersil 7226 application notes, but also has an input
buffer chip.

Included is a spare 7226 (A input is fine, B input is broke),
and two spare LED digit displays.

A single 7226 itself costs $34.62 from Mouser. I'm asking
$25 + shipping, prepaid, for the whole shebang.

--
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available
```

4391. Digital phone salvage for parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Brian Mork <mork@usa.net>
Message-ID: <335D90D6.278F@usa.net>
Source record: 94709
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,co.ads,co.cos.ads,misc.forsale.non-computer

An electronic parts bonanza. Only nine bucks or less!

Computerized, digital, multi-line units to use as-is, or
strip for parts! They're Eagle Telephones, each with the
following, plus more.

o Epoxy encapsulated magnetic reed-switch (phone handset proximity
sensor)

o 12-button high-quality feel phone pad, about 2"x 3", with 8-wire
flat ribbon cable/connectors.

o 2" diameter, 8-ohm speaker

o Bunch of ICs: CD4081, HCF4069, 2x HCF4066, LS404CB, 2x ULN2003A,
2x ULN2032, SN75176, AMI 8948 (programmed 8048?), LM386

o 3.579575 MHz crystal

o 1.5" x 7" 20 push-button selector panel. Each button has two
colored LEDs and room to insert a small paper label. 34-wire
ribbon cable/connectors.

o 4-digit LED display, with ":" and decimals built onto the display

o Astec daughter card, 2.5"x 1.5", that appears to be a TelCo
interface

o One 4-pin, and two 6-pin J-connectors (telephone connectors,
often used on computer network cables, too).

o 8 position DIP switch

o Two 10k-ohm dial pots

o Beige enclosure. I have only a few handsets/cords. Let me
know if you particularly are interestd in the handset.

I'll sell these for $9 + shipping, prepaid. Check exact shipping
costs with the UPS web site cost calculator (my ZIP is 80840):
http://www.ups.com/using/services/rave/rate.html.

--
Brian J. Mork, 4504-C Juniper, USAFA, CO 80840
Radio Nets: ka9snf@kb0kqh.#seco.co.usa, Internet: mork@usa.net
http://www.pcisys.net/~mork/ --public encryption key available

4392. DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <pSDgrHAjfIXzEwoL@two-way.demon.co.uk>
Source record: 94710
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

Can some kind soul point me to the contact information for a
manufacturer of 5nf & 10nf high quality compression trimmers.
These are for a 160m mosfet tx design that I am working on, please help.
An e-mail direct would be greatly appreciated: phil@two-way.demon.co.uk

Thanks

Phil de G4ZOW.
So many toys,
So little time and so little money!

4393. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: J-M Noeding <la8ak@online.no>
Message-ID: <335D1CAD.5977@online.no>
Source record: 94711
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

I philip de cadenet wrote:
>
> Can some kind soul point me to the contact information for a
> manufacturer of 5nf & 10nf high quality compression trimmers.
> These are for a 160m mosfet tx design that I am working on, please help.
> An e-mail direct would be greatly appreciated: phil@two-way.demon.co.uk
>
> Thanks
>
> Phil de G4ZOW.
> So many toys,
> So little time and so little money!
believe I got some from Birkett or was it AJH electronics at Rugby...
--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4394. Yaesu FT-51R Mods.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Robert Lara <gameshow3@earthlink.net>
Message-ID: <335DB18F.57F6@earthlink.net>
Source record: 94712

I&#65533;m interested in buying the Yaesu FT-51R dual band hand held. Does anybody know where I could find a write up on the radio? I currently have a Kenwood TH78A which has been modified with the extended band TX & RX capabilities. I was told the Yaesu can be modified for extended band TX & RX functions. I would like to know if anyone knows where I could go to look for modification information.

Thank You
Robert

4395. L7 Power/Mode Rocker Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Mike Pfeiffer <k5wim@voyageronline.net>
Message-ID: <335D46CB.5987@voyageronline.net>
Source record: 94713

Where can I get a new one (with red and black rockers) and for how much?

4396. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: marty@trucom.com
Message-ID: <335c4bf2.1016831@news.trucom.com>
Source record: 94714
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On Mon, 21 Apr 1997 22:38:16 GMT, kb2rmi@pop3.frontiernet.com (robbin decker) wrote:
>Good point, although the same effect might be better served by
>separating the commercial gear. I am sure that the motorola guys are
>as sick of sifting through the TS520's as I am of downloading 75
>headers to find that 55 of them are for
>trunking/sabre/jobcomm/phoenix/whatever commercial band rigs that
>don't interest the average ham. How about rec.radio.commercial.swap,
>and let r.r.s. pick up the rest of the SW/ham/scanner/CB/etc. gear?
>Bill

Already been done, more or less, Bill...

rec.radio.amateur.swap is for the Ham gear (non commercial)

rec.radio.swap is for everything else.

Perhaps even finer divisions are needed?

Take Care & 73

Marty Albert - marty@trucom.com
Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

Heartland Internet Services

****
Interested in Amateur Radio?
http://www.trucom.com/ppages/marty
****

4397. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5jjrs4sme1@nnrp01.primenet.com>
Source record: 94715
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Tom Rauch <W8JItom@worldnet.att.net> wrote:
: On 19 Apr 1997 20:17:04 -0700, Christopher Trask <ctrask@primenet.com>
: wrote:

: > Less efficient, yes. But, if the length of wire in the antenna
: >as about 3/4 wavelength, the efficiency approaches 80%. At 3/8 wave-
: >length, this decreases to 40% at best. Most loop antennas being used
: >have a total wire length of less than 1/4 wavelength, at which point
: >the efficiency is less than 5%. These numbers are well documented in
: >several professional papers, if anyone is interested.

: My experience, having built and measured dozens and dozens of
: transmitting and receiving loop antennas for medical and
: communications use, disagrees with yours.

: Total wire length has very little to do with efficiency, and I would
: bet money you could never get 80% efficiency with a small (less than
: 05 wl diameter) loop.

You obviously are not familiar with, nor interested in, the
supporting literature, which shows measured performance of 80%
efficiency at 3/4 wavelength of wire. And not just in one single
article, either.

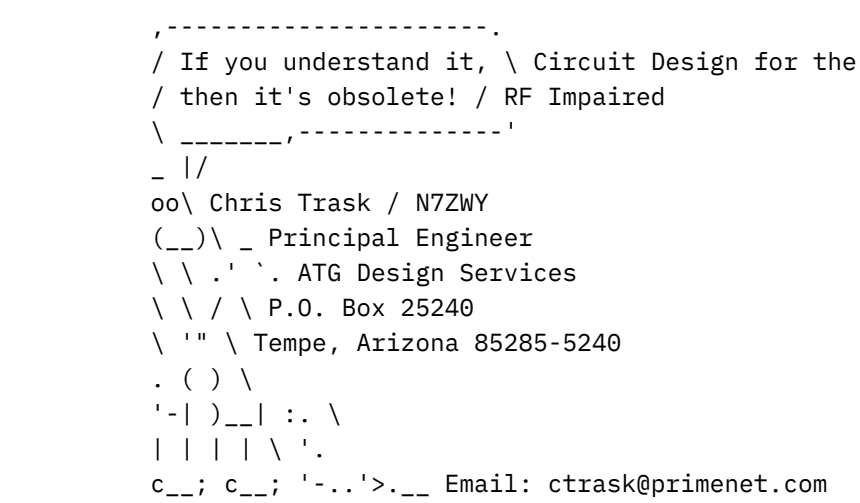
:
: It is the physical area of the loop and overall surface area of the
: conductor that determine efficiency, not the number of turns.
:
I never said it was dependent on the number if turns. I have
repeated the literature's measured evidence that it is dependent upon
the total length of the wire.

:
: If you had 80 percent efficiency, you wouldn't be using a
: pre-amplifier.
:
At times. I don't. Most of my preamplifiers are for converting
the high impedance of the antenna to the low impedance of the cable.

If you wish to contest the measured and published data, I sug-
gest that you contact the Ohio State University's Electro Science Lab
and take it up with them. And Ronold W.P. King as well.

Regards,

Chris


,----------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _____,----------'
_ |/
oo\ Chris Trask / N7ZWY
(__)\ _ Principal Engineer
\ \ .' `. ATG Design Services
\ \ / \ P.O. Box 25240
\ '" \ Tempe, Arizona 85285-5240
. ( ) \
'-|)__| :. \
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com

Graphics by Loek Frederiks

4398. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-22 00:00:00 UTC
From: Rye Gewalt <ryeg@vais.net>
Message-ID: <335C95A5.139C@vais.net>
Source record: 94716

Roy Lewallen wrote:
>
> In article <335d10f0.129711468@eskinews.eskimo.com>,
> wrt@eskimo.com (Bill Turner) wrote:
> >>
> >>>
> >>> Silver oxide is conductive; there is no need to remove it.
> >>
> ><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
> >Back in the '50s, TV sets had tuners with a large rotating drum which
> >had silver contact points and silver fingers to contact them. One of
> >my first jobs as a young apprentice was cleaning the oxidation off of
> >them. Silver oxide may be a conductor in theory, but those contacts
> >were very erratic if there was much of it there. I'd clean it off.
> >Ordinary silverware type polish was what we used and it worked fine.
> >
> >73, Bill W7TI
>
> I don't know about silver oxide, but the black stuff on exposed silver is
> more likely to be silver sulfide. Its resistivity is about 2 mohm-m, or
> about 100,000 times as resistive as copper. A thin coating of this probably
> wouldn't adversely affect a conductor carrying RF, but you wouldn't want it
> as a surface film on contacts carrying zero or very low current. That's why
> low-current contacts on quality switches and connectors are gold, not
> silver. (Contacts carrying considerable current clean themselves by burning
> through the surface layer.)
>
> Roy Lewallen, W7EL

As I recall, silver sulfide is pretty soft and a good banger of a relay
can clean itself. At least we are not using aluminum contacts :-)

Rye K9LCJ

4399. Re: Looking for ceramic IF filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5jm264$bq2@apple.telalink.net>
Source record: 94601

BRIAN DANGERFIELD <bdanger@es.co.nz> wrote:
>try an old fm broadcast radio eg.an old car radio
>>From: "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es>
>>Subject: Looking for ceramic IF filters

Unfortunately these are usually 200KHz or wider. I've corresponded in private email with Sr. Garcia & he needs something narrower. Digi-Key (USA) lists Toko filters as narrow as 110KHz in their catalog. It may be possible to special-order narrower ones. (though I can't imagine what the commercial market would be)

73 Doug

4400. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Ed Legenza AA6NI <atued@best.com>
Message-ID: <335ECD80.1BE3@best.com>
Source record: 94602
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

JoeDWadd wrote:
>
> In article <01bc4d34$e5319000$0fa42399@94387684762264> "Pom E Granate"
<seno417b@themall.net> writes:
> >From: "Pom E Granate" <seno417b@themall.net>
> >Subject: Re: Stick a fork in ham radio
> >Date: 20 Apr 1997 02:42:01 GMT
>
> >...perhaps better to stick a fork in "ham radio" instead of
> >the ham operator. Just got back from a hamfest (my 3rd)
> >and I've never seen more overweight, slopply dressed, chain
> >smoking greezeballs in any one place. My guess is that if
> >you stuck a fork in a few of the ones I saw this day, they'd
> >likely fly off into the air like an un-corked party balloon.
> >(SFX follows, imagine : Plink-Ponk! PPPFHHBLTTTTTT!!!!!!)
>
> >Sorry guys, I't's only my 3rd visit to a hamfest, and it was
> >just as scary as visits # 1 and # 2. Some real space-cases
> >were there too....Oy!
>
> >PomEGranate
> fits me to a tee.joez@k5zcx

Ah yes....but did you take the time to check his thermometer...if that
ham was already done....then sticking a fork in him would not cause a
release of air. Everybody know that only under done hams elicit air.

Oh, and some outsiders are just full of it!!!

4401. Re: Seeking simple SW receiver designs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002304971147350001@news.europa.com>
Source record: 94603

In article <335CDF3A.49C@lsid.hp.com>, Charlie Panek <charlier@lsid.hp.com>
wrote:

:
: I second the idea of a regen circuit. I came across a design

If you've ever worked with kids trying to build things, you want it as
simple as possible. Especially if you are going to make 20 of them.

Regen or superregen is as simple as you can get. And the selectivity is
much better at SW than it is at VHF (native Q is already much higher in
tuned ckts)

As for radiation, you can add a broadband RF, but realize that most of
those high tech feedback circuits have little isolation as they work like
"transformers with gain" as some friends have coined. A common gate
circuit would be optimal.

Rob.

4402. Re: Pan adapter? How does it work and how can it be built?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <335E75FE.43C5@aade.com>
Source record: 94604

Mike Kraml wrote:
>
> Hello. Does anyone have on info on how a Pan adapter works, and how one could
> be built. I have a very nice 100MHZ Oscope just sitting there, and would love
> to use it as a spectrum display device for my TS-940. Thanks in advance,
> 73, Mike - WQ0N

A pan adapter is really a spectrum analyzer with sweep range limited
to the IF bandwidth of a receiver. It would be possible to make one
that used a o'scope for display using an NE605. The NE605 is actually
an NE602 mixer/oscillator and an NE604 limiting IF amplifier with
RSSI output. Use a varicap and sawtooth generator to sweep the
oscillator across the IF bandwith. The sawtooth will also be the
horz sweep for the o'scope and the RSSI output will be the vertical
sweep for the o'scope.
--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.

4403. LOOKING

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Dana Yeomans <dana@randomc.Com>
Message-ID: <Pine.GSO.3.96.970423193900.24122D-100000@randomc.com>
Source record: 94605

looking for schematic for lafayette kt-320 or he-30 if there is anyone out that has one out there, e-mail back. thanks from n4pge in griffin, georgia, i am working on this rig, it was ready for the trash can.

4404. ADVERTISE TO OVER 100 MILLION PEOPLE FOR FREE!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: nejeh@gdi.net
Message-ID: <5jmd2c$65g@news.gdi.net>
Source record: 94606

Please take the time out to read this email. it is worth your time.

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well over 100 MILLION people will have E-mail accounts in the next year!
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immediate access to all of them. Do you think some of the more than 100
million people with E-mail addresses would be interested in your products or
services? Even if you don't have your own products or services you can
still make money buy promoting our computer software!!!
You can make money with our new software called E-MAIL BLASTER

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* By Using E-Mail To Sell our Computer Software such as: Email Blaster, Web Walker,
Email Lock Box etc.
* By Renting or Selling Your E-mail Addresses
* By Becoming A Distributor for e-mail BLASTER

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days instead of waiting weeks or months like with television or print
advertising. You can begin filling orders the same day you send E-mail.

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millions of letters using the United States Postal Service! Now you can
send your ad to MILLIONS of people for FREE using E-Mail BLASTER

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web pages, news groups, and hundreds of other sources. (2) E-Mail BLASTER
automatically stores the E-mail addresses in your computer along with
keywords that describe hobbies and interests to created highly targeted
E-mail addresses. (3) E-Mail BLASTER sends your marketing letter or ad to
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HOW DOES E-MAIL BLASTER WORK? E-Mail Blaster has dozens of special filters to automatically harvest E-mail addresses from major online services such as: America OnLine, Compuserve, Delphi, Genie, and of course the internet.

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SIMPLE TO USE: E-Mail Blaster does all the work for you. Unlike other programs where you must cut & paste addresses, E-Mail Blaster does it for you automatically. And, unlike other E-mail programs, with E-Mail Blaster there is no need to purchase any additional software

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along with this order form.
nejeh@gdi.net

4405. Power Antenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: keith a montgomery <hunter48@ix.netcom.com>
Message-ID: <335EB1F1.112F@ix.netcom.com>
Source record: 94607

How would I go about designing and building a circuit to lower rf power
so an amp can be driven with radio that does not have variable power.
Kind of like a L-pad. Have some electrical knowledge but not enough.
73
falcon

4406. 80 Meter SSB Kit/Reasonable

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: jparker@fix.net
Message-ID: <5jm517sja2@zinger.callamer.com>
Source record: 94608

Dan from Dan's Small Parts and Kits is offering his 80 Meter Centennial SSB Kit in several variations to Make it easy and inexpensive to get a kit up on SSB.

Check it out at:

http://www.fix.net/dans.html

Enjoy,,,72,,,Jerry...WA6OWR...K

4407. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Tom McDermott <mcdermot@aud.alcatel.com>
Message-ID: <335E3ABF.167EB0E7@aud.alcatel.com>
Source record: 94609

George Carlson (geotek@comwerx.net) wrote:

> Boy, are you asking for trouble. Not only will the steel wool ruin
> the silver plating, but you could leave hundreds of tiny steel fibers
> on the coil and inside the equipment. If you feel the need to use an
>

You may want to look for 'Scotchbrite' which is a plastic
pad made by 3M. At one time the burgundy-red colored Scotchbrite
did not have any additional chemicals added to it. It is very
effecitve for cleaning printed circuit boards without embedding
steel fiber in the copper, or contaminating the copper with
chlorine (due to cleanser or bleach).

Many machine shops use it to clean metal and certain tools.
You may be able to find it at hardwre stores or machine supply
shops.

--

- Tom

Tom McDermott
mcdermot@aud.alcatel.com

4408. Re: GE MASTR II frequency changes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Bob <pmw5@cornell.edu>
Message-ID: <335D949C.5093@cornell.edu>
Source record: 94717

Samuel Johnson wrote:
>
> I am setting up MASTR II's for repeater use. The only problem I have, is
> that the manual says to read the frequency with a frequency counter at a
> certain point in the radio. My point is, it has to be 9 times the
> frequency. In the 440 range, this puts the frequency far above the
> frequency counters that I have access to. Am I looking at the problem
> wrong? Can anyone help me decide on how to solve this situation? I have
> the test set, and MASTR II manuals to work with, plus the mods.
> Any help appreciated,
> Sam Johnson KF4GQSThe point they want you to measure is BEFORE any multipliers. The
OUTPUT is 9 times what
you measure there.

--
-----BEGIN PGP PUBLIC KEY BLOCK-----
Version: 2.6.2

mQBtAzK9lTgAAAEDALNAegQHu6xJ7isCW1c57zKpN2N97N14FO6OcHQ1JLQNpbsB
bXmt2KaZMu4+4qLKiaM3S94CANtQlMc/VrQ6fZJNmu2Abg68PrP5RM9PkrKasLiU
8OJ86NbesAZWzN0PFQAFEbQ+Um9iZXJ0IFdleWJyZWNodCwgSlIgLSBOMlFFVyAt
IHBtdzVAY29ybmVsbC5lZHUgLSA2MDctNzU3LTk0MzQ=
=Df2X
-----END PGP PUBLIC KEY BLOCK-----

4409. Re: TS450 IF232 Protocol?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: tenorman@i1.net
Message-ID: <5jk1np$f6g$1@news1.i1.net>
Source record: 94718
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

The Kenwood TS450 uses the RS-232 serial protocol. The signaling is TTL logic level, that must be converted to +/-12 volt to interface to the more popular "PC" type signaling standard. This can be accomplished by purchasing and interfacing a MAX-232 chip (TTL - RS232 level converter), and a TTL inverter. Get a spec / interfacing sheet on the MAX 232 chip, it will explain how to build a simple converter board. After that, the rig communicates at 4800 baud, Hardware flow control, 8 data bits, 2 stop bits, and no parity (if my memory serves me). After that, the commands to be sent and received should be found in the supplimental guide that comes with the TS-450. If you don't have that book, email me, and I'll send them to ya. Good luck, 73, Mike - WQ0N

In article <01bc4e5a$c85b96c0$31aa3bc6@hotel.intranet.asctmd.com>, "McCoy" <rmccoy@nospamhere.com> wrote:
>I'm designing a repeater interface to my TS450 using the IF232 port on the
>rig. Does anyone know where I can find the communication protocol across
>this port??
>
>Thanks,
>Russ

4410. Pan adapter? How does it work and how can it be built?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: tenorman@i1.net
Message-ID: <5jk2ungcq1@news1.i1.net>
Source record: 94719

Hello. Does anyone have on info on how a Pan adapter works, and how one could be built. I have a very nice 100MHZ Oscope just sitting there, and would love to use it as a spectrum display device for my TS-940. Thanks in advance,
73, Mike - WQ0N

4411. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970423075201.DAA25106@ladder01.news.aol.com>
Source record: 94720

Yes, Stateside (The Colonies) it's a solution called TARN-X. Purchased in most drug stores. Chemists. Another brand called DIP-IT, same stuff, diluted and a tad cheaper.

W4ZCB

4412. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970423075500.DAA25197@ladder01.news.aol.com>
Source record: 94721

Forgot. If after cleaning, you'll put a moth ball or two in the box with the silver, you won't have to do it again. The Phenolthalien in the moth ball keeps the silver oxide-sulphide from forming. Put a piece of masking tape loosely over the mothball to keep it from rattling around.

W4ZCB

4413. Need help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: aibes@aibes.ksu.ras.ru
Message-ID: <AAndrbY0pst@aibes.ksu.ras.ru>
Source record: 94722

Hi people,

I'm looking for pinout for IC TA8164p.
Please, replay to: aibes@aibes.ksu.ras.ru.
Thanks in advance,- Alex (UA4RO).

4414. Foreclosures/Gov't Auctions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Property4Less <property@seanet.comn>
Message-ID: <01bc4f72$90e19460$96800ccf@regina>
Source record: 94723
Cross-posted to: rec.games.trading-cards.misc,rec.games.trading-cards.startrek,rec.music.artists.mariah-carey,rec.radio.amateur.homebrew,rec.toys.cars,rec.travel.caribbean,relcom.auto,relcom.commerce.computers,relcom.commerce.money,rpi.forsale,saga-u.forsale,sc

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4415. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5jjmvt$34v@news.Hawaii.Edu>
Source record: 94724
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Marty Albert <marty@trucom.com> wrote:
>Willard Flagg <flagg@TFF.Com>

>>I don't see a rec.radio.amateur.swap. I do see a rec.radio.swap and a
>>rec.ham-radio.swap. Perhaps others don't get the sub-group either.

>rec.radio.amateur.swap has been around for well over a year now.
>Sounds like your ISP is falling down on the job of getting new groups
>added.

Actually Marty, it sounds more like your ISP falls for every bogus news-
group that's created outside of the recognized and accepted procedure.
There was no Call For Discussion, nor was there a Call For Votes, and
there was no posting of any r.r.a.swap charter. Thus, it's bogus and
will eventually be cancelled.

(Are you sure it's not under the alt hierarchy?)

Jeff

4416. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970423075600.DAA25246@ladder01.news.aol.com>
Source record: 94725

Forgot too...You write a nice article. Tell Pat Hawker I'm ready for ver 2.0 of his scrapbook, 1989 to date.

W4ZCB

4417. Re: Looking for ceramic IF filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: BRIAN DANGERFIELD <bdanger@es.co.nz>
Message-ID: <5jko8d$6em@Chaos.es.co.nz>
Source record: 94726

```
This is a multi-part message in MIME format.

---------------------------------181011563329070
Content-Transfer-Encoding: 7bit
Content-Type: text/plain; charset=us-ascii

try an old fm broadcast radio eg.an old car radio

---------------------------------181011563329070
Content-Transfer-Encoding: 7bit
Content-Type: text/plain

From: "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es>
Newsgroups: rec.radio.amateur.homebrew
Subject: Looking for ceramic IF filters
Date: Sat, 19 Apr 1997 18:44:20 +0200
Organization: Amateur Radio Net
Mime-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
Message-ID: <3358F664.504CDB27@sat.cide.upm.es>

Hello all

I'm looking for a 10.7 MHz, 50-100 kHz bandwith ceramic filter that it
is near to impossible to find in Spain.

Anyone know for a source to take this small device? I know that muRata
and Panasonic manufactures them, but I don't believe they sell
unities...

Thanks in advance,

--
Rafael,
Madrid (Spain)

---------------------------------181011563329070--
```

4418. Re: Looking for ceramic IF filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: tom.twist@hydro.com
Message-ID: <5jkqvf$kmr@vkhdsu01.hda.hydro.com>
Source record: 94727

"Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es wrote:

>Hello all

> I'm looking for a 10.7 MHz, 50-100 kHz bandwith ceramic filter that it
>is near to impossible to find in Spain.

> Anyone know for a source to take this small device? I know that muRata
>and Panasonic manufactures them, but I don't believe they sell
>unities...

...snip

Try http://www1.tip.nl/users/t474001/Cat_x-filter.htm

Tom

Email: ttwist@online.no (twist@nano.no, tom.twist@hda.hydro.com)
Phone: +47 35972928/90662366, Ham call sign: LB8X, LC5ZAT
Snail: Tom Twist, Kirkeveien 8A, N3970 Langesund, Norway

4419. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Jim N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <335E053E.6F7D@worldnet.att.net>
Source record: 94728
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

philip de cadenet wrote:
>
> Can some kind soul point me to the contact information for a
> manufacturer of 5nf & 10nf high quality compression trimmers.
> These are for a 160m mosfet tx design that I am working on, please help.
> An e-mail direct would be greatly appreciated: phil@two-way.demon.co.uk
>
> Thanks
>
> Phil de G4ZOW.
> So many toys,
> So little time and so little money!

I've found this trick very useful. Look inside any radioshack device (2 meteramp Transeiver etc) if you find a part that matchs your needs call RSparts at 1-800-the-shack. Tell them you need that part! Inside the little 2 meter amp are 3 variablecap. I know 1 of them is a 10-50 pf unit. It'll set you back a cool $1.99....Good luck!

4420. Re: HW-8 Call to Experts.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Bob Miller <brmiller@Tracy.com>
Message-ID: <335DF68C.2E71@Tracy.com>
Source record: 94729
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

You need the HW-8 Handbook, it has all kinds of mods and fixes for the HW-8. You can get one from Mike Bryce WB8VGE 2225 Mayflower NW, Massillon, OH 44647. The cost is $11 which includes shipping.

I have a HW-8 and it has the same problems as yours. The cure is to rewind the coils for those bands along with changing some cap values.

Good luck

Bob

Wb6KWT
http://www.tracy.com/~brmiller

4421. L.O.S.A Contribution Form

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: cjNOSPAM@hth.com
Message-ID: <335df7fe.168917398@news.buller.se>
Source record: 94730
Cross-posted to: comp.robotics.misc,comp.home.automation,sci.electronics.misc,rec.radio.amateur.homebrew

```
List Of Stamp Applications (L.O.S.A for short)
==============================================

If you have done something (big or small) with the BASIC Stamp
that you are willing to tell others please use the form below and
write a short description, nothing fancy is needed just a simple
explanation. If you have source code to share that's even better but
it's not necessary.

Then e-mail the form to:

cj@hth.com

With the following as the subject:

L.O.S.A Contribution

Or you could point your Web-browser to the following URL and fill in
the L.O.S.A form on the Web-page...

http://www.hth.com/losa.htm

The latest version of L.O.S.A is going to be posted to the following
mailing lists and news groups, I will update it approx. once a month.

Mailing lists:

BASIC Stamp Mailing List

News groups:

comp.robotics.misc
comp.home.automation
sci.electronics.misc
rec.radio.amateur.homebrew

You can also find the latest version on the following URL...

WWW site:

http://www.hth.com/losa.htm

FTP-site:

ftp://ftp.parallaxinc.com/pub/text/losa.txt

[--- cut ---]
```

```
=========================================================================
- L.O.S.A Contribution Form -
=========================================================================
New Contribution [ ] Update [ ]
-------------------------------------------------------------------------

Title :
Author: Date:

E-mail: (optional)
-------------------------------------------------------------------------

Stamp model : BASIC Stamp/BS1-IC/BS2-IC
Code available: YES/NO
Filename : (optional)
URL : (optional)
-------------------------------------------------------------------------
Description : (5-50 rows describing your application)

=========================================================================

[--- cut ---]

/Christer

[Remove the "NOSPAM" from my e-mail address if you wish to e-mail me]

-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* High Tech Horizon - Christer Johansson - E-mail: cj@hth.com *
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
* Vi saljer Parallax PIC och BASIC STAMP produkter i Skandinavien *
>> World Wide Web On-Line Catalog - http://www.hth.com <<
-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-=-
```

4422. TCM 3105

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Milos Nikolic <mishko@classroom.opennet.org>
Message-ID: <335E12D8.175D49CD@classroom.opennet.org>
Source record: 94731

Hi to all,

I need a IC TCM 3105 for Packet radio
modem.If anybody anyhow can get it please
mail me.

Thanks in advance from Milos 4N1FNM

4423. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: jedentxpoz@phoenix.net
Message-ID: <jedentxpoz.165.001419EA@phoenix.net>
Source record: 94732
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <01bc4d34$e5319000$0fa42399@94387684762264> "Pom E Granate"
<seno417b@themall.net> writes:
>From: "Pom E Granate" <seno417b@themall.net>
>Subject: Re: Stick a fork in ham radio
>Date: 20 Apr 1997 02:42:01 GMT

>...perhaps better to stick a fork in "ham radio" instead of
>the ham operator. Just got back from a hamfest (my 3rd)
>and I've never seen more overweight, slopply dressed, chain
>smoking greezeballs in any one place. My guess is that if
>you stuck a fork in a few of the ones I saw this day, they'd
>likely fly off into the air like an un-corked party balloon.
>(SFX follows, imagine : Plink-Ponk! PPPFHHBLTTTTTT!!!!!!)

>Sorry guys, I't's only my 3rd visit to a hamfest, and it was
>just as scary as visits # 1 and # 2. Some real space-cases
>were there too....Oy!

>PomEGranate
fits me to a tee.joez@k5zcx

4424. Re: BEST Active antenna design in the world! (was) Re: Design advice sought for active antenna from radio engineers/hams

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <335e06ee.2910385@netnews.worldnet.att.net>
Source record: 94733
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On 22 Apr 1997 19:24:04 -0700, Christopher Trask <ctrask@primenet.com>
wrote:

>snip<

If you have a 3 ft area fixed-shape loop, it ALWAYS has essentially
the same pattern and performance no matter HOW MANY turns of wire you
use as long as the total effective cross sectional surface are of the
conductors are the same.

> I never said it was dependent on the number if turns. I have
>repeated the literature's measured evidence that it is dependent upon
>the total length of the wire.

I'm not really sure what you are saying.

If you are increasing the diameter, then we are in agreement.

If you are maintaining the same loop diameter or area and increasing
wire length than I disagree.

This thread was dealing with small loop antennas. " I use 3/4 wl of
wire in mine" gives the impression you have a small loop with 3/4 wl
of wire. Do you have a small loop or a large loop?

73 Tom

4425. Help about the HP-8551 Spectrum Analyzer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: it9xxs <it9xxs@exit.it>
Message-ID: <01bc4fe7$ec11cb00$589e1fc3@mazzola>
Source record: 94734

I've heard there is a replacement for the 2GHz IF strip of the HP-8551 Spectrum Analyzer made by WA8NLC.

If you have any info about that paper please let me know how can I have a copy of it.

Thanks in advance.

Giovanni, IT9XXS

E-Mail: it9xxs@exit.it

4426. (none)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: sp2xdq@free.polbox.PL
Message-ID: <01BC5012.2F263DC0@ppp253.gdynia.tpnet.pl>
Source record: 94735

```
Subscribe my e-mail: sp2xdq@free.polbox.pl
```

4427. Re: Panel Lettering: Datak or laser lettering?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: donrm@sr.hp.com
Message-ID: <5jle14$92u@canyon.sr.hp.com>
Source record: 94736

Jack Giehl (jackg@one.net) wrote:
> Hi,
> I want to letter a panel with black lettering. I have used Datak lettering

Datak's phone is 815-874-2301 and FAX is 815-874-2896 and can probably tell you who distributes their dry transfer lettering. I checked Digikey and surprisingly, they don't carry it, but do other Datak products.

Make sure you get something that's still in date by looking for a four digit code in any corner - e.g., 8203 would mean the third work-week of 1982 -- and there's still some of this old material out there. Datak guarantees their stuff for five years, so anything earlier than 91XX is suspect and you may have difficulty getting it to transfer. Sometimes you can "pre-release" it by rubbing the letter onto the backing paper until it turns gray looking, then transfer it to your work.

Radio Shack used to carry a good house brand of dry transfer, but it's been gone out of their catalog for some time now...another thing you might do is check your art supply stores; they supply "A" size sheets of letters/numbers only with a large selection of colors/fonts. Expect to pay up to $10/sheet. Don't be afraid to try the individual characters; the sheets have datum lines to facilitate alignment and you can kern the characters anyway you want, even create shadow lettering by over-laying one color with another with a slight diagonal shift.

Happy Homebrewing
Don K6LTS
donrm@sr.hp.com

4428. Military Preamplificatore driver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: dxhog@netsync.NET
Message-ID: <335E40EB.21CB@netsync.net>
Source record: 94737

At a hamfest recently I picked up one of those "GOT'S TO HAVE ITEM'S" that I need some information on. The small compact amplifier is solid state and seems to be in like new condition and is military. The amp measures 7"w x 2.50"t x 9"l, it has a very beefy heat sink and is built as you would expect any military piece to be manufactured. The outside of the case is marked Preamplificatore Driver, 2-55814//A, under that is this number 80063 assy A3026012. Upon pulling the cover, the circuit board has these numbers, 0-94170, MPA 39877, A3031540 in the upper right corner. In the lower left corner of the board is 80063ASSY A3026105. The unit has two drivers MRF466 at 28v and two finals MRF429 at 50v. Looking into the amp it appears that it was used as a pre driver for a very large amplifier. This unit with the driver's and final's that it has according to spec is capable of producing 300 watts. Pad on the input to the driver shows that about 2 to 5 watts will drive this and also looks to be about 75 ohm input. This unit is built to be rugged, as even the wire is teflon wire. From the construction of the unit it looks as if it will play from 1.8Mz to 30Mz, maybe as high as 50Mz. Thought that maybe someone out there could shed some light on this interesting unit. Doe's anyone have spec's, or a manual for this unit? I would like to put this into service with my QRP rig of 5 watts. Thanks for reading this and your time. 73 N2ODU/Dave.

4429. Re: TS450 IF232 Protocol?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Ed <mrmicro@techie.com>
Message-ID: <335E6F23.3FF6@techie.com>
Source record: 94738
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

You can download the specs on the MAX232 chip from the Maxim web site:

http://www.maxim-ic.com/
--

Ed
W5CE@usa.net

4430. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: miker <mreiney@NOSPAMhevanet.com>
Message-ID: <335E71D0.758@NOSPAMhevanet.com>
Source record: 94739
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

SOME CALL ME THE BIG BOPPER wrote:
>
> In article <3357a131.1626891@news.trucom.com>, marty@trucom.com (Marty Albert) writes:
> >
> >
> > Has anyone else noticed all the WTB and For Sale ads in the groups
> > lately? Seems to be getting bad again...
> >
> > This morning, out of 23 new articles in one group, 18 were
> > inappropriate.
> >
> > Makes you wonder why we have rec.radio.amateur.swap for, eh?
> >
> > Take Care & 73
> >
> >
> >
> > Marty Albert - marty@trucom.com
> > Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM
>
> I agree! Are we going to turn into CB'ers, who in their selfishness, not
> only ruin things for everybody, they even ruin it for themselves.
>
> I say, Send an email complaint to each person who posts inappropriately
> (and turn this place into 75 meters).

While you're counting things, count the number of postings to this thread and the number of newsgroups that are spammed. Which is the bigger bandwidth/time waster??? Sometimes the cure is worse than the disease...

Best thing you can do is to boycot the good deals that are posted here so that I can buy them :-).

4431. Swap 1GB IDE for tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: KB4AEP <crsdan@mis.net>
Message-ID: <335E6AFE.496F@mis.net>
Source record: 94740

Hi guys........

I'm looking to trade a working 1GB 3.5" IDE hard drive for a Drake MN-4

antenna tuner or an MFJ-949E or 941E tuner.

Call (606)238-0029 days or (502) 863-0500 nights and ask for Mark.

Thanks........KB4AEP

4432. Swap 1GB IDE for tuner

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: KB4AEP <crsdan@mis.net>
Message-ID: <335E6A02.5FB7@mis.net>
Source record: 94741

Hi guys........

I'm looking to trade a working 1GB 3.5" IDE hard drive for a Drake MN-4

antenna tuner or an MFJ-949E or 941E tuner.

Call (606)238-0029 days or (502) 863-0500 nights and ask for Mark.

Thanks........KB4AEP

4433. FS: New Eimac 3-1000Z Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Phil Clements <philk5pc@connect.net>
Message-ID: <335E749F.799E@connect.net>
Source record: 94742

Mfg. dates late 1996. NIB, delivered to your door via Fed-Ex for
less than 1/2 RF Parts price.
(((73)))
Phil, K5PC

4434. Re: TCM 3105

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Roland Brade <roland@venusww.demon.co.uk>
Message-ID: <4pHpeJAKUhXzIwBt@venusww.demon.co.uk>
Source record: 94743

In article <335E12D8.175D49CD@classroom.opennet.org>, Milos Nikolic
<mishko@classroom.opennet.org> writes
>
>Hi to all,
>
>I need a IC TCM 3105 for Packet radio
>modem.If anybody anyhow can get it please
>mail me.
>
> Thanks in advance from Milos 4N1FNM
TCM3105NL are still available from Venus Electronics
Priced at UKP11.95 plus Delivery is UKP2.00 for the UK and UKP4.50
overseas.
VISA/MASTERCARD/ACCESS
--
Roland Brade
roland@venusww.demon.co.uk
http://www.venusww.demon.co.uk

4435. Re: Panel Lettering: Datak or laser lettering?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <335E557A.D87@up.net>
Source record: 94744

Don Montgomery wrote:
>
> Jack Giehl (jackg@one.net) wrote:
> > Hi,
> > I want to letter a panel with black lettering. I have used Datak lettering
>
> Datak's phone is 815-874-2301 and FAX is 815-874-2896 and can probably
> tell you who distributes their dry transfer lettering. I checked Digikey
> and surprisingly, they don't carry it, but do other Datak products.
>
> Make sure you get something that's still in date by looking for a
> four digit code in any corner - e.g., 8203 would mean the third work-
> week of 1982 -- and there's still some of this old material out there.
> Datak guarantees their stuff for five years, so anything earlier than
> 91XX is suspect and you may have difficulty getting it to transfer.
> Sometimes you can "pre-release" it by rubbing the letter onto the
> backing paper until it turns gray looking, then transfer it to your
> work.
>
> Radio Shack used to carry a good house brand of dry transfer, but it's
> been gone out of their catalog for some time now...another thing you
> might do is check your art supply stores; they supply "A" size sheets
> of letters/numbers only with a large selection of colors/fonts. Expect
> to pay up to $10/sheet. Don't be afraid to try the individual characters;
> the sheets have datum lines to facilitate alignment and you can kern
> the characters anyway you want, even create shadow lettering by over-
> laying one color with another with a slight diagonal shift.
>
> Happy Homebrewing
> Don K6LTS
> donrm@sr.hp.com

Chartpak Dry Transfer material, in various sizes and colors from:

City Blue Print Co., Inc.
1729 Tilghman St.
Allentown, PA 18104-4196

4436. Help Homebrew Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: jfolk@dido.com
Message-ID: <861842481.10210@dejanews.com>
Source record: 94745

I have a Swan350 homebrew supply with adjustable
Bias.I need info on tune up of this with rig
as far as the cathode current goes or any information
regarding this setup.
Thanks. You can send any info to jfolk@dido.com

--------------------==== Posted via Deja News ====-----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

4437. WTB: duplexers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <335E4ABA.3F54@Bledsoe.net>
Source record: 94746

I need a set of VHF duplexers for a MASTR II repeater I'm building, as usual I want to find the cheapest possible, sell or trade. I could also use another MASTR II UHF radio, if the price is right.
Sam Johnson KF4GQS

4438. Re: TS450 IF232 Protocol?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: John Welton <John_Welton@unc.edu>
Message-ID: <01bc5014$27015ce0$d5e70298@JWELTON.UNCH.UNC.EDU>
Source record: 94747
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Russ, one "trick" you might try is to put a DSP with pseudo COR output on the TS450 audio to simulate COR. JPS in Raleigh has such a mod for a little more than the price of their amateur product (high $300's) and you get DSP audio filtering as well.

You might also look at the Link Communications Controllers, They have TTL logic output on each radio port (one direction - to radio) to talk to the Kenwood directly without an interface.

Good luck, John

McCoy <rmccoy@nospamhere.com> wrote in article
<01bc4e5a$c85b96c0$31aa3bc6@hotel.intranet.asctmd.com>...
> I'm designing a repeater interface to my TS450 using the IF232 port on
the
> rig. Does anyone know where I can find the communication protocol across
> this port??
>
> Please respond via email via the following address:
> rmccoy@alb.asctmd.com
>
> Don't reply to this post as it is intended to filter the spam mailers.
>
> Thanks,
> Russ
>

4439. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: vx701205@woods.uml.edu
Message-ID: <1997Apr23.144840.1@willow>
Source record: 94748
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <3357a131.1626891@news.trucom.com>, marty@trucom.com (Marty Albert) writes:
>
>
> Has anyone else noticed all the WTB and For Sale ads in the groups
> lately? Seems to be getting bad again...
>
> This morning, out of 23 new articles in one group, 18 were
> inappropriate.
>
> Makes you wonder why we have rec.radio.amateur.swap for, eh?
>
> Take Care & 73
>
>
>
> Marty Albert - marty@trucom.com
> Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

I agree! Are we going to turn into CB'ers, who in their selfishness, not
only ruin things for everybody, they even ruin it for themselves.

I say, Send an email complaint to each person who posts inappropriately
(and turn this place into 75 meters).

4440. Would you like some extra money??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-23 00:00:00 UTC
From: ras7000@rit.edu
Message-ID: <335EB04D.2EB1@rit.edu>
Source record: 94749
Body handling: 1 inline base64-encoded payload block was not displayed

```
[Inline base64-encoded payload not displayed]

Content-Type: text/plain; name="Cash"

Content-Disposition: inline; filename="Cash"
```

4441. Re: HI

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: mikek0brxr@aol.com
Message-ID: <19970424003000.UAA22127@ladder01.news.aol.com>
Source record: 94610

Hi, from Rockford, Ill

4442. Re: NEED A TRANSFOMER HELP ME!!!!!!!!!!!!!!!!!!1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: saw@camalott.com
Message-ID: <335ec9f4.81675323@qwknews.com>
Source record: 94611

jkanejr182@aol.com (JKanejr182) wrote:

> I NEED A 2800 VOLT TRANSFOMER GIVE OR TAKE A 100 VOLTS
> AT ABOUT 1 AMP CAN YOU HELP ME THANKS
>JKanejr182@aol.com

a few years ago I went to a hamfest in El Paso, TX. While there I spoke with a gentleman and picked up a catalog at his booth. The catalog says design, manufacture & rewinding. I've never ordered anything from them, but the guy seemed interested and nice enough.... the company is:

Peter W. Dahl Co.
5869 Waycross Ave.
El Paso, TX 79924
915-751-2300
915-751-0768 fax
Telex 763861 PWDCO
--
Alan
e-mail: saw@camalott.com
voice: +915.672.2881 (somebody's... but not mine)

4443. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: jspatric@mailhost.ecn.uoknor.edu
Message-ID: <5jmlcr$i46$1@independence.ecn.ou.edu>
Source record: 94612
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

marty@trucom.com (Marty Albert) writes:
>rec.radio.amateur.swap is for the Ham gear (non commercial)

This newsgroup doesn't exist on my server... or any that my server gets
news from...

>rec.radio.swap is for everything else.

This is the only swap NG I get.... :(

>Marty Albert - marty@trucom.com
>Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

John
--
John Patrick (jpatrick@ou.edu) - KC5VEI
Electrical/Computer Engineering Grad @ The University of Oklahoma
* John's EE Page: <http://www.ecn.ou.edu/~jspatric/ee-info.html> *

4444. Looking for room in or near Dayton during "Hamvention"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: n9xrg@sprynet.com
Message-ID: <3366ded5.4840654@news.sprynet.com>
Source record: 94613

If anyone has any information on how I could get a hotel room for two
for Friday and Saturday during "Hamvention". If anyone who has a room
reserved and is not going please e-mail me at hargis@mail.org.
73s
Todd Hargis
N9XRG

4445. Re: WANTED: filter choke, 8 - 12 Henries @ 100 mA, or similar

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: "Tony T. Hwang" <oolong@netcom.ca>
Message-ID: <5jmou8$387@tor-nn1-hb0.netcom.ca>
Source record: 94614

In article <335D7584.1938@erols.com>,
3W8PE1B <willi6@erols.com> wrote:

>
>Dean Hemphill K5DH wrote:
>>
>> Greetings, Boatanchor and GlowBug fans!
>>
>> I need a small filter choke for the low B+ line in a transmitter
>> power supply I'm building. Something around 8 to 12 Henries at
>> 100 mA or so should do the trick. Needs to be fairly small in
>> size (limited space in the chassis).
>>
>> Okay guys, check your junkboxes...
>
>==
>
>I know you'd rather have an old dirty one from a Junque' Box;
>however, Antique Electronic Supply has a few pretty decent
>chokes at a reasonable price.
>
>10 H. / 100 ma,
>2-3/16" mounting centers,
>Mfd by Hammond (PT-158M),
> $17.80
>
>The one I needed for my Ocean Hopper was a little cheaper.
>
> 73 Dave K7HMP
>
>
>>
>> --
>> Dean W. Hemphill, K5DH Email: k5dh@qsl.net
>> 211 Addison Place
>> PO Box 328 Home: (817) 497-5365
>> Lake Dallas, Texas 75065-0328 Work: (972) 462-2033

Swinging or smoothing type?

4446. New student radio club needs help!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: jwells@argohouston.com
Message-ID: <5jmhja$58e@lacy.zippo.com>
Source record: 94615

I have founded a new student amateur radio club at Cy-Fair
High School in Cypress, TX, and WE NEED YOUR HELP!! Before
the summer we will be getting our first batch of newly
licensed hams, but very few of them will have any money to
get a station on the air. If you can help with a monetary
or equipment donation of any kind, please point your browser to:

http://www.argohouston.com/pages/g/gewellss/

ALL DONATIONS ARE TAX-DEDUCTIBLE!!!

73's,

James A. Wells, KC5SIZ
President, Cy-Fair HS ARC
mailto:jwells@argohouston.com

4447. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: no.spam@no.ads
Message-ID: <335f4aec.7509455@news.mnsinc.com>
Source record: 94616
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

Oh yes, I am SURE he is going to find trimmers for a 160m transmitter
inside a Radio Shack 2 meter rig - NOT!!

On Wed, 23 Apr 1997 08:49:02 -0400, Jim N8XYN
<jim.N8XYN@worldnet.att.net> wrote:

>philip de cadenet wrote:
>>
>> Can some kind soul point me to the contact information for a
>> manufacturer of 5nf & 10nf high quality compression trimmers.
>> These are for a 160m mosfet tx design that I am working on, please help.
>> An e-mail direct would be greatly appreciated: phil@two-way.demon.co.uk
>>
>> Thanks
>>
>> Phil de G4ZOW.
>> So many toys,
>> So little time and so little money!
>
>
>I've found this trick very useful. Look inside any radioshack device (2
>meteramp Transeiver etc) if you find a part that matchs your needs call
>RSparts at 1-800-the-shack. Tell them you need that part! Inside the
>little 2 meter amp are 3 variablecap. I know 1 of them is a 10-50 pf
>unit. It'll set you back a cool $1.99....Good luck!

To reply to this message, you MUST IGNORE my shown address.
It is there to fool annoying unsolicited e-mail advertising robots!
Send replies ONLY to: bry AT mnsinc DAWT com
For some GREAT Messianic Jewish resources on the Web, VISIT:
http://www.mnsinc.com/bry/mjlynx.htm

4448. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: no.spam@no.ads
Message-ID: <335f4b2a.7572399@news.mnsinc.com>
Source record: 94617
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

On Tue, 22 Apr 1997 10:41:55 +0100, philip de cadenet
<phil@two-way.demon.co.uk> wrote:

>Can some kind soul point me to the contact information for a
>manufacturer of 5nf & 10nf high quality compression trimmers.
>These are for a 160m mosfet tx design that I am working on, please help.
>An e-mail direct would be greatly appreciated: phil@two-way.demon.co.uk
>
>Thanks
>
>Phil de G4ZOW.
>So many toys,
>So little time and so little money!

Phil - I was surprised (and disappointed!) at all of the responses to
this request!

Where is Birkett and AJH in Rugby?

I would like ADDRESSES and PHONE NUMBERS for these two if they sell
such trimmers!!

Also - if you want a good long list of parts suppliers that may have
them, try this:

http://www.mnsinc.com/bry/hamfiles.htm

and click on PARTS

All the very best - Brian, AF4K / G3XLQ

To reply to this message, you MUST IGNORE my shown address.
It is there to fool annoying unsolicited e-mail advertising robots!
Send replies ONLY to: bry AT mnsinc DAWT com
For some GREAT Messianic Jewish resources on the Web, VISIT:
http://www.mnsinc.com/bry/mjlynx.htm

4449. Homebrew information added to webpage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <335f30f5.0@cheese.pcug.org.au>
Source record: 94618

Those wanting to build a QRP transmitter or transceiver may wish to have a look at sections of the Australian QRP Home Page and Novice Notes Online.

The following are just some of the topics covered:-

* VFO, VXO or crystal control in homebrew rigs?
* What is a reasonable output power for success on HF?
* CW, AM, DSB or SSB?
* Portable operating
* Ten secrets of QRP success
* Converting AM broadcast receivers to 160 metres (link)

Plus other material to interest the experimenter, the QRPer and the beginner to amateur radio. Simply click on the URL below to find out more.

73,

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

4450. Looking for WB3JBG, KA5JVU, and KC5NG QSL cards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: k5dh@qsl.net
Message-ID: <5jnl3v$m5i@sf18.dseg.ti.com>
Source record: 94619
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This is way off-topic, and I'm sorry for that, but here goes...

I'm looking for examples of my old QSL cards. Like a dummy, over the years I did not save examples of most of my cards. I want to put up a framed display of one of each of my cards in my hamshack, but I do not have them all. Actually, I can't even remember what some of them looked like.

I do NOT need these:
- WB3JBG card with tower/beam on front (my first QSL from 1977)
- KC5NG card with farm/barn/horses on front

I know one card was a promo from RCA, with a painting on the front side that depicted some sort of communications satellite, and my call would have been hand-written along the right-hand side of the front of the card. I only ever had 100 of these, so this one may be hard to locate.

I also used some temporary U-fill-in cards when I first moved from Delaware to Texas. These will also be very hard to find.

All of the other cards were bought from regular QSL vendors.

If you have one of my old cards that you'd be willing to part with, and the front side is in mint or near-mint condition, please email me and I'll make arrangements to get the card(s) from you.

Thanks very much and 73!

--
Dean W. Hemphill, K5DH Email: k5dh@qsl.net
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033

4451. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Jim N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <335F5990.6291@worldnet.att.net>
Source record: 94620
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

Brian Carling wrote:
>
> Oh yes, I am SURE he is going to find trimmers for a 160m transmitter
> inside a Radio Shack 2 meter rig - NOT!!
>
> On Wed, 23 Apr 1997 08:49:02 -0400, Jim N8XYN
> <jim.N8XYN@worldnet.att.net> wrote:
>
> >philip de cadenet wrote:
> >>
> >> Can some kind soul point me to the contact information for a
> >> manufacturer of 5nf & 10nf high quality compression trimmers.
> >> These are for a 160m mosfet tx design that I am working on, please help.
> >> An e-mail direct would be greatly appreciated: phil@two-way.demon.co.uk
> >>
> >> Thanks
> >>
> >> Phil de G4ZOW.
> >> So many toys,
> >> So little time and so little money!
> > >
> > >
> > >I've found this trick very useful. Look inside any radioshack device (2
> > >meteramp Transeiver etc) if you find a part that matchs your needs call
> > >RSparts at 1-800-the-shack. Tell them you need that part! Inside the
> > >little 2 meter amp are 3 variablecap. I know 1 of them is a 10-50 pf
> > >unit. It'll set you back a cool $1.99....Good luck!
>
> To reply to this message, you MUST IGNORE my shown address.
> It is there to fool annoying unsolicited e-mail advertising robots!
> Send replies ONLY to: bry AT mnsinc DAWT com
> For some GREAT Messianic Jewish resources on the Web, VISIT:
> http://www.mnsinc.com/bry/mjlynx.htm

Excuse me but he is LOOKING for 5 to 10 Nf caps...pretty small values
huh? Just so happens that small components like that do exist in 2
meter equipment! And also 160 meter stuff.....

4452. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: George Gonzalez <grg@umn.edu>
Message-ID: <01bc50b5$405ef980$90865486@grgdell.umn.edu>
Source record: 94621
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

Jim N8XYN <jim.N8XYN@worldnet.att.net> wrote in article
<335F5990.6291@worldnet.att.net>...
> Brian Carling wrote:

>
> Excuse me but he is LOOKING for 5 to 10 Nf caps...pretty small values
> huh? Just so happens that small components like that do exist in 2
> meter equipment! And also 160 meter stuff.....
>

Note that is 5 to 10 nf "nanofarads" not pf "picofarads". That's 5,000 to
10,000 pf,
where common trimmers are 5 to 100pf. A 2-meter rig is unlikely to have a
5,000pf
trimmer. I misread this too the first time.

4453. Re: Would you like some extra money?? - projects

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Bill Schaller <schalleb@mayo.edu>
Message-ID: <335F674E.7224@mayo.edu>
Source record: 94622

At first I couldn't see the connection between your note and
rec.radio.amateur.homebrew, but I guess I just wasn't thinking.

This isn't about money, its about getting more projects to work on!
Each of us has one or 2 projects that went sour, and is just sitting
on the shelf! Mine is a 2 meter receiver. It works sort of, but the
frontend is lousy, and it is impossible to tune due to a 1 turn pot
and a poor power regulation unit. Things improved somewhat when I
put it in a box, but it still isn't usable.

SO What's on your shelf??

ras7000@rit.edu wrote:
>
> Name: Cash
> Part 1 Type: Macintosh File
> Encoding: 7bit
>
> ----------
> Would you like some extra MONEY???
>
> A little while back, I was browsing thru newsgroups, just like you
> are now, and came across an article similar to this that said you
> could make thousands of dollars within weeks with only an initial investment of $5.00! So, I thought, &#65533;Yeah, right, this must be a
> scam,&#65533; like most of us, but I was curious, like most of us, so I
> kept reading. Anyway, it said that you send $1.00 to each of the 5
> names and addresses stated in the article. You then place your own
> name and address in the bottom of

....
--
Oooo.
Bill .oooO ( )
Schaller ( )) / Try
N0PUJ \ ((_/ Walking
schaller.william@mayo.edu _)

4454. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <335f6f4e.8331895@news.atl.bellsouth.net>
Source record: 94623
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 23 Apr 1997 01:00:45 GMT, jeffreyh@Hawaii.Edu (Jeffrey Herman) wrote:

>Marty Albert <marty@trucom.com> wrote:
>>Willard Flagg <flagg@TFF.Com>
>
>>>I don't see a rec.radio.amateur.swap. I do see a rec.radio.swap and a
>>>rec.ham-radio.swap. Perhaps others don't get the sub-group either.
>
>>rec.radio.amateur.swap has been around for well over a year now.
>>Sounds like your ISP is falling down on the job of getting new groups
>>added.
>
>Actually Marty, it sounds more like your ISP falls for every bogus news-
>group that's created outside of the recognized and accepted procedure.
>There was no Call For Discussion, nor was there a Call For Votes, and
>there was no posting of any r.r.a.swap charter. Thus, it's bogus and
>will eventually be cancelled.

Jeff's right (for once), rec.radio.amateur.swap is a bogus group. And any and all rec.ham-radio.* groups are bogus as well. They were replaced by the rec.radio.amateur.* groups in the grand renaming. And there is no rec.radio.amateur.packet group either. I've seen that as a bogus group on some ISP servers, but it, like the rec.radio.amateur.swap group, is the result of some sysop doing an illegitimate group creation. All Big Eight hierarchies have an established process for creating groups. None of these bogus groups have passed through that process. But if someone wants to do it legitimately, I'd vote for the creation of an amateur swap group, and for a packet group under the digital hierarchy too.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4455. Best Active Antenna Design under 25$

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: rnewell@vcn.bc.ca
Message-ID: <5jnudj$ldo@milo.vcn.bc.ca>
Source record: 94624
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Check out its Web Page:

http://espresso.ts.uvic.ca

--
Robert Colin Newell--Victoria--BC Canada
http://www.octonet.com/~coffee
The Coffee Expert's Web Page and Caffeine Database

4456. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: waddco@phoenix.net
Message-ID: <waddco.185.0027C000@phoenix.net>
Source record: 94625
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

In article <335ECD80.1BE3@best.com> Ed Legenza AA6NI <atued@best.com> writes:
>From: Ed Legenza AA6NI <atued@best.com>
>Subject: Re: Stick a fork in ham radio
>Date: Wed, 23 Apr 1997 20:03:28 -0700

>JoeDWadd wrote:
>>
>> In article <01bc4d34$e5319000$0fa42399@94387684762264> "Pom E Granate"
<seno417b@themall.net> writes:
>> >From: "Pom E Granate" <seno417b@themall.net>
>> >Subject: Re: Stick a fork in ham radio
>> >Date: 20 Apr 1997 02:42:01 GMT
>>
>> >...perhaps better to stick a fork in "ham radio" instead of
>> >the ham operator. Just got back from a hamfest (my 3rd)
>> >and I've never seen more overweight, slopply dressed, chain
>> >smoking greezeballs in any one place. My guess is that if
>> >you stuck a fork in a few of the ones I saw this day, they'd
>> >likely fly off into the air like an un-corked party balloon.
>> >(SFX follows, imagine : Plink-Ponk! PPPFHHBLTTTTTT!!!!!!)
>>
>> >Sorry guys, I't's only my 3rd visit to a hamfest, and it was
>> >just as scary as visits # 1 and # 2. Some real space-cases
>> >were there too....Oy!
>>
>> >PomEGranate
>> fits me to a tee.joez@k5zcx

>Ah yes....but did you take the time to check his thermometer...if that
>ham was already done....then sticking a fork in him would not cause a
>release of air. Everybody know that only under done hams elicit air.

>Oh, and some outsiders are just full of it!!!
ckeck out the July hamfest at texas city,tx all us porkers
will be dripping, coff'n, fart'n and wheez'n. Scammers galore
will be tring to sell worthless junk to unsuspecting piglets.
vendors will be offer'n goods at prices well over retail.
but as a hole the people are nice introverts like most hams.

4457. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: free <free@space.net>
Message-ID: <335F9CA0.6A1B@space.net>
Source record: 94626
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

Ed Legenza AA6NI wrote:
>
> JoeDWadd wrote:
> >
> > In article <01bc4d34$e5319000$0fa42399@94387684762264> "Pom E Granate"
<seno417b@themall.net> writes:
> > >From: "Pom E Granate" <seno417b@themall.net>
> > >Subject: Re: Stick a fork in ham radio
> > >Date: 20 Apr 1997 02:42:01 GMT
> >
> > >...perhaps better to stick a fork in "ham radio" instead of
> > >the ham operator. Just got back from a hamfest (my 3rd)
> > >and I've never seen more overweight, sloppily dressed, chain
> > >smoking greezeballs in any one place. My guess is that if
> > >you stuck a fork in a few of the ones I saw this day, they'd
> > >likely fly off into the air like an un-corked party balloon.
> > >(SFX follows, imagine : Plink-Ponk! PPPFHHBLTTTTTT!!!!!!)
> >
> > >Sorry guys, I't's only my 3rd visit to a hamfest, and it was
> > >just as scary as visits # 1 and # 2. Some real space-cases
> > >were there too....Oy!
> >
> > >PomEGranate
> > fits me to a tee.joez@k5zcx
>
> Ah yes....but did you take the time to check his thermometer...if that
> ham was already done....then sticking a fork in him would not cause a
> release of air. Everybody know that only under done hams elicit air.
>
> Oh, and some observers are just telling it like it is!!!

The ham defined:

The H stands for "Huh!"..you know..Huh?..I didn't copy that
last..Huh?..oh..CQ..who?
The A stands for "Aye!...you know..aye...good buddies..let's act like
morons on 40meters
The M stands for "Moron!.you know..Huh?..Aye moron yall going to hamfest
so we can rip off some unsuspecting newbie?..you know.
.HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..H
AMMER..HAMMER..HAMMER..HAMMER..HAMMERHAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMME
R..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER

4458. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: mjsilva@ix.netcom.com
Message-ID: <5jo2c2$foe@dfw-ixnews10.ix.netcom.com>
Source record: 94627
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

In <335F5990.6291@worldnet.att.net> Jim N8XYN
<jim.N8XYN@worldnet.att.net> writes:

>Excuse me but he is LOOKING for 5 to 10 Nf caps...pretty small values
>huh? Just so happens that small components like that do exist in 2
>meter equipment! And also 160 meter stuff.....

I've never seen compression trimmers as big as 10,000 pF, which is of course not to say they're not available. 10,000 pF has a reactance of about 0.1 ohms at 2 meters, so it's unlikely to be found in such equipment.

73,
Mike, KK6GM

4459. Re: Power Antenuator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <335FB62A.4295@qsl.net>
Source record: 94628

Check out my home page. I have some info on homebrew
attenuators.

Remember evaluate the power through each stage. NEVER
begin with the HIGHEST ATTENUATION at the output of your
amp. I.E. 100W AMP needs 1 Watt output. a 2 watt
20 DB atten. will absorb 99 watts. (Until it blew!)

Youll need probably a 3dB 50 watt, Another 3dB 25Watt,
and 10 dB 25 Watt. to get down to 2.5 watts output.

Above just an example.
73
-Ed Loranger
--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee (First and Last callsign!)
OHR-100, Pixie2, Johnson Viking II w/VFO.
mailto:we6w@qsl.net QRP-L member #1068.
http://www.qsl.net/we6w

4460. Re: Panel Lettering: Datak or laser lettering?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Bob Hutson <bhutson@wchat.on.ca>
Message-ID: <335F89C4.2E95@wchat.on.ca>
Source record: 94629

This sounds like the samestuff I call Lettroset.
It's OK for very small projects... but when you
have to put several lines of the stuff on,
the second and third lines mess up the first.
Also.. when you have the letters on, be sure to
spray on some kind of clear layer to stop them from
being scratched or smudged.
Bob

4461. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: shoppa@alph02.triumf.ca
Message-ID: <5joed0$3sq$1@nntp.ucs.ubc.ca>
Source record: 94630
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <33602AE8.4BD5@sn.no>, Svein Henriksen <la3pu@sn.no> wrote:
>Does anyone know of a pin (socket) compatible replacement for the 6146
>tube and eventually where it is available?. There is supposed to be a
>more rugged version of a different type denomination.
>Any information would be appreciated.

6146A's, 6146B's, and 6146W's are still available. The characteristics
of each are slightly different and will probably require reneutralization,
assuming that the application you're using them in is a RF power amp.

Tim.

4462. Looking for WB3JBG, KA5JVU, and KC5NG QSL cards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: k5dh@qsl.net
Message-ID: <5joi4p$btc@sf18.dseg.ti.com>
Source record: 94631
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This is way off-topic, and I'm sorry for that, but here goes...

I'm looking for examples of my old QSL cards. Like a dummy, over the years I did not save examples of most of my cards. I want to put up a framed display of one of each of my cards in my hamshack, but I do not have them all. Actually, I can't even remember what some of them looked like.

I do NOT need these:
- WB3JBG card with tower/beam on front (my first QSL from 1977)
- KC5NG card that was a promo from RCA with satellite on front
- KC5NG card with farm/barn/horses on front

I also used some temporary U-fill-in cards when I first moved from Delaware to Texas. These will also be very hard to find.

All of the other cards were bought from regular QSL vendors.

If you have one of my old cards that you'd be willing to part with, and the front side is in mint or near-mint condition, please email me and I'll make arrangements to get the card(s) from you.

Thanks very much and 73!

--
Dean W. Hemphill, K5DH Email: k5dh@qsl.net
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033

4463. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: shearer@pluto.njcc.com
Message-ID: <335FCE46.3AFD@pluto.njcc.com>
Source record: 94632

<snip>
> > I don't know about silver oxide, but the black stuff on exposed silver is
> > more likely to be silver sulfide. Its resistivity is about 2 mohm-m, or
> > about 100,000 times as resistive as copper. A thin coating of this probably
> > wouldn't adversely affect a conductor carrying RF, but you wouldn't want it
> > as a surface film on contacts carrying zero or very low current. That's why
> > low-current contacts on quality switches and connectors are gold, not
> > silver. (Contacts carrying considerable current clean themselves by burning
> > through the surface layer.)<snip>
> As I recall, silver sulfide is pretty soft and a good banger of a relay
> can clean itself. At least we are not using aluminum contacts :-)<snip>

"at least we are not using aluminum contacts"?
i, for one, do not understand the reference...
i do know that aluminum is not recommended for wiring due to
the potential of a fire hazard as the aluminum might ignite.
is the reference to aluminum contacts with regard to this???
would anyone care to elaborate on why aluminum is not used?

4464. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Jim N8XYN <jim.N8XYN@worldnet.att.net>
Message-ID: <335F9910.594A@worldnet.att.net>
Source record: 94633
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

michael silva wrote:
>
> In <335F5990.6291@worldnet.att.net> Jim N8XYN
> <jim.N8XYN@worldnet.att.net> writes:
>
> >Excuse me but he is LOOKING for 5 to 10 Nf caps...pretty small values
> >huh? Just so happens that small components like that do exist in 2
> >meter equipment! And also 160 meter stuff.....
>
> I've never seen compression trimmers as big as 10,000 pF, which is of
> course not to say they're not available. 10,000 pF has a reactance of
> about 0.1 ohms at 2 meters, so it's unlikely to be found in such
> equipment.
>
> 73,
> Mike, KK6GM

Sorry, at this point I wish to retract my previous statement!

4465. 6146B Valves.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: DENNIS <dennisg@netactive.co.za>
Message-ID: <01bc50da$af45a180$LocalHost@dennisg>
Source record: 94634
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Hi there,

OM Johan ZS4KB is looking for two (2) x 6146B Finals valves for a project
he is busy with. Can you help?

Contact him at 27 57 3531600 [057 3531600] or vis packet radio to
ZS4KB@ZS0BFFN.OFS.ZAF.AF

--
73
Dennis ZS4BS

4466. Re: Transformers and secondary voltages in DC power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5jp0hr$lig@mtinsc05.worldnet.att.net>
Source record: 94635

Given your requirements, I think you are at about the proper AC
voltage. The absolute AC requirements will (also) depend on the
transformer secondary resistance - how much drop under how much load.?.
Also will depend on the amount (value) of filter capacitor. More filter
capacitor will permit lower input voltage - to a point. If the
capacitor value is very high and the transformer secondary resistance is
low, beware of turn-on surge currents (check you diode surge ratings).
A slow turn-on circuit is sometimes needed.

Woody, WB4QXE

Andrea Grillini wrote:
>
> I'm assembling a power supply to be used with my radio sets (typical output
> voltage: 13.8 volts). Since the transformer I've got had a too high
> secondary voltage (around 24 volts), it was worthwhile unwinding and
> removing some turns from the secondary winding to have a smaller voltage
> drop on the regulator, and hence a smaller power dissipation on it (at the
> moment I'm using a LM338; maybe I'll try a combination of a LM317 with a
> couple of MJ4502). Here comes te problem: what's the best value I can choose
> for the secondary voltage , assuming that I would like to be able to
> increase occasionally the DC output voltage up to 15 volts?
<snip>
no load is connected to the DC output of the supply and about 18 volts
AC
> when a load draws from the supply a current of 3-4 ampere. I'd like to
> reduce it further, to reduce the heating of the power stage, but I <snip>
> 73 de IK0RNT

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

4467. help on homebrew cavity filter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: putra000@uwp.edu
Message-ID: <5jo9nn$3u4$1@news.inc.net>
Source record: 94636

Hi!

I am looking for help in setting up a homebrew 2meter repeater. the main problem I am having is one of isolation. Attempted to build a cavity filter, but at last hamfest I picked up a set of 2 for like $15! I have been able to tune them both as a 'reject' notch? filter for the receiver on the transmitter's frequency.
My problem: I have been unable to find any or VERY FEW references for helping me 1. tune the cavities, 2. build the cavities, and 3. Possibly use them as a duplexer.3. although it mentions that by adding capacitance or inductance you can modify the reject or pass, the handbook makes no mention of the proper values.
Looking in an older handbook, it mentions something about a 'hybrid ring' design, that uses specific lengths of coax to accomplish isolation. However, when looking at a more recent, 1996 handbook, there is NO mention of a hybrid ring design... Am I to assume that the measurements are from tip-to-tip of the two PL-259's, or is it only to the connector???
I amlooking for a place to go for help on the
theory, and getting it to work properly. If you know anything about this, or would be able to point me in the right direction for sources, please help!!

Thanks!
-John

putra000@uwp.edu
--

4468. WTB: Millen/Johnson Turns-Count Dials

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Phil Clements <philk5pc@connect.net>
Message-ID: <335FFA4A.23C0@connect.net>
Source record: 94637

I need James Millen or E.F. Johnson turns-count dials for
a project. Any leads on sources appreciated!

(((73)))
Phil, K5PC

4469. Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Svein Henriksen <la3pu@sn.no>
Message-ID: <33602AE8.4BD5@sn.no>
Source record: 94638
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Does anyone know of a pin (socket) compatible replacement for the 6146 tube and eventually where it is available?. There is supposed to be a more rugged version of a different type denomination.
Any information would be appreciated.

73 de Svein
la3pu@sn.no

4470. Crystal detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: "Henrik N. Larsen" <hlarsen@post4.tele.dk>
Message-ID: <335FAD11.2517@post4.tele.dk>
Source record: 94639

Hi

I am about to make a test between a new germanium diode and a "old" crystaldetector. I have some galena, which I know could be used for the crystal detector, but how do I finish the detector: how shall I connect the 2 wires to the galena, and what sort of wires shall I use?

I want to make a diode-characteristic on the crystal detector. Does anyone have and idea how it would look like (so I have someting to "aim" for)

Hope YOU can help me :-)

Sincerely
Henrik Larsen
email: hlarsen@post4.tele.dk

4471. Re: Help Homebrew Supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Vincent Buccellato <WA2RSX@worldnet.att.net>
Message-ID: <335FB5EC.32FE@worldnet.att.net>
Source record: 94640

If I recall correctly, the idle curren on my SWAN350 (6hf5's as final)
required the bias setting for an idle current of 50mA. Voice peaks
should not be greater than 175ma, when fully loaded to 500mA Ip.

I have the manual here if you are in need of further information, OM.

73s,
Vince

jfolk@dido.com wrote:
>
> I have a Swan350 homebrew supply with adjustable
> Bias.I need info on tune up of this with rig
> as far as the cathode current goes or any information
> regarding this setup.
> Thanks. You can send any info to jfolk@dido.com
>
> ---------------------==== Posted via Deja News ====-----------------------
> http://www.dejanews.com/ Search, Read, Post to Usenet

4472. Transformers and secondary voltages in DC power supplies

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: ik0rnt@quipo.IT
Message-ID: <1.5.4.32.19970424203629.008fc354@quipo.it>
Source record: 94641

I'm assembling a power supply to be used with my radio sets (typical output voltage: 13.8 volts). Since the transformer I've got had a too high secondary voltage (around 24 volts), it was worthwhile unwinding and removing some turns from the secondary winding to have a smaller voltage drop on the regulator, and hence a smaller power dissipation on it (at the moment I'm using a LM338; maybe I'll try a combination of a LM317 with a couple of MJ4502). Here comes te problem: what's the best value I can choose for the secondary voltage , assuming that I would like to be able to increase occasionally the DC output voltage up to 15 volts?
Of course, I've to take into account the voltage drop across the diodes of the bridge rectifier (0.7*2 volts=1.4 volts, if not little more; that depends on the voltage drop across the single diode) and the oscillations of the AC line voltage around the 220 volts mean value (I've realized that at home I've about 230 volts AC on the sockets, but I guess that in some other place of my city, which is Rome, there could be also 210 volts AC, and I would like the power supply to be usable everywhere). Is that really all?

At the moment the secondary voltage of the transformer is about 19 V AC when no load is connected to the DC output of the supply and about 18 volts AC when a load draws from the supply a current of 3-4 ampere. I'd like to reduce it further, to reduce the heating of the power stage, but I don't wanna risk to have to wind again the removed turns, whether something doesn't work.

Mostly, the question arises because I guess there could be something about DC power supplies I don't know yet. Is there anybody who can tell me, knowing more about this subject, how to make the best choice?

Excuse me for the lenght.

73 de IK0RNT

4473. 5 Watt Press

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: Doug Wetzel <dwetzel@earthlink.net>
Message-ID: <01bc50f3$19ef00e0$4928d796@DOUGWE.wrq.com>
Source record: 94642

Anyone know the current whereabouts of 5 Watt Press?

I ordered a book from them months ago, and have no book, and they have not cashed my check. I'd really love to get the book - and be able to balance my account!

Thanks..

Doug
K7IP

4474. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-24 00:00:00 UTC
From: zateslo@quartz.gly.fsu.edu
Message-ID: <5jnqeo$7kk@quartz.gly.fsu.edu>
Source record: 94643
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

In article <335F5990.6291@worldnet.att.net>,
Jim N8XYN <jim.N8XYN@worldnet.att.net> wrote:
>Brian Carling wrote:
>>
>> Oh yes, I am SURE he is going to find trimmers for a 160m transmitter
>> inside a Radio Shack 2 meter rig - NOT!!
>>
>
>Excuse me but he is LOOKING for 5 to 10 Nf caps...pretty small values
>huh? Just so happens that small components like that do exist in 2
>meter equipment! And also 160 meter stuff.....

Jim, I think you misread the sizes. 5 nF is 5000 pF, or .005 uF. It's
hard to find full-size variable caps that big, let alone trimmers. I
suspect the original poster will have to redesign his transmitter.

Ted Zateslo, W1XO

4475. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: anthonys@ix.netcom.com
Message-ID: <5jpl7e$6q@dfw-ixnews8.ix.netcom.com>
Source record: 94551

In <335FCE46.3AFD@pluto.njcc.com> shearer@pluto.njcc.com writes:
>
><snip>
>> > I don't know about silver oxide, but the black stuff on exposed
silver is
>> > more likely to be silver sulfide. Its resistivity is about 2
mohm-m, or
>> > about 100,000 times as resistive as copper. A thin coating of this
probably
>> > wouldn't adversely affect a conductor carrying RF, but you
wouldn't want it
>> > as a surface film on contacts carrying zero or very low current.
That's why
>> > low-current contacts on quality switches and connectors are gold,
not
>> > silver. (Contacts carrying considerable current clean themselves
by burning
>> > through the surface layer.)<snip>
>> As I recall, silver sulfide is pretty soft and a good banger of a
relay
>> can clean itself. At least we are not using aluminum contacts
:-)<snip>
>
>"at least we are not using aluminum contacts"?
>i, for one, do not understand the reference...
>i do know that aluminum is not recommended for wiring due to
>the potential of a fire hazard as the aluminum might ignite.
>is the reference to aluminum contacts with regard to this???
> would anyone care to elaborate on why aluminum is not used?

Sure. "Think" dis-similar metals in contact with a current
gradient. Electrolysis results.

4476. 26.995

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: luuk@hotmail.com
Message-ID: <33607a9b.9016373@news>
Source record: 94552

hi

Is 26.995MHz a open freq. in Australia or is a licance needed????

need to know!!!

luuk

4477. REPEATER MAILING LIST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: Major Domo Daemon <majordom@jerrys.rogerswave.ca>
Message-ID: <5jph1b$35j@news.bc>
Source record: 94553

```
******************************
* REPEATER Mailing List *
******************************

This is a mailing list for exchanging ideas and information about any
Repeater and Repeater Controllers (HAM or COMMERCIAL).

If your interested in Repeaters and/or Controllers and would like to
be added to the REPEATER Mailing List, send an email message to:

To: repeater-request@jerrys.rogerswave.ca
Subject: (leave this blank)

subscribe
```

4478. Source for Curtis 8044ABM Keyer Chips

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: bejones@hursley.ibm.com
Message-ID: <33605b8a.651981@hurnews.hursley.ibm.com>
Source record: 94554

Mouser no longer stock this chip. I have found a UK source but I will probably save a few hard earned pounds (dollars) if I get a couple on my next US visit in a few weeks.

Anyone know of any stockists.

Tnx - Brian G0UKB & KB8YKJ

4479. Valve equivalents please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: john@moyle.demon.co.uk
Message-ID: <861958618.17698.0@moyle.demon.co.uk>
Source record: 94555

I'm going back to valves!
Can anyone tell me the "minature" equivalants of 6V6, 6L6, 6SK7
Many thanks
73
John Moyle

4480. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: Bob Lewis <rlewis@staffnet.com>
Message-ID: <3360941D.649D@staffnet.com>
Source record: 94556

Steve Carlisle wrote:
>
> Would someone please explain the differance between the two types and
> the applications for use. Can the AC type be used for DC power
> supplys.
> Steve Carlisle VE7AHL

"AC" electrolytic capacitors are not polarity sensitive like the normal electrolytic. The most common use is motor-start capacitors such as you may find in a rotor control box. As I recall, you can substitute two normal electrolytics back-to-back (at double the needed capacitance) for an "AC" electrolytic. There should be no reason you couldn't use an "AC" type in a normal DC circuit.

4481. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5jp27s$e07@news.teleplex.net>
Source record: 94557
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

In article <335F9910.594A@worldnet.att.net>, jim.N8XYN@worldnet.att.net says...
>
>michael silva wrote:
>>
>> In <335F5990.6291@worldnet.att.net> Jim N8XYN
>> <jim.N8XYN@worldnet.att.net> writes:
>>
>> >Excuse me but he is LOOKING for 5 to 10 Nf caps...pretty small values
>> >huh? Just so happens that small components like that do exist in 2
>> >meter equipment! And also 160 meter stuff.....
>>
>> I've never seen compression trimmers as big as 10,000 pF, which is of
>> course not to say they're not available. 10,000 pF has a reactance of
>> about 0.1 ohms at 2 meters, so it's unlikely to be found in such
>> equipment.
>>
>> 73,
>> Mike, KK6GM
>
>Sorry, at this point I wish to retract my previous statement!

Go with an ARCO 466 or 467 and pad it with parallel silver micas. It will take some experimenting. The largest mica compression caps I have ever seen were 2700pf and had a 1/8" tuning shaft. Danny Stevig had them a few years ago.

Pat Bunn
N4LTA

4482. Need Extender Board for Heathkit SB-104

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <5jq9hs$q38@news.asu.edu>
Source record: 94558

Does anyone have an Extender board for a Heathkit SB104? A friend of mine was given a partially completed 104 and has it finished but needs the extender to do the alignment. Heathkit part number is 85-1465. Thank you.

George in Phoenix

--

4483. Re: Valve equivalents please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: mjsilva@ix.netcom.com
Message-ID: <5jqbtr$k4t@dfw-ixnews11.ix.netcom.com>
Source record: 94559

In <861958618.17698.0@moyle.demon.co.uk> john@moyle.demon.co.uk writes:

>
>I'm going back to valves!
>Can anyone tell me the "minature" equivalants of 6V6, 6L6, 6SK7
>Many thanks

The 6V6 was "reborn" as the 6AQ5. The 6L6 is too large to have been squeezed into a miniature form. The 6SK7 never had a mini version, but the same function (variable mu pentode) was performed by the 6BA6 (actually a mini 6SG7).

Come join the "glowbugs" mailing list and talk tubes (ahem, valves) all you like. Subscribe via majordomo@www.atl.org. See you there.

73,
Mike, KK6GM

4484. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <3360B10A.1CAA@rcru.rl.ac.uk>
Source record: 94560

Dave Potter wrote:

> > Thanks Markus
>
> Your friend needs to know that what he wants to do is illegal.
>
> Dave
> K1MBO

No it is not. At least not in the UK so don't generalise.
So long as the transmitted power is less than a regulation threshold
and he sticks to appropriate bands the pets never leave the house and
the transmitters are off when he is out.

Of course he needs an amateur license.

A better plan is to go any buy a device for the purpose using the
frequency band allocated.

To make one, don't use a 2m crystal. Use a crystal around 48 MHz
with a transistor oscillator and an output circuit tuned to the 3rd
harmonic. There is a circuit in the ARRL handbook in the Oscillators
section.

4485. FS: Yaesu FT-747GX - $500

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: kf4kjf@post1.com
Message-ID: <3361bfed.8415245@news.icanect.net>
Source record: 94561
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi All,

I have a Yaesu FT-747GX to sell. Covers .5-30 mz, all-mode AM,CW,SSB, and FM with optional accessory. Its "as new" in the box not a single mark on it. I would like to get $500.

BTW- I just got a old issue of CQ (1992) and there is a remote mounting mobile kit one can get for the FT-747GX.

.-.
/ \ .-. .-.
/ \ / \ .-. / \
/_Benjamin_Blavat_KF4KJF_kfkjf@post1.com
\ / \ / \ / \ /
\ / `-' `-' \ /
`-' `-'

4486. FREE: remains of a Heath SB-102 (please read)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: k5dh@qsl.net
Message-ID: <5jq8j8$r9r@sf18.dseg.ti.com>
Source record: 94562
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have the "mortal remains" of a stripped-out Heathkit SB-102
sitting in my hamshack, taking up valuable space. It has been
heavily stripped, but there are a LOT of good parts left for
the Heath repairer/restorer.

THE FOLLOWING PARTS ARE ALREADY GONE:

Cabinet and front panel
panel meter (face was broken anyway)
LMO unit
main VFO dial (was shattered anyway)
all knobs
all tubes
PA tune/load caps
PA tank coil
both relays
driver tune caps
many of the tube sockets
power supply connector
RCA jacks
drive belts (weren't any good anyway)
some crystals
CW filter
random small parts

There are still LOTS of small parts, including the coil-pack boards,
some of the crystals (I don't recall which ones), etc.

I will give this away for free to someone who needs it. Maybe you
can trade me something that I need some day. First person to request
it, gets it. You pay the shipping charges via UPS.

--
Dean W. Hemphill, K5DH Email: k5dh@qsl.net
211 Addison Place
PO Box 328 Home: (817) 497-5365
Lake Dallas, Texas 75065-0328 Work: (972) 462-2033

4487. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: Dave Potter <dpotter@bbn.com>
Message-ID: <3360A988.753@bbn.com>
Source record: 94563

Markus Baertschi wrote:
>
> A friend of mine is looking for instructions to build a small
> 2m transmitter. The transmitter should be as small as possible
> and use the leas power possible. He would like to attach it
> to the collar of his cat and dog and e able to follow them
> around with a mobile 2m receiver.
>
> Has somebody a source for suitable schematics ?
>
> I thought of an quartz-controlled oscillator and a cmos
> circuit turning it on for 1s every 3-4s. But i don't know
> were to find a quartz of the correct frequency (2m HAM band).
>
> Thanks Markus

Your friend needs to know that what he wants to do is illegal.

Dave
K1MBO

4488. Re: FREE: remains of a Heath SB-102 -- GONE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: k5dh@qsl.net
Message-ID: <5jqkff$a3e@sf18.dseg.ti.com>
Source record: 94564
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

The free SB-102 carcass has been spoken for. Thanks!

4489. Hi power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: Svein Henriksen <la3pu@sn.no>
Message-ID: <336171B0.6566@sn.no>
Source record: 94565
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

I am in need of a hi power shorting bandswitch. Need on wafer with 9 positions. The amplifier gives a theoretical maximum of 1800 watts and covers 160 to 10m. Does anyone have one to sell or know where one can be bought ??
Any information would be highly appreciated.

73 de Svein
la3pu@sn.no

4490. UHF oscillators - high stability

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: Greg Becker <na2n@ifam.com>
Message-ID: <33610F72.2F38@ifam.com>
Source record: 94566

I need to design/build/nick/steal :) a design for a high-stability phase-modulated oscillator (<5ppm) in the 400 mHz range. Physical size is important, and I expect to have to use a crystal oven. Questions:

1) Who in the U.S. makes crystal ovens, or temperature-compensated crystal assemblies?

2) Anyone MAKE high-stability oscillators like this in the U.S.?

3) Any suggestions?

4) Anyone out there a real cool competent digital RF design engineer who might be interested in undertaking this project?

Specs available upon request. Please reply via email, not to the newsgroup. Thanks & 73,
--
Greg Becker NA2N na2n@ifam.com
FFII/EMT, Safety Officer, Milan Vol FD / Rescue Squad
Ideas For American Manufacturers / Rock Temple Entertainment

4491. Re: desperate for 5nanofarad compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: LA8AK <la8ak@online.no>
Message-ID: <33612827.7B87@online.no>
Source record: 94567
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Steve!
have you ever tried to use multiple smaller value capacitors in
paralell?
In 2m and 6m power amplifiers I used 3-5x 100pF and varyed the value by
removing or increasing the amount of capacitors, I have also applied
this
for 80m QRP transmitter
--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4492. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: daveaa1a@ssih.com
Message-ID: <5jr1lk$gpo@usenet85.supernews.com>
Source record: 94568

> free <free@space.net> writes:
> Ed Legenza AA6NI wrote:
> >
> > JoeDWadd wrote:
> > >
> > > In article <01bc4d34$e5319000$0fa42399@94387684762264> "Pom E Granate"
<seno417b@themall.net> writes:
> > > >From: "Pom E Granate" <seno417b@themall.net>
> > > >Subject: Re: Stick a fork in ham radio
> > > >Date: 20 Apr 1997 02:42:01 GMT
> > >
> > > >...perhaps better to stick a fork in "ham radio" instead of
> > > >the ham operator. Just got back from a hamfest (my 3rd)
> > > >and I've never seen more overweight, slopply dressed, chain
> > > >smoking greezeballs in any one place. My guess is that if
> > > >you stuck a fork in a few of the ones I saw this day, they'd
> > > >likely fly off into the air like an un-corked party balloon.
> > > >(SFX follows, imagine : Plink-Ponk! PPPFHHBLTTTTTT!!!!!!)
> > >
> > > >Sorry guys, I't's only my 3rd visit to a hamfest, and it was
> > > >just as scary as visits # 1 and # 2. Some real space-cases
> > > >were there too....Oy!
> > >
> > > >PomEGranate
> > > fits me to a tee.joez@k5zcx
> >
> > Ah yes....but did you take the time to check his thermometer...if that
> > ham was already done....then sticking a fork in him would not cause a
> > release of air. Everybody know that only under done hams elicit air.
> >
> > Oh, and some observers are just telling it like it is!!!
>
>
>
> The ham defined:
>
> The H stands for "Huh!"..you know..Huh?..I didn't copy that
> last..Huh?..oh..CQ..who?
> The A stands for "Aye!...you know..aye...good buddies..let's act like
> morons on 40meters
> The M stands for "Moron!.you know..Huh?..Aye moron yall going to hamfest
> so we can rip off some unsuspecting newbie?..you know.
>
.HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..H

AMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMERHAMMER..HAMMER..HAM
MER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMM
ER..HAMMER..HAMMER..HAMMER..HAMMER
>
>>>>
Geez, Sounds like the lids off now, gonna hafta clean it up.. ha..

4493. Affordable 2m plans????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: kc4srn@aol.com
Message-ID: <19970425200100.QAA29695@ladder01.news.aol.com>
Source record: 94569

Doesn't ANYONE have affordable 2m plans??? I know, I know the Ten- Tec Kit is great to build, Yet, I don't want to pay more than a BRAND NEW rig including all the bells and whistles. I don't have to have every available option but I would like to build in the basics. I'l find my own box if necesary. PLEASE HELP ?

4494. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: geomac@hop-uky.campus.mci.net
Message-ID: <geomac-2504972250220001@s07-pm08.snaustel.campus.mci.net>
Source record: 94570
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <33602AE8.4BD5@sn.no>, la3pu@sn.no wrote:

> Does anyone know of a pin (socket) compatible replacement for the 6146
> tube and eventually where it is available?. There is supposed to be a
> more rugged version of a different type denomination.
> Any information would be appreciated.
>
> 73 de Svein
> la3pu@sn.no

If memory serves...the 2E26 will work but at reduced power output. I tried this in a Heath DX40 a long time ago and got about 20 watts out of it.

73
George
WA3DNC

4495. Re: Panel Lettering: Datak or laser lettering?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5jqafg$58v@lana.zippo.com>
Source record: 94571

jackg@one.net (Jack Giehl) wrote:

>Hi,

>I want to letter a panel with black lettering. I have used Datak lettering in
>the past with good results, but now I can't find any dealers who carry Datak
>lettering. Anyone have their address, or know of a dealer who carries their
>lettering kits?

>I also have a laser printer and several drawing programs. Has anyone done any
>transferring from a sheet designed for transfer to a panel? If so, how
>well did the process work, how is the durability, what sort of clear finish
>was applied over the lettering, etc?

>Thanks, Jack WB8BFS

This is a reprint of an earlier post:

I have a couple of methods that work pretty well, the simple one
first:

Design and print-out the label using a computer and a laser or inkjet
printer.
Using a do-it-yourself laminiating sheet, cover the label with clear
plastic. The material I use is called Cleer-Adheer, C-Line #65001,
from office supply stores.
To fasten the label to a panel use 3M transfer tape (the best way), or
3M Super 77 spray adhesive available from a hardware store.

A real neat way to do it is this:
Using a laser printer, print the label on "Toner Transfer System"
paper. This paper has a resin coating that is water soluble. I
believe Press and Peel Wet is the same thing. I bought this at a
local electronic parts store.
If you want color in your image, use the product Ibifoil from Ibico.
You can get this at office supply stores.
Next put several light coats of laquer over the printed image. Be
careful because the laquer solvent can dissolve the toner and cause it
to run.
After the laquer dries, soak the image in water. It will float off
just like a decal used for model airplanes.
Apply the decal and after it is fully dry, coat the panel with a light
coat of laquer.
Note: It may be necessary to apply a little musalige sp? glue to the
panel to make the decal stick. Using the glue dissolved from paper
shipping tape works well too.

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

4496. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: Bill Harris <billharr@flash.net>
Message-ID: <3361057E.41BD@flash.net>
Source record: 94572
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Tim Shoppa wrote:
>
> In article <33612CEF.5F97@online.no>, LA8AK <la8ak@online.no> wrote:
> >we tested PL36 in RSGB national field day 74, works fb, 120W input with
> >signle valve in HW100 (what say G3TQD?)
>
> Interesting. If I remember correctly, a stock HW-100 has two 6146A's
> running in push-pull. What sort of modifications do you have to
> make to drop a single PL36 in there?

They are in parallel, not push-pull, so dropping in a single one would
work fine.

4497. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5jr4h0$s5h@apple.telalink.net>
Source record: 94573

carlisle@capescott.net (Steve Carlisle) wrote:
>Would someone please explain the differance between the two types and
>the applications for use. Can the AC type be used for DC power
>supplys.

Certain types of capacitors (electrolytic and tantalum, for example) are polarized. They expect one lead to always be positive relative to another. These caps are usually well marked + and/or -. Hooking them up the wrong way (or to an AC circuit where the polarity changes 60 times a second) can cause excessive current to flow. In fact, the capacitor can literally explode!

It should be fine to go the other way. An "AC" capacitor will work OK in a DC supply, though it will be very large (physically) and somewhat expensive relative to an electrolytic of the same value.

73 Doug

4498. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970425105207.12212A-100000@Stratus.CAM.ORG>
Source record: 94574
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

1nF = .001uF = 1000pF

Thus the original poster, philip de cadenet, is looking for something
with 5000pF and 10,000pF (ie .01uF) capacity.

While these do seem rather large for even 160Meter equipment, there is
no way you will find them in 2M equipment. Considering how large in
capacitance they are, I do believe that they will be hard to come by.
Which is precisely why this isn't a run of the mill question.

Michael VE2BVW

On Thu, 24 Apr 1997, Jim N8XYN wrote:

> Brian Carling wrote:
> >
> > Oh yes, I am SURE he is going to find trimmers for a 160m transmitter
> > inside a Radio Shack 2 meter rig - NOT!!
> >
> > On Wed, 23 Apr 1997 08:49:02 -0400, Jim N8XYN
> > <jim.N8XYN@worldnet.att.net> wrote:
> >
> > >philip de cadenet wrote:
> > >>
> > >> Can some kind soul point me to the contact information for a
> > >> manufacturer of 5nf & 10nf high quality compression trimmers.
> > >> [snip]

> > >I've found this trick very useful. Look inside any radioshack device (2
> > >meteramp Transeiver etc) if you find a part that matchs your needs call
> > >RSparts at 1-800-the-shack. Tell them you need that part! Inside the
> > >little 2 meter amp are 3 variablecap. I know 1 of them is a 10-50 pf
> > >unit. It'll set you back a cool $1.99....Good luck!
> > > [snip]
>
> Excuse me but he is LOOKING for 5 to 10 Nf caps...pretty small values
> huh? Just so happens that small components like that do exist in 2
> meter equipment! And also 160 meter stuff.....
>
>

4499. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: Tony Wallace <bravhart@interlynx.net>
Message-ID: <01bc5125$62472200$c7c032cc@bravhart.interlynx.net>
Source record: 94575
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Jerry;
Have you considered how you might feel if you find yourself in the
line of fire for one of these links? I presume they'll be mostly if not
all fixed azimuth beams aimed at one facility's recv. antenna. I'm not
trying to rattle your chain about this, but, it seems that if there's a
proliferation of these installations (and I think there's bound to be)
then ther'll also be a proliferation of hams who can't do much but pack up
and relocate. ...or am I missing something??
regards...
de VE3 TNW... Tony

> This is actually a good thing.
>
> ...very high "gain" antenna directs most of the radiated energy towards
> the intended receiver lessening the chance for inadvertant
> interference. The long and the short of it is this order is to the hams
> benefit...
>
> Jerry

> >The complete story, including the Report and Order, is now available
> online at: http://www.hamradio-online.com

4500. FS: Teflon Wire AWG #18-26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <5jp6ii$bvc@news1.hlc.net>
Source record: 94576
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

I have several colors in each size. #18 &20 are .10/ft. and the rest
are .07/ft. Shipping is $3.00 for any amount. Limit is
100ft./color/size per order.
Thank you,
Dale

4501. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5jp6i5$eoo@news.Hawaii.Edu>
Source record: 94644
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Please remove r.r.a.boatanchors from any further responses to this thread.
There is nothing in the .boatanchors charter to prohibit FS and WTB ads,
and in fact such ads are welcome.
Jeff

4502. (no subject)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: 780394@cms.ITri.ORG.TW
Message-ID: <19970425.10541146@$T103666.AccSMTP>
Source record: 94645

add ham-homebrew
Are there anyone did the SSB KIT(SX-20 , RAMSEY)? Can you
give some suggestion about this kit . Thank you ?

* SX-20 20 meter SSB transceive made in RAMSY cop.

4503. equipment for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: mgutter@iglou.com
Message-ID: <E96Bsn.BB0@iglou.com>
Source record: 94646

I am selling the following:

note: I bought this equipment less than a year ago, never got my
license and now I need the money to support another expensive hobby of
mine!!! The point is that this equipment was NEVER used, each piece
is still in its box with manuals!!!!

I would like to sell it all as a package deal, I may listen to offers
on individual pieces.

Free shipping in the USA!!!!!!!!!!

- Realistic 2 meter handheld transceiver and case

- RF Concepts 30 watt power amp

- Tucker SWR/PWR meter

- Astron 10A power supply

- Tucker mobile antenna

price = $450

email if interested,
Super-Gut

4504. Re: Crystal detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: serley19@alliance.net
Message-ID: <5jp80s$i3a@informer.alliance.net>
Source record: 94647

Henrik N. Larsen (hlarsen@post4.tele.dk) wrote:
: Hi

: I am about to make a test between a new germanium diode and a "old"
: crystaldetector. I have some galena, which I know could be used for the
: crystal detector, but how do I finish the detector: how shall I connect
: the 2 wires to the galena, and what sort of wires shall I use?

: I want to make a diode-characteristic on the crystal detector. Does
: anyone have and idea how it would look like (so I have someting to "aim"
: for)

: Hope YOU can help me :-)

: Sincerely
: Henrik Larsen
: email: hlarsen@post4.tele.dk

This used to work for me:

Set a small bottle cap on mom's electric stove.
Heat bottle cap until paint etc. burned off. (Stinks, oops)
Feed 60/40 rosin core solder into bottle cap until about half full.
Drop in chunk of galena and hold down if it floats too high.
Stick 1 end of a copper wire into solder puddle before it hardens.

You'll need some sort of moveable contact to touch various points on
the galena for the other connection. I've seen several references to
using re-bent safety pins, but I always got better signal levels with
a steel paper clip.

Steve Erley

4505. AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <336014e5.10591242@news.zippo.com>
Source record: 94648

Would someone please explain the differance between the two types and the applications for use. Can the AC type be used for DC power supplys.
Steve Carlisle VE7AHL

4506. Re: Student Radio Club

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: jwells@argohouston.com
Message-ID: <5jp8mv$oto@lana.zippo.com>
Source record: 94649

My apologies here. I guess I didn't supply all of the information necessary in my earlier post. I wasn't just looking for handouts. We are having a tough time as it is just getting the club on its feet andputting a club station together. Yes, we can and will do fundraisers, but IMHO, group fundraisers need to benefit the whole group, and not all of our members are trying for a license just yet. We would appreciate any help or suggestions, either by direct email or at: http://www.argohouston.com/pages/g/gewellss

My apologies and 73's,

James A. Wells, KC5SIZ
President, Cy-Fair HS ARC
mailto:jwells@argohouston.com

4507. Looking for: Fox-hunt receiver kit that I can modify for CAP use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-25 00:00:00 UTC
From: perryrt@flinthills.com
Message-ID: <5jpcfr$aeu@news.flinthills.com>
Source record: 94650

OK, Folks, I need your help.

I'm involved with the local squadron of CAP (Civil Air Patrol). I'd really like to work some electronics into the education program we do with the cadets. Specifically, part of the SAR program uses DF equipment to search for aircraft ELT's (which go off in the event of a crash). I would really like to build a rudimentary DF receiver with the kids. Ideal parameters for this project should be:

1) a kit commercially available, that I can tune (or crystal control) to 2 freqs: 121.5 and 121.6 mHz

2) Battery powered (so we can take 'em into the field)

3) Kits not too complex to test or hideously expensive.

Suggestions? What I hope to do is start with "This is a soldering iron. Grab THIS end" and go from there. Anybody done anything similar?

Would an airband radio work with a decent S-meter and a good antenna?

Thanks alot for all your input!

Regards,

R. T. Perry
perryrt@flinthills.com
KF4BAL
GMOO

- The world is divided up into two groups of people:
Those that use HP's, and those that yell "HEY!
Where's the equals sign!"

4508. Re: Question about TDD for the deaf

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierE9B57p.8t2@netcom.com>
Source record: 94503

In article <5jrqk3$a8i$2@news3.microserve.net>,
gudmundur <dcowey@cyberia.com> wrote:
> Hello from KD3SH,
>I would like to know if there is some type of terminal program or if
>it is even possible for my computer with a 14.4kb modem to communicate
>with a deaf persons TDD unit. I may be wrong, but I think they still
>use the baudot code and maybe some old tone groups. Please enlighten
>me on any possibilities. TNX and 73

There is a old program that runs the modem in software, for both the
Radio Shack Color Computer and the IBM PCjr called TDD56. Although the
code may be useless, it also has a good doc file. Look on a Simtel site
or CD-ROM in the msdos section in the modem directory for TDD56.ZIP. Or
look for sites that specialize in software for the handicapped.

The protocol uses 45.5 baud 5 level "baudot"/Murray using the single FSK
tone pair of 1400/1800 hz, both ends use the same tone pair and the
carrier operates in a "vox" type mode where it's only send when
characters are being typed.

You might check to see if the TDD equipment can run with ASCII at
110 or 300 baud using the Bell 103 modem (full duplex FSK). Most
modems can support that, and I think some of the TDD stuff does too.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

4509. 2 CELLULAR PHONES 1 NUMBER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: CELLULAR <cellclones@hotmail.com>
Message-ID: <3362688D.46D43B88@hotmail.com>
Source record: 94504

--
SAVE MONEY NOW. 2 CELLULAR PHONES 1 NUMBER

HTTP://WWW.CYBERCITY.HKO.NET/TORONTO/CELLCLONES

THIS WEB SITE IS BEST VIEWED WITH NETSCAPE 4.0

4510. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: gcouger@tacoma.ceatlabs.okstate.edu
Message-ID: <5js5d7$2d6@news.cis.okstate.edu>
Source record: 94505

In article <3360B10A.1CAA@rcru.rl.ac.uk>,
Mike Willis <"mjw "@rcru.rl.ac.uk> wrote:
>Dave Potter wrote:
>
>> > Thanks Markus
>No it is not. At least not in the UK so don't generalise.
>So long as the transmitted power is less than a regulation threshold
>and he sticks to appropriate bands the pets never leave the house and
>the transmitters are off when he is out.
>
Just a cmos crystal oscilator will generate harmonics well into the
two meter range. To get some range make the collar a resonate loop on
the desired harmonic. A fm reciver will not detect it very well but I have
seen it done on baloons for the close in direction finder.

Gordon

Gordon Couger W5RED
624 Cheyenne
Stillwater, OK 74075
405.624.2855 home

4511. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: LA8AK <la8ak@online.no>
Message-ID: <33612CEF.5F97@online.no>
Source record: 94577
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

we tested PL36 in RSGB national field day 74, works fb, 120W input with signle valve in HW100 (what say G3TQD?) LA4NN tried PL509 instead of 6JS6 in his FT-200
--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4512. Re: 26.995 -xtals.....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: LA8AK <la8ak@online.no>
Message-ID: <33612A8E.6662@online.no>
Source record: 94578

very useful xtals for several projects, operate at 9MHz paralell res,,,
--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4513. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: shoppa@alph02.triumf.ca
Message-ID: <5jrh0i$8jq$1@nntp.ucs.ubc.ca>
Source record: 94579
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <33612CEF.5F97@online.no>, LA8AK <la8ak@online.no> wrote:
>we tested PL36 in RSGB national field day 74, works fb, 120W input with
>signle valve in HW100 (what say G3TQD?)

Interesting. If I remember correctly, a stock HW-100 has two 6146A's
running in push-pull. What sort of modifications do you have to
make to drop a single PL36 in there?

Tim.

4514. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <5jrqan$a8i$1@news3.microserve.net>
Source record: 94580

In article <336014e5.10591242@news.zippo.com>, carlisle@capescott.net says...
>
>Would someone please explain the differance between the two types and
>the applications for use. Can the AC type be used for DC power
>supplys.
> Steve Carlisle VE7AHL

The AC types do not have their foils polarized and can accept voltage charge in either direction. They are physically bigger than the DC only versions of the same value.

NEVER NEVER NEVER hook to DC caps together in series backwards to make an AC cap. It doesn't work, an it will blow up in your face if given even half a chance.

Best wishes KD3SH

4515. Question about TDD for the deaf

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <5jrqk3$a8i$2@news3.microserve.net>
Source record: 94581

Hello from KD3SH,
I would like to know if there is some type of terminal program or if it is even possible for my computer with a 14.4kb modem to communicate with a deaf persons TDD unit. I may be wrong, but I think they still use the baudot code and maybe some old tone groups. Please enlighten me on any possibilities. TNX and 73

4516. Re: Pan adapter? How does it work and how can it be built?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5jrmp3$7i0@cletus.bright.net>
Source record: 94582

You need a sweep generator that sweeps across your IF frequency thats
applied to the horiz and an output from your AGC that goes to the vert.

Norm N8RGR

4517. Re: Valve equivalents please

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: LA8AK <la8ak@online.no>
Message-ID: <33612D88.641B@online.no>
Source record: 94583

john@moyle.demon.co.uk wrote:
>
> I'm going back to valves!
> Can anyone tell me the "minature" equivalants of 6V6, 6L6, 6SK7
> Many thanks
> 73
> John Moyle
6V6=6AQ5, for 6SK7 I would suggest 9003, 6L6= ?
--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4518. HIGH VOLTAGE CAPS FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5jrmep$7i0@cletus.bright.net>
Source record: 94584

I have some high voltage caps for sale.

1 MFD 5000 V 2 each $25 each
3 MFD 4000 V 1 each $25
2 MFD 5000 V 2 each $25 each
1.43 MFD 25000 V 1 each $50
3.7 MFD 15000 V 1 each $65

Will ship UP SCOD you pay shipping

Contact me at norsan@bright.net

Norm N8RGR

4519. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: doll@centuryinter.net
Message-ID: <N.042597.205130.23@anxp48.ld.centuryinter.net>
Source record: 94585

On 4/25/97 7:54AM, in message <3360A988.753@bbn.com>, Dave Potter
<dpotter@bbn.com> wrote:

> Markus Baertschi wrote:
> >
> > A friend of mine is looking for instructions to build a small
> > 2m transmitter. The transmitter should be as small as possible
> > and use the leas power possible. He would like to attach it
> > to the collar of his cat and dog and e able to follow them
> > around with a mobile 2m receiver.
> >
> > Has somebody a source for suitable schematics ?
> >
> > I thought of an quartz-controlled oscillator and a cmos
> > circuit turning it on for 1s every 3-4s. But i don't know
> > were to find a quartz of the correct frequency (2m HAM band).
> >
> > Thanks Markus
>
> Your friend needs to know that what he wants to do is illegal.
>
> Dave
> K1MBO

Sounds like the wrong kind of dog "license".

Ken
KK5JD

4520. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5jsb2s$cva@news.Hawaii.Edu>
Source record: 94586
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <33612CEF.5F97@online.no>, LA8AK <la8ak@online.no> wrote:
>we tested PL36 in RSGB national field day 74, works fb, 120W input with
>signle valve in HW100 (what say G3TQD?) LA4NN tried PL509 instead of
>6JS6 in his FT-200

Svetlana is tooling up for production of the 6146. Their email address
is svetengr@aol.com if you have questions regarding any of their devices.

73, Jeff KH2PZ

P.S. What's a PL36?

4521. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5jsbk0$dap@news.Hawaii.Edu>
Source record: 94587
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Tim Shoppa <shoppa@alph02.triumf.ca> wrote:
>In article <33612CEF.5F97@online.no>, LA8AK <la8ak@online.no> wrote:

>>we tested PL36 in RSGB national field day 74, works fb, 120W input with
>>signle valve in HW100 (what say G3TQD?)

>Interesting. If I remember correctly, a stock HW-100 has two 6146A's
>running in push-pull. What sort of modifications do you have to
>make to drop a single PL36 in there?

I've wondered about this in regard to my GT-550 running two 6LB6's
in parallel; I'd love to run just a single one. Even though it's
capable of running 550W input, I usually idle along at no more than
50W. No need to have both 6LB6's burning while running QRPo (or is
that QROp? ;)

73, Jeff KH2PZ

4522. Re: Hi power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: LA8AK <la8ak@online.no>
Message-ID: <3361BA28.7546@online.no>
Source record: 94588
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

```
......go to amateur radio rallies in England, Nederland and Germany..
--
----
OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
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```

4523. Re: Crystal detector

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: LA8AK <la8ak@online.no>
Message-ID: <3361B97E.1F61@online.no>
Source record: 94589

Hi
it was some technical comparison and more details in the German magazin
Funk Geschichte (Gesellschaft der freunde der geschichte des funkwesens
GFGF) a year or two ago

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4524. Really good regenerative receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3361dcc0.0@cheese.pcug.org.au>
Source record: 94590

Further to the discussion re SW receivers, I've just put together the best regenerative receiver I've ever built (valve or transistor). It appeared in Communications Quarterly Fall 1995 and Radio Communication April 1997 (built by N1TEV).

It uses two FETS (not critical) and an IC audio amplifier. The chip specified was weird and required a split supply rail so I substituted an LM386. Worked first time - the only thing was that I needed to wind a few more turns than specified on the regeneration tickler coil as I was using a smaller than specified regeneration variable capacitor. My unit covers 3-10 MHz and is in a large metal box (front panel nearly the size of a TS520s!). Three vernier drives grace the front panel, and it really looks like a homebrew transceiver, though when you open it up there's almost nothing in it - just 2 transistors, a coil and an IC. Audio quality on AM is first-class on the SW bcast stns.

73,

--

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

4525. Re: Hi power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: Svein Henriksen <la3pu@sn.no>
Message-ID: <33625F94.1ADD@sn.no>
Source record: 94591
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

LA8AK wrote:
>
> ......go to amateur radio rallies in England, Nederland and Germany..
> --
> ----
> OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
> Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
> Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

That sure is a big help. Everybody, but everybody knows that.
Svein

4526. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: LA8AK <la8ak@online.no>
Message-ID: <3361FAA0.55E8@online.no>
Source record: 94592
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Tim Shoppa wrote:
>l. What sort of modifications do you have to
> make to drop a single PL36 in there?
>
> Tim.
well, I did not make this, one should try to ask G3NUE or G3TQD (or was
it G3TQZ?)
--

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4527. FS AOR3000a

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: pe1ouc@freemail.nl
Message-ID: <3361fa29.62694866@news.xs4all.nl>
Source record: 94593

For Sale: AOR3000a Scanning receiver.

100 kHz - 2036 MHz 400 memory channels.

Incluses original box, manuals, power supply and software for use with
the serial port.

1 1/2 jear old in excellent condition!

asking $ 900 US

E-mail fright@knoware.nl or pe1ouc@dds.nl

4528. Re: 5894 for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: LA8AK <la8ak@online.no>
Message-ID: <3361FC41.ED6@online.no>
Source record: 94594

It really depends on the actual set - what is possible - dependent on the size of the holders. I run 5894 (QQE06/40) with 190W RF out on 2m, YL1070 is ssb tube, and YL1060 either has 60-70w anode dissipation and they are as such better than 5894/QQE06/40. The problem is that the socket (same as for 832A and 829B) - it might not be possible. Perhaps one valve?
I believe it is not difficult to locate 6146B, I have some for my FT902, and I know about several good sources, there are many sources, I feel persons often wish to have replies like using 6BQ5 for 6146.....

--

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4529. FS: Kenwood YK-455C-1 500Hz Filter , Lower priced.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <3362f73f.4777936@news.interbusiness.it>
Source record: 94595
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Specially dedicated to TS-140/680, but VG also for lot of others KW
rtx.I sell it tested OK, like new for $ 70 shipped to your door.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

4530. Need schematic for heath SW717

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: arm@intr.net
Message-ID: <5jtdbn$t08$1@news.intr.net>
Source record: 94596
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Looking for a schematic for Heath SW717 shortwave receiver.
A whole manual would be even nicer. Thanks

--
Andy Mitz (WA3LTJ)
arm@helix.nih.gov

4531. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc529c$a3b73540$f90f2399@peter->
Source record: 94597

gudmundur <dcowey@cyberia.com> wrote in article
<5jrqan$a8i$1@news3.microserve.net>...
> NEVER NEVER NEVER hook to DC caps together in series backwards to
> make an AC cap. It doesn't work, an it will blow up in your face
> if given even half a chance.

I've never had any problems with this. Perhaps it's the Schottkey
protection diodes I
parallel across the caps?

4532. 2 Million E-Mail Addresses $35.95

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: Mark Purdy <mpurdy@mail.tds.net>
Message-ID: <5ju4sh$nq8@news2.tds.net>
Source record: 94598

##
This message is create by Dynamic mail - a most powerful online marketing tool
will explode your business on the internet. For more information please visit
our web site at : http://www.australia.net.au/~apexpi/dynamail.htm
##

2 Million E-Mail Addresses $35.95

Payment by:
Visa, MasterCard, American Express

http://www.tds.net/compurdy/2_million

4533. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: robert bowman <bowman@montana.com>
Message-ID: <3362C6C1.30B@montana.com>
Source record: 94599

Dave Potter wrote:
>
> Markus Baertschi wrote:
> >
> > to the collar of his cat and dog and e able to follow them
> > around with a mobile 2m receiver.
>
> Your friend needs to know that what he wants to do is illegal.

sounds like a great idea for a 'fox' hunt to me.

bob kj7xu

4534. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-26 00:00:00 UTC
From: Manny <mperry5@ix.netcom.com>
Message-ID: <3362E7F3.7103@ix.netcom.com>
Source record: 94600

Markus,

I believe there may be some legal problems here. In order to do as you decribed, your pet dog or cat must be licenced to operate in the 2m band. Not to worry, for 2m all the dog or cat needs is a technician "no code" licence. Otherwise I would suggest operating in the CB band, where no licence is required. Good luck an' keep the pedal to the metal, good buddy!

4535. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: brian@nothing.ucsd.edu
Message-ID: <5jue95$916$1@news1.ucsd.edu>
Source record: 94506
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I have just sent out a newgroup message for alt.ham-radio.marketplace
Perhaps your ISP will carry that group.
- Brian

4536. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: tgm@netcom.com
Message-ID: <tgmE9A023.BAD@netcom.com>
Source record: 94507
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve J. Quest (Squest@concentric.net) wrote:
: Just stick two high-speed rectifier diodes, capable of conducting
: forward several amperes of current, back to back, and you are
: protected. All voltages exceeding 700mw will be clipped thusly.

As has been mentioned, back to back diodes are an invitation to
intermod. How much ESD protection is needed? My solution would be a
miniature neon bulb across the rx feedline. A neon bulb will conduct at
around 70 volts or so (can't remember exactly). Don't use the type of
neon bulb with the built-in resistor, just a plain neon bulb will do.
This will also work on a feedline used for tx if the bulb is attached
at a low impedance point and both SWR and power out are low enough
(for 50 ohm line, somewhere a few watts below 50 watts out--calculate it).

Thomas (ars KI4N)
[use the word "rabbit" somewhere in the subject line when sending me e-mail]

4537. Re: Affordable 2m plans????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: kc4srn@aol.com
Message-ID: <19970427030700.XAA00222@ladder01.news.aol.com>
Source record: 94508

What I mean by "box" is shell to put it in. That wasn't a smart comment.

4538. F.S. - Tubes, radios, and much misc....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970427061500.CAA13909@ladder01.news.aol.com>
Source record: 94509

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Large selection of radio related publications. Schematics for many radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more. Now over 1550 different tube types in stock - E-mail Rog42@aol.com and ask for my latest RADIO list - #426-T.

4539. Re: All The WTB & SALE Ads Here

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: -=Tony=- <anthonys@pacbell.net>
Message-ID: <336302EC.4FA4@pacbell.net>
Source record: 94510
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Brian Kantor wrote:
>
> I have just sent out a newgroup message for alt.ham-radio.marketplace
> Perhaps your ISP will carry that group.
> - Brian

News host responded: No such group alt.ham-radio.marketplace

So, now what?

4540. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5jv633$36m$2@nadine.teleport.com>
Source record: 94511

In article <335FCE46.3AFD@pluto.njcc.com>, shearer@pluto.njcc.com wrote:

>. . .

>i do know that aluminum is not recommended for wiring due to
>the potential of a fire hazard as the aluminum might ignite.
>is the reference to aluminum contacts with regard to this???
> would anyone care to elaborate on why aluminum is not used?

Aluminum oxidizes almost immediately when exposed to air. The oxide forms a very thin layer and is very hard. (Aluminum oxide, a ceramic material, is commonly used for sandpaper.) It's also an excellent insulator. (It's used as a substrate material for circuitry operating at frequencies well into the microwave range.) So you have contacts with an insulated coating. If you apply enough pressure to break the coating, the broken pieces imbed themselves into the soft aluminum underneath. When the contact is broken again, more oxide forms and is again broken the next time the contacts mate. In a short period, the contacts look like a battleground with jagged chunks of insulating material jammed into the soft aluminum, with very little exposed unoxidized aluminum left to make contact. This will also happen in the presence of vibration. The combination of this effect and the difficulty of permanently clamping such a soft material makes it difficult to make a reliable connection with aluminum. One thing that has to be done is to keep oxygen away from the connection. For house wiring, this is done by covering it with a greasy compound like NoAlox.

Tin contacts have the same problem, although it may not be as severe. But in my experience, tin contacts will just about always cause trouble sooner or later.

Roy Lewallen, W7EL

4541. data transmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: luuk@hotmail.com
Message-ID: <336337e5.14605113@news>
Source record: 94512

hallo

I am looking to make a 2 watt or there abouts transmiter that
can transmit data on any freq. (as long as a licance is not required)
If any one has any ides or plans or knows where I can find some please
let me know!!

(-:

cu

luuk

4542. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <33674bfd.4420731@eskinews.eskimo.com>
Source record: 94513

anthonys@ix.netcom.com(-=Tony=-) wrote:
>>i, for one, do not understand the reference...
>>i do know that aluminum is not recommended for wiring due to
>>the potential of a fire hazard as the aluminum might ignite.
>>is the reference to aluminum contacts with regard to this???
>> would anyone care to elaborate on why aluminum is not used?
>
<><><><><><><><><><><><><><><><><><><><><><><><><><><><>
When aluminum is exposed to air it immediately forms a thin layer of
aluminum oxide which is non-conductive. You can see this effect
yourself with an ohm meter. Gently touch the two probes to a piece of
aluminum and it will show an open circuit. Press down hard enough to
puncture the oxide layer and you will have continuity.

73, Bill W7TI

4543. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5jvli9qiv1@nnrp01.primenet.com>
Source record: 94514
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Thomas G. McWilliams <tgm@netcom.com> wrote:
: Steve J. Quest (Squest@concentric.net) wrote:
:
: As has been mentioned, back to back diodes are an invitation to
: intermod.

Correct. Most MOSFET devices have back-to-back zener diodes
connected from the gate(s) to the source.

I've just finished testing a unity gain antenna buffer that has
an IP3 of +35dBm. It uses a lowly J309/310 and a couple of bipolar de-
vices. I had previously considered using a dual-gate GaAsFET, but the
discussions here and elsewhere had led me to believe that I should use
something that's safer ESD-wise.

I gotta go.

Regards,

Chris

,----------------------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _______,--------------'
_ |/
oo\ Chris Trask / N7ZWY
(__)\ _ Principal Engineer
\ \ .' `. ATG Design Services
\ \ / \ P.O. Box 25240
\ '" \ Tempe, Arizona 85285-5240
. ( ) \
'-|)__| :. \
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com

Graphics by Loek Frederiks

4544. Re: Foreclosures/Gov't Auctions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: John Carboni <carboni@wizvax.net>
Message-ID: <33635F36.6450@wizvax.net>
Source record: 94515
Cross-posted to: rec.games.trading-cards.misc,rec.games.trading-cards.startrek,rec.music.artists.mariah-carey,rec.radio.amateur.homebrew,rec.toys.cars,rec.travel.caribbean,relcom.auto,relcom.commerce.computers,relcom.commerce.money,rpi.forsale,saga-u.forsale,sc

Property4Less wrote:
>
> FORECLOSURES!!
> GOVERNMENT AUCTIONS!!
>
>
> Obtain property for pennies on the dollar!
>
> Discover Times/Dates/Locations of Government Auctions throughout the United
> States
>
> Perfect for 1st Time Home Buyers
> Low Income Families
> Investors
>
>
> Financing Info Available
>
> Real Estate, Cars, Computers, Boats, Jewelry, Antiques, etc.- obtained
> through Drug Seizures, Tax Foreclosures, IRS Seizures, and other government
> agency seizures.
>
> The deals are phenomenal!!
>
> If interested email Property11@aol.com for additional information

4545. Re: FCC kills off ham radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970427160700.MAA09948@ladder01.news.aol.com>
Source record: 94516

And, your comments particularly have absolutely nothing to do with building and homebrew. I can do that with zero spectrum space.

W4ZCB

4546. Re: Looking for ceramic IF filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es>
Message-ID: <336334ED.FE716B4@sat.cide.upm.es>
Source record: 94517

Tom Twist wrote:

> "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es wrote:
>
> > I'm looking for a 10.7 MHz, 50-100 kHz bandwith ceramic filter that it
> >is near to impossible to find in Spain.

> ...snip
>
> Try http://www1.tip.nl/users/t474001/Cat_x-filter.htm

Tom and all who replied,

I went to the address suggested, and I think that I've found exactly
what I need:

SFE10.7MF 10.7 -30...50 KHz bandbreedte, verbeterde
SFA

If my memory is right, this device is manufactured by Panasonic. I will
contact with this Netherlands supplier to see if they deliver items
overseas.

BRIAN DANGERFIELD <bdanger@es.co.nz> wrote:
>try an old fm broadcast radio eg.an old car radio
>>From: "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es>
>>Subject: Looking for ceramic IF filters

And Doug Smith aswered:

>Unfortunately these are usually 200KHz or wider. I've corresponded in
>private email with Sr. Garcia & he needs something narrower. Digi-Key
>(USA) lists Toko filters as narrow as 110KHz in their catalog. It may
>be possible to special-order narrower ones. (though I can't imagine
>what the commercial market would be)

I'm agree with Doug. The current IF filter installed is 200 kHz wide,
ideal for FM-broadcast users. I want to change this filter to a narrower
bandwith for satellite weather fax receiving.

Thanks to all!

PS. Others replies suggested me to contact Digi-Key at USoA, but not
reply yet.

--
Rafael,
Madrid (Spain)

4547. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: duncan@muffy.demon.co.uk
Message-ID: <33638570.336731907@news.demon.co.uk>
Source record: 94518
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

On 26 Apr 1997 07:32:44 GMT, jeffreyh@Hawaii.Edu (Jeffrey Herman)
wrote:

>P.S. What's a PL36?

PL36 is a line output valve (sweep tube ???) used in 1950's b/w
televisions. It's an octal valve 'bout the same size as an EL34 with
a top cap and a little shorter.

Duncan

Duncan Munro
http://www.muffy.demon.co.uk/

4548. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: jw@alpha1.csd.uwm.edu
Message-ID: <5k03ik$ffb@uwm.edu>
Source record: 94519

Manny (mperry5@ix.netcom.com) wrote:
: Markus,
:
: I believe there may be some legal problems here. In order to do as you
: decribed, your pet dog or cat must be licenced to operate in the 2m
: band. Not to worry, for 2m all the dog or cat needs is a technician "no
: code" licence. Otherwise I would suggest operating in the CB band, where
: no licence is required. Good luck an' keep the pedal to the metal, good
This is getting silly...but couldn't the dog/cat operate under third party
agreement? Plus, the animal isn't really controlling the xmtr...just
carrying it!
I really don't see a problem here unless the band is REALLY open and
an FCC monitoring station catches you.

jw

--
==========
John C. Wilke (jw@alpha1.csd.uwm.edu)
WB9UAI
==========

4549. Re: REPEATER MAILING LIST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <33638E13.EE6@earthlink.net>
Source record: 94520

Major Domo Daemon wrote:
>
> ******************************
> * REPEATER Mailing List *
> ******************************
>
> This is a mailing list for exchanging ideas and information about any
> Repeater and Repeater Controllers (HAM or COMMERCIAL).
>
> If your interested in Repeaters and/or Controllers and would like to
> be added to the REPEATER Mailing List, send an email message to:
>
> To: repeater-request@jerrys.rogerswave.ca
> Subject: (leave this blank)
>
> subscribe

You're a little late...there HAS been one already at:
rptrown@clarc.org

To subscribe send a msg to:
majordomo@clarc.org

in the BODY of the msg put:
subscribe rptrown
end

Chris
WB5ITT

4550. Re: GE MASTR II frequency changes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: "Christopher W. (Chris) Boone" <cboone@earthlink.net>
Message-ID: <33638D0D.3C72@earthlink.net>
Source record: 94521

Bob wrote:
>
> Samuel Johnson wrote:
> >
> > I am setting up MASTR II's for repeater use. The only problem I have, is
> > that the manual says to read the frequency with a frequency counter at a
> > certain point in the radio. My point is, it has to be 9 times the
> > frequency. In the 440 range, this puts the frequency far above the
> > frequency counters that I have access to. Am I looking at the problem
> > wrong? Can anyone help me decide on how to solve this situation? I have
> > the test set, and MASTR II manuals to work with, plus the mods.
> > Any help appreciated,
> > Sam Johnson KF4GQS

>The point they want you to measure is BEFORE any multipliers. The OUTPUT is 9 times what
>you measure there.

My God!!! I cannot believe I am reading crap like this in a "technical"
area!!!!

To read a MSTR II freq, KEY THE DAMN TX and read it with a freq counter..
to set the RX to freq, determine what the IF is (11.2 or 9.4 Mhz) and is
the LO low side or high side injection? (typically LOW side)..
then couple the freq counter to the MIXER board and read the ACTUAL LO
freq (I can do the same by attaching a service monitor ANT to the RX
input of the GE and read the LO there)

GEesssh people, it aint that hard!!

Chris
WB5ITT

4551. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <3364a367.15095551@netnews.worldnet.att.net>
Source record: 94522

On 26 Apr 1997 02:46:47 GMT, dcowey@cyberia.com (gudmundur) wrote:

> NEVER NEVER NEVER hook [two] DC caps together in series backwards to
>make an AC cap.

I'm not going to get into this any more than this:

the use of back-to-back electrolytic capacitors to form a
non-polarized capacitor is a common practice. Amost any commercial
RFI filter rated for AC service (with a total capacitance over 1 uf)
is constructed using back-to-back polarized capacitors. And the
practice of using large electrolytic capacitors back to back with
reverse-polarity protecting diodes across them as a relacement for
non-polarized capacitors is a successful practice that has been around
for many years.

Fred
jfriley@airmail.net

4552. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: dcowey@cyberia.com
Message-ID: <5k02m3$3u6$1@news3.microserve.net>
Source record: 94523

In article <336014e5.10591242@news.zippo.com>, carlisle@capescott.net says...
>
>Would someone please explain the differance between the two types and
>the applications for use. Can the AC type be used for DC power
>supplys.
> Steve Carlisle VE7AHL

O.K. to the replys about using diodes,

if you need 100 mfd ac cap and make one using two 200 mfd dc caps back to back with diodes it may work somewhat well on a sine wave with a well behaved load. If on a complex wave, you charge down one of the caps until the diode conducts, you now have a 200 mfd coupling cap instead of the 100 you were shooting for. This may make a differance.

Just do like a good engineer and don't replace an ac cap with a pair of dc caps. Also the dc caps may not handle the ripple current.

The lesson, unless your project is supposed to bang and smoke, don't do the two dc's equal one ac.

4553. Q: confirmation

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: shearer@pluto.njcc.com
Message-ID: <3363A919.5619@pluto.njcc.com>
Source record: 94524

superheterodynes are FM in nature, correct?
a fixed FM oscillation mixed with a variable FM oscillation...

TIA.

4554. See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: John in Roseville <r2d2@cqnet.net>
Message-ID: <5k0bmd$gj3@blush.jps.net>
Source record: 94525
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

I'm making solid state versions of the tubes used in a AC-DC
AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).

See:
http://home.cwnet.com/rtwodtwo/tubemod.htm

I'm working on the 12BE6 now.
Let me know what you think!

John

--
The stated return address is incorrect to reduce the amount
of junk e-mail I receive. To get the valid return address,
replace the both "2"s with "two"s and "cqnet" with "cwnet".
(: are tee double-you oh dee tee double-you oh at
sea double-you net dot com :)
John in Roseville CA.

4555. See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: John in Roseville <r2d2@cqnet.net>
Message-ID: <5k0c0e$gj3@blush.jps.net>
Source record: 94526
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

I'm making solid state versions of the tubes used in a AC-DC
AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).

See:
http://home.cwnet.com/rtwodtwo/tubemod.htm

I'm working on the 12BE6 now.
Let me know what you think!

John
--
The stated return address is incorrect to reduce the amount
of junk e-mail I receive. To get the valid return address,
replace the both "2"s with "two"s and "cqnet" with "cwnet".
(: are tee double-you oh dee tee double-you oh at
sea double-you net dot com :)
John in Roseville CA.

4556. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: toyboat@freenet.edmonton.ab.ca
Message-ID: <5k0ckkamc1@news.sas.ab.ca>
Source record: 94527

Steve Carlisle (carlisle@capescott.net) wrote:
: Would someone please explain the differance between the two types and
: the applications for use.

The normal power supply electrolytic is polarized, due to its dielectric film. Used reversed polarized, they break down rapidly and short.

Motor-Start and Motor-Run capacitors are designed to work with AC currents. As industrial-strength components, their voltage ratings usually have a safety factor of four or five times, meaning they won't usually fail even if voltage ratings are constantly exceeded.

The metal-can type (liquid-filled) has an oil dielectric and is made to work under constant-duty service with AC. The plastic-bodied type is supposed to be used in intermittent-duty service on AC, and not in constant-duty service with either AC or DC.

: Can the AC type be used for DC power
: supplys.

The oil-filled metal units are preferred by audio-buffs for tube supplies. They were used for filter service in many heavy-duty power supplies. Highly recommended. Because they are fully sealed, they last forever (so I'm told). Lots available in surplus stores. I've seen several old QST projects using oil-filled caps.

I am presently using a pair of the plastic-bodied ones as filter caps in a power supply (400VDC @ 100mA). No problems at all, although there are conflicting opinions on whether this is proper. They filter just great.

Buy the metal cans to be absolutely certain.

: Steve Carlisle VE7AHL

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|____\
_______|__________
\ / \o/
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
```

Shane <toyboat@freenet.edmonton.ab.ca>

~~~~~~
~~~~~~

4557. TVRO LNA (c-band) to 1691 MHz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: ct@onr.com
Message-ID: <5k0h87$315@mari.onr.com>
Source record: 94528

Has anyone out there hacked a c-band (4 GHz) TVRO
low noise amp. to 1691 MHz for GOES weather image
reception? I'd be interested in any references.
Seems like you'd have a killer pre-amp for 1691.

Even if you only got 1/2 the gain ...half of 50 dB is still 25!!

thanks,

Charlie

4558. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002704971554310001@news.europa.com>
Source record: 94529
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

In article <5k0c0e$gj3@blush.jps.net>, John in Roseville <r2d2@cqnet.net> wrote:

:I'm making solid state versions of the tubes used in a AC-DC
:AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
:
:See:
:http://home.cwnet.com/rtwodtwo/tubemod.htm
:
:I'm working on the 12BE6 now.
:Let me know what you think!
:
:John

Wondering if you are using the QST article "Solid-Tubes- a New Life for Old Designs" by Sartori, April 77---?

In the article, he explains how you can make solid state tubes for most any application- but its not simple, so I suppose that you might do well in such a cottage industry, now that boatanchors are in vogue.

However, those attempting to put such tubes into a relatively high performance design may be dissappointed. The limitations on collector/drain current caused by dropping down from 100v or so, severely limits the IMD performance of such homemade devices.

That was certainly the case with the R4-C.

Have fun! Rob

ps. there may be some interest in a solid state tube replacement for the vox relay driver in the T4X-ABC, as the tube is very hard to find, I think its the 6EV7.

4559. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3363c55e.15194391@news.atl.bellsouth.net>
Source record: 94530

On 27 Apr 1997 17:49:08 GMT, jw@alpha1.csd.uwm.edu (John Clifford Wilke) wrote:

>Manny (mperry5@ix.netcom.com) wrote:
>: Markus,
>:
>: I believe there may be some legal problems here. In order to do as you
>: decribed, your pet dog or cat must be licenced to operate in the 2m
>: band. Not to worry, for 2m all the dog or cat needs is a technician "no
>: code" licence. Otherwise I would suggest operating in the CB band, where
>: no licence is required. Good luck an' keep the pedal to the metal, good
>This is getting silly...but couldn't the dog/cat operate under third party
>agreement? Plus, the animal isn't really controlling the xmtr...just
>carrying it!

That's the key. The animal isn't operating the transmitter, just carrying it.
This is plain old remote telemetry operation, and is permitted under the rules.
Just remember to have the transmitter ID periodically.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4560. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002704971559370001@news.europa.com>
Source record: 94531
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <5jvli9qiv1@nnrp01.primenet.com>, Christopher Trask
<ctrask@primenet.com> wrote:

:Thomas G. McWilliams <tgm@netcom.com> wrote:
:: Steve J. Quest (Squest@concentric.net) wrote:
::
:: As has been mentioned, back to back diodes are an invitation to
:: intermod.
:
: Correct. Most MOSFET devices have back-to-back zener diodes
:connected from the gate(s) to the source.

Back to back zeners is a completely different animal. The zeners conduct
at a much higher voltage, therefore, they play little part in IMD
considerations.

Rob.

4561. HIGH POWER TRANSMITTING TUBES FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5k0fq3$ds0@cletus.bright.net>
Source record: 94532

Eimac type YC156. This is the same basic tube as a 4CX5000. It was designed for the medical industry and has a rating of 6500 volts at 4 amps when used in a pulsed mode. This tube was used in applications to 35 mc but will operate at higher frequencies. See the data sheets on the 4CX5000. No socket is necessary for this tube, it will mount in a 3 1/2 inch diameter clear hole, and the grid ring will bolt to the chassis. Height is overall height is 8 inches. Tube is used but emission is guaranteed for full output. $325 each.
Norman N8RGR
norsan@bright.net

4562. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Larin <larin@blueriver.net>
Message-ID: <3363913C.751D@blueriver.net>
Source record: 94533

John Clifford Wilke wrote:
>
> Manny (mperry5@ix.netcom.com) wrote:
> : Markus,
> :
> : I believe there may be some legal problems here. In order to do as you
> : decribed, your pet dog or cat must be licenced to operate in the 2m
> : band. Not to worry, for 2m all the dog or cat needs is a technician "no
> : code" licence. Otherwise I would suggest operating in the CB band, where
> : no licence is required. Good luck an' keep the pedal to the metal, good
> This is getting silly...but couldn't the dog/cat operate under third party
> agreement? Plus, the animal isn't really controlling the xmtr...just
> carrying it!
> I really don't see a problem here unless the band is REALLY open and
> an FCC monitoring station catches you.
>
> jw
>
> --
> ==========
> John C. Wilke (jw@alpha1.csd.uwm.edu)
> WB9UAI
> ==========

BUT.....If he only uses 1 watt of power, could that be considered control of a craft? Of course he would have to attach a sticker that has his call sign and address.....???? Just a thought. :)

4563. Re: Affordable 2m plans????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: laura halliday <ve7ldh@direct.ca>
Message-ID: <33639F08.2D0D1A68@direct.ca>
Source record: 94534

KC4SRN wrote:

> Doesn't ANYONE have affordable 2m plans??? I know, I know the
> Ten-Tec Kit is great to build, Yet, I don't want to pay more
> than a BRAND NEW rig including all the bells and whistles...
> (snip snip snip)

It might help if you let us in on what exactly you are looking for. SSB? CW? FM? Do you want to do local stuff? Drive microwave transverters? Packet? Satellites? Why do you want to do this?

If you want cheap SSB/CW, simple VXO-controlled rigs are cheap, easy to build and generally hard to beat. If you want FM, there used to be crystal controlled stuff in the ARRL and RSGB Handbooks, among other places. But with the passage of time they may be hard to reproduce now. The economics don't work, either, when you look at the price of new entry-level gear - don't forget to include the price of crystals!

I certainly don't mean to discourage you, but let's be realistic about this. The absence of plans may be telling you something.

--
Laura Halliday "C'est une femme mutine, assez elegante,
ve7ldh@direct.ca grave et legere, ayant le sens de
Grid: CN89mg de confort et de plaisir en tout."
- C. Deneuve

4564. Binary Code for Invasion plans!!!!!!!!!!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Atari 2600 <evilfetusalien@hotmail.com>
Message-ID: <3363A674.9BA@hotmail.com>
Source record: 94535

http://www.angelfire.com/mt/evilfetusalien

01100100100101000100100000001001111110010100100100100000011110010101010010100101010110100000001011110010101001010101001000111100101011000111 0

4565. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc534e$41c33d40$38102399@peter->
Source record: 94536

gudmundur <dcowey@cyberia.com> wrote in article
<5k02m3$3u6$1@news3.microserve.net>...
>
> if you need 100 mfd ac cap

I've never seen a 100 uF AC cap. Where would such a beastie be used?

All I've seen for AC caps are phase shift caps for motors and caps used in audio applications (coupling and crossover networks), and these all have been relatively small values, all less than 10 uF.

For motor apps the currents can be large so it is wise to heed the advise to refrain from the back to back caps, but for low power circuits the back to back arrangement works fine. Just don't use tantalum caps!! They are very sensitive to reverse voltages and will let you know in no uncertain terms!

By the way, many aluminum electrolytics have -20 +80 percent values, so watch out in those critical circuits.

Also, the diodes have a dual function. Besides protecting against the cycle
by cycle reverse current in the caps they protect against reverse polarity in
the asymetrical waveform cases where DC balance slowly changes.

4566. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33639b40.4411162@news.atl.bellsouth.net>
Source record: 94537

On Sun, 27 Apr 97 09:26:18 GMT, w7el@teleport.com (Roy Lewallen) wrote:
>Tin contacts have the same problem, although it may not be as severe. But
>in my experience, tin contacts will just about always cause trouble sooner
>or later.

This is also why Tin-Tec radios have so many intermittant problems. The stupid solder (lead/tin) coated Molex pins used in the interconnect harness become resistive. Quality equipment uses gold flashed pins.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4567. Re: GE MASTR II frequency changes?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <3364056D.7F92@Bledsoe.net>
Source record: 94538

Thanks for the real NICE reply, Chris. Unfortunately, a lot of good techs out there have already given me all the information that I need, (and more). The next time you feel the urge to flame, why don't YOU go to an area designated for it, and I'll try to keep my questions on a higher technical level that would be more to your liking. That way maybe I won't be so far beneath someone with your obvious talents.
Sam Johnson KF4GQS

4568. ICOM CI-V?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Steve Dahlqvist <steve.dahlqvist@bamsebo.pp.se>
Message-ID: <01bc5344$9f233ee0$0100a8c0@u45602114>
Source record: 94539

Hello all!
I�m looking for a description of the ICOM CI-V protocoll. It could be
interesting to do some programs to
control the rigs.
Anyone who knows a good site or something -I�m very curious!

73 de SM7IML/Steve

mailto:steve.dahlqvist@bamsebo.pp.se

4569. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Steve Jackson KZ1X/4 <76216.2557@CompuServe.COM>
Message-ID: <5k08qt$km1$4@mhafn.production.compuserve.com>
Source record: 94540
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

```
Try Communications Concepts or RF Parts.
--
73 de Steve
KZ1X/4 Chapel Hill, NC
```

4570. Re: data transmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Steve Jackson KZ1X/4 <76216.2557@CompuServe.COM>
Message-ID: <5k08pe$km1$3@mhafn.production.compuserve.com>
Source record: 94541

What data rate? What format? What range? Where are you located?
You could use a TEKK and crystal it for one of the family radio channels. It's not legal but....
--
73 de Steve
KZ1X/4 Chapel Hill, NC

4571. Re: 6146B Valves.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Steve Jackson KZ1X/4 <76216.2557@CompuServe.COM>
Message-ID: <5k08u8$km1$5@mhafn.production.compuserve.com>
Source record: 94542
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc

Dennis

These are easily had here in the US. Does he want to buy them in So. Africa or is he willing to mail order? Heck, I have a pair I'd sell him!
--
73 de Steve
KZ1X/4 Chapel Hill, NC

4572. Re: Looking for: Fox-hunt receiver kit that I can modify for CAP use

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-27 00:00:00 UTC
From: Steve Jackson KZ1X/4 <76216.2557@CompuServe.COM>
Message-ID: <5k091i$km1$6@mhafn.production.compuserve.com>
Source record: 94543

You could buy a Ramsey or Hamtronics kit and modify it.
--
73 de Steve
KZ1X/4 Chapel Hill, NC

4573. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33646AA1.87A@concentric.net>
Source record: 94453
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Thomas G. McWilliams wrote:
>
> Steve J. Quest (Squest@concentric.net) wrote:
> : Just stick two high-speed rectifier diodes, capable of conducting
> : forward several amperes of current, back to back, and you are
> : protected. All voltages exceeding 700mw will be clipped thusly.
>
> As has been mentioned, back to back diodes are an invitation to
> intermod. How much ESD protection is needed? My solution would be a
> miniature neon bulb across the rx feedline. A neon bulb will conduct at
> around 70 volts or so (can't remember exactly). Don't use the type of
> neon bulb with the built-in resistor, just a plain neon bulb will do.
> This will also work on a feedline used for tx if the bulb is attached
> at a low impedance point and both SWR and power out are low enough
> (for 50 ohm line, somewhere a few watts below 50 watts out--calculate it).

I'm sorry to say, that won't cut it when you're using a MOSFET
in your front end. In fact, the break-over is so much lower than 70
volts that I laughed when I read this. This kind of trick reminds me
of the old vacuum tube days. Also, how much current can an ionizing
neon tube shunt? A diode will switch on and shunt AMPERES at just 700mw
while a neon won't conduct before 60 volts, and will only shunt
a few milliamperes before it dies. An MOV (Metal Oxide Varistor) would
be a better bet to shunt 60 volts, either that or a sidactor.....sq

(afraid of intermod? That's easy, two series strung diodes in parallel
back to back. This will then shunt at 1.4 volts, WELL below the damage
threshold of the gate on the device, yet well above the typical RF
voltage levels coming in. I think I posted that solution as well.....)

4574. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33647008.3AD1@concentric.net>
Source record: 94454
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Ross Archer wrote:
>
> On 27 Apr 1997 06:50:01 -0700, Christopher Trask <ctrask@primenet.com>
> wrote:
>
> >Thomas G. McWilliams <tgm@netcom.com> wrote:
> >: Steve J. Quest (Squest@concentric.net) wrote:
> >:
> >: As has been mentioned, back to back diodes are an invitation to
> >: intermod.
> > >
> > > Correct. Most MOSFET devices have back-to-back zener diodes
> > >connected from the gate(s) to the source.
> > >
> What about MOV varistors (surge suppressors)? I've seen them in 250A
> sizes as small as 17 volts. If you've got 17 volts of RF on your
> preamplifier, it sort of begs the question of why you've got a
> broadband preamp of any sort in your front end. The same would go for
> higher-voltage zeners...

17 volts is still MORE than enough to blow out a MOSFET. You
want to keep it somewhere below 3 volts or so, and it needs to have
very fast turn-on, thus a diode or zener is optimum choice........sq

(mov's tend to turn on over milliseconds, not picoseconds like diodes.)

4575. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33646EB0.6113@concentric.net>
Source record: 94455
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

jupiter@europa.com wrote:
>
> : Correct. Most MOSFET devices have back-to-back zener diodes
> :connected from the gate(s) to the source.
>
> Back to back zeners is a completely different animal. The zeners conduct
> at a much higher voltage, therefore, they play little part in IMD
> considerations.

That's not exactly true. I can buy zeners in the range of 1.2
volts all the way up to 1000 volts. if you stuff two 1.2 volt zeners
in series so that one is forward while the other is reverse biased, it
will clamp at 1.9 volts. That would be excellent for the task.......sq

(you must be used to seeing 5.1 and 12.1 volt zeners only.............)

4576. Need cal procedure for Philips PM3234 Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: miker <mreiney@NOSPAMhevanet.com>
Message-ID: <336459C1.5434@NOSPAMhevanet.com>
Source record: 94456
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I need to cal my Philips PM3234 Dual Beam Portable Storage Oscilloscope.
None of the pots are labeled and I have no experience with storage
scope tube bias settings.
Can anyone supply the cal procedure or at least the pictures
showing the labels for the cal pots?
Thanks, miker
--
Please remove NOSPAM from return address before replying.

4577. Re: TVRO LNA (c-band) to 1691 MHz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <33641ae4.618180@news.zippo.com>
Source record: 94457

On 27 Apr 1997 21:42:31 GMT, ct@onr.com (Charlie Thompson) wrote:

>
>Has anyone out there hacked a c-band (4 GHz) TVRO
>low noise amp. to 1691 MHz for GOES weather image
>reception? I'd be interested in any references.
>Seems like you'd have a killer pre-amp for 1691.
>
>Even if you only got 1/2 the gain ...half of 50 dB is still 25!!
>
>thanks,
>
>Charlie

The ABOVE and BEYOND column in 73 MAG has had article's on
this in previous issues from the last couple of years.

Steve Carlisle VE7AHL

4578. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: tgm@netcom.com
Message-ID: <tgmE9CJ06.LIE@netcom.com>
Source record: 94458
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve J. Quest (Squest@concentric.net) wrote:
: I'm sorry to say, that won't cut it when you're using a MOSFET
: in your front end. In fact, the break-over is so much lower than 70
: volts that I laughed when I read this.

You are wrong. Think about why aluminum wiring is generally forbidden for use in home construction; Now think about metal oxide semiconductor gates. 70 volts of static EMF across a feedline is nothing, particularly when you consider that a mosfet's gate is already tied to ground via a resistor or a transformer winding. (And as has been pointed out by others, most mosfets are diode clamped anyway--yuck).

: Also, how much current can an ionizing neon tube shunt? A diode will
: switch on and shunt AMPERES at just 700mw while a neon won't conduct
^^^^^
Huh? Do you mean 700 mV?

: before 60 volts, and will only shunt a few milliamperes before it dies.

Wrong again. ESD is *very* low current. Why do you think your wrist strap at an ESD work station has over 1 Meg Ohms of resistance to ground? It works and it keeps you from being electrocuted in case you touch the mains. Apply Ohms law. ESD currents are on the order of microamps at best, not even milliamps. On a high performance front-end, even a Meg ohm resistor across the feed line is far preferable to diode mixers.

If ESD currents were of the order which you claim, then we would all be dead. Check out the biological effects of electricity. Current is a complete non-issue as far as ESD is concerned.

Face facts, for a high-performance rx, avoid hanging mixers across a feed line. A neon bulb is preferable by far. In fact, I wouldn't even worry about ESD if the gate of the device I wish to protect has a reasonable path to ground--which means most any normal design.

Thomas (ars KI4N)
tgm@netcom.com
[use the word "rabbit" in the subject line of e-mail directed to me]

4579. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <0MMSeIAVMMZzEw6g@two-way.demon.co.uk>
Source record: 94459
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

In article <335F5990.6291@worldnet.att.net>, Jim N8XYN
<jim.N8XYN@worldnet.att.net> writes
>Brian Carling wrote:
>>
>> Oh yes, I am SURE he is going to find trimmers for a 160m transmitter
>> inside a Radio Shack 2 meter rig - NOT!!
>>
>> On Wed, 23 Apr 1997 08:49:02 -0400, Jim N8XYN
>> <jim.N8XYN@worldnet.att.net> wrote:
>>
>> >philip de cadenet wrote:
>> >>
>> >> Can some kind soul point me to the contact information for a
>> >> manufacturer of 5nf & 10nf high quality compression trimmers.
>> >> These are for a 160m mosfet tx design that I am working on, please help.
>> >> An e-mail direct would be greatly appreciated: phil@two-way.demon.co.uk
>> >>
>> >> Thanks
>> >>
>> >> Phil de G4ZOW.
>> >> So many toys,
>> >> So little time and so little money!
>> >
>> >
>> >I've found this trick very useful. Look inside any radioshack device (2
>> >meteramp Transeiver etc) if you find a part that matchs your needs call
>> >RSparts at 1-800-the-shack. Tell them you need that part! Inside the
>> >little 2 meter amp are 3 variablecap. I know 1 of them is a 10-50 pf
>> >unit. It'll set you back a cool $1.99....Good luck!
>>
>> To reply to this message, you MUST IGNORE my shown address.
>> It is there to fool annoying unsolicited e-mail advertising robots!
>> Send replies ONLY to: bry AT mnsinc DAWT com
>> For some GREAT Messianic Jewish resources on the Web, VISIT:
>> http://www.mnsinc.com/bry/mjlynx.htm
>
>
>Excuse me but he is LOOKING for 5 to 10 Nf caps...pretty small values
>huh? Just so happens that small components like that do exist in 2
>meter equipment! And also 160 meter stuff.....
Oh god,
I never thought that my original posting would start you guy's off, I'm

used to all this and have a good laugh on the cb ng.
I must admit that I would not of thought that anything 2m would have the necessary 5nf or 10nf trimmers inside so did'nt bother looking.
I do like the sense of humour in teaching the population of this ng the difference between nf & pf!
Seems anyway that I'm going to have to pad out the largest trimmer that I've found (3500pf), with some fixed caps.
I must look into this ng more often, I enjoy this kind of humour,

73

Phil
Unit 148 on 11m
DC1 on 45m
G4ZOW/ extreme mobile everywhere else.
--
philip de cadenet

4580. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: mjsilva@ix.netcom.com
Message-ID: <5k2mth$t00@sjx-ixn5.ix.netcom.com>
Source record: 94460
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

In <0MMSeIAVMMZzEw6g@two-way.demon.co.uk> philip de cadenet <phil@two-way.demon.co.uk> writes:

>I do like the sense of humour in teaching the population of this ng
>the difference between nf & pf!

Well, it's taken us long enough to stop thinking uuF, and now it's these funny nFs -- where will it all end? However, I'm sure I speak for all Americans in saying we promise to start using nF if you all will promise to start drawing your resistor symbols correctly instead of as those little boxes. Deal?

73,
Mike, KK6GM

p.s. :) :)

4581. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: jpd@isoroku.mit.edu
Message-ID: <5k2e0a$ipo@senator-bedfellow.MIT.EDU>
Source record: 94461
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <tgmE9CJ06.LIE@netcom.com> tgm@netcom.com (Thomas G. McWilliams) writes:
> Wrong again. ESD is *very* low current. Why do you think your wrist
> strap at an ESD work station has over 1 Meg Ohms of resistance to
> ground?

The processes that place large electrostatic voltages on objects tend to be very low current, so a large bleeder resistance can drain off the charge as fast as it is supplied, preventing a discharge. However, in an actual electrostatic discharge event the currents are quite high, typically several amps. The duration is short, usually well under a microsecond, too short for serious biological effects, but it can easily damage a semiconductor device.

A system "protected" by a bleeder isn't protected against a discharge due to contact with an unprotected external object (cable, person). The charge on a single raindrop may be sufficient to cause damage in extreme cases.

This is a hard problem to solve. Zeners and MOVs have been mentioned, but they tend to have too much capacitance to be useful even at video frequencies. Ne bulbs, and their bigger brothers designed for lightning protection, have low capacitance but their clamp voltage is generally too high (a multilayer approach with a gas discharge tube out front, followed by a lower voltage device, can be very effective). High conductance, low capacitance diodes (1N914B) are fairly effective, but may produce mixing products. Reverse biasing the diodes with batteries or a quiet power supply helps.

There's a fairly new IC protection technology I haven't tried yet that may be a bit better than diodes: check out <http://www.semi.harris.com/datasheets/tvs/sp720/>. These things may still produce mixing products, but I suspect they make less than diodes. The Harris site also has a lot of useful information on ESD protection in general (no connection, just a satisfied customer).

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4582. 90 Degree Power Splitter. - Theory?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: tom@tfaloon.demon.co.uk
Message-ID: <862248315.13626.0@tfaloon.demon.co.uk>
Source record: 94462

Can anyone explain the operation of a 90 Degree RF power Splitter.

e.g. I am thinking of the 'Transformer' types offered by Mini Circuits. Their catalogue gives a good general description of 0/180 degree power dividers, but does not explain how the 90 degree version works.

Thank you for taking the time to read this. All advice will be appreciated.

Tom Faloon

4583. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: jpd@isoroku.mit.edu
Message-ID: <5k2qbf$opg@senator-bedfellow.MIT.EDU>
Source record: 94463
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

A few comments here:

First, remember that noise figure and dynamic range are system properties, not component properties. Doing well on these specs is not so much a matter of magic components as it is a matter of getting the details right.

The useful frequency range of active antennas is from longwave to shortwave. Especially at the lower part of this range, neither GaAs MESFETs nor Si MOSFETS will yield optimum noise performance due to "1/f" noise (also known as "flicker" or "excess" noise). In this frequency range, JFETs and bipolars dominate low noise design.

Note that there is nothing magic in gallium arsenide that automatically reduces noise. Thermal noise voltage in a GaAs FET is about the same as in an Si FET with the same transconductance. What GaAs has is a higher electron mobility, so the GaAs FET can be smaller for a given transconductance. This reduces the capacitances and transit times. This is much more of an issue at microwave frequencies. A nice cheap J308 has 10-20 times the capacitance of an MRF966, but it has about the same transconductance. At HF it's probably quieter, and at LF it almost certainly is. GaAs FET sheets don't have noise specs at these frequencies, but the Motorola sheet shows minimum noise figure for their MRF966 test circuit at 500 MHz.

Also, don't count out bipolars for untuned loops. Thermal noise voltage is very low in bipolars relative to FETs, and shot noise is often not a problem at low to moderate impedances. The dynamic range rap against bipolars is misleading: a bipolar with a well chosen emitter resistor can often beat a FET.

There's a good section on low noise design in Horowitz and Hill's "The Art of Electronics", primarily applicable to the audio/video frequency range (but that's what we're in: "real" RF these days is mostly microwaves :-).

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4584. Re: _Small_ 2m transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: "Mark L. Bary" <MBary@nmaa.org>
Message-ID: <33655289.40BE@nmaa.org>
Source record: 94464

Try looking at this URL, it has some very interesting transmitters AND transceivers.

http://home.navisoft.com/agrelo/ae.htm

73,

Mark
N4EOC
Germantown, MD

4585. Internet MINIDISC Specials!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: administrator@melting-pot.com
Message-ID: <339c339a.32234529@news.berkeley.edu>
Source record: 94465

Internet MINIDISC Specials!

visit http://www.melting-pot.com for more info!

Sony MZ-R30 Int'l Edition w/ 100-240V AC Adaptor

$459 shipped, customs charges paid within the U.S.A.

Sony MZ-R4ST Portable Recorder w/ Docking Station

$579 shipped, customs charges paid within the U.S.A.

Sony MZ-E50 Portable PLAYER only

$419 shipped, customs charges paid within the U.S.A.

Sony MZ-F40 Portable player w/ AM/FM radio

$399 shipped, customs charges paid within the U.S.A.

JVC XM-R2 Portable MD Recorder with Pen Input (touchpad)

$499 shipped, customs charges paid within the U.S.A.

Sharp MD-MS200 Portable MD Recorder

$399 shipped, customs charges paid within the U.S.A.

Please remember that all models, EXCEPT for the MZ-R30 are Japanese
Domestic models, meaning they come with 100VAC Adaptors.

Sales tax must be paid if the buyer is in California. Please remember
to add 8.25% to the total of any purchase.

INTERNATIONAL SHIPPING ADD $39

Please email us to order at:

administrator@melting-pot.com

4586. Re: Affordable 2m plans????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: bowman <bowman@montana.com>
Message-ID: <33653385.6D5D@montana.com>
Source record: 94466

KC4SRN wrote:
>
> Doesn't ANYONE have affordable 2m plans???

Jessup's _VHF/UHF Manual_ from the RSGB has some working schematics.
be advised that unless you want the experience of rolling your own
it will be much cheaper to buy something like a Radio Shack HT.

4587. Need Stancore Transformer

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: eugene.welcome@rook.wa.com
Message-ID: <2064133035-970428150414@rook.wa.com>
Source record: 94467

TA >Hello....Does anyone have the specs or any info on a Stancore
TA >transformer P8361 ??? Need spec's to replace it.

Stancor P8361 Low current control/rectifier transformer

```
Blk _____ ________ Brn
)|||(
Pri 117vac (||) Sec# 1 12vac 0.1amp
Blk _____)|||(________ Silver
||
|| ________ Blue
|||(
||) Sec# 2 12vac 0.1amp
|||(________ Red
||
|| ________ Green
|||( Sec# 3
|||)-------- Grn/Yellow 12vac 0.1amp center tapped
|||(________ Yellow
```

Size = 2" wide - 1.5" deep - 1.75" high: Wt = 0.333 lbs.

You may find this from some mail order dealer, or use three 12 vac
transformers from Radio Shack.

```
_ ,,/|
\'o 0'
```

73, Gene, K7"EEK" !! a =(_"_)= ?? He ate my Mouse !
U
eugene.welcome@eagles.wa.com

4588. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002804971215240001@news.europa.com>
Source record: 94468
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

:complete non-issue as far as ESD is concerned.
:
:Face facts, for a high-performance rx, avoid hanging mixers across a
:feed line. A neon bulb is preferable by far. In fact, I wouldn't even
:worry about ESD if the gate of the device I wish to protect has a
:reasonable path to ground--which means most any normal design.
:
:Thomas (ars KI4N)
:tgm@netcom.com
:[use the word "rabbit" in the subject line of e-mail directed to me]

I didn't know the discussion was about ESD. I thought we were talking
about high voltage induced on the rcvr input via nearby transmitters, since
the early posts talked about IMD. With transmitters, you could have
considerable current into the rcvr.

Also, I thought that commercial gas discharge tubes were available for
transient suppression? Don't they contain hydrogen, a very fast conductor?

Also, usually the limitation on speed of gas discharge tubes is not the
initial turn-on, but instead the recovery time. Thats why thyratrons are
so slow.

Rob.

4589. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: wdmilner@atcon.com
Message-ID: <5k38dj$c9$2@thor.atcon.com>
Source record: 94469
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

geomac@hop-uky.campus.mci.net (George McCouch) wrote:

>In article <33602AE8.4BD5@sn.no>, la3pu@sn.no wrote:

>> Does anyone know of a pin (socket) compatible replacement for the 6146
>> tube and eventually where it is available?. There is supposed to be a
>> more rugged version of a different type denomination.
>> Any information would be appreciated.
>>
>> 73 de Svein
>> la3pu@sn.no

>If memory serves...the 2E26 will work but at reduced power output. I tried
>this in a Heath DX40 a long time ago and got about 20 watts out of it.

The ruggedized version is the 6146W. This tube is still available
especially if you have access to a military/surplus source.

Dean, VE1CBF VE1CBF@qsl.net
10-X 31826 FN96VC

- - ... ... - -

4590. HAM equipment for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: mgutter@iglou.com
Message-ID: <E9DCEq.6Kx@iglou.com>
Source record: 94470

I am selling the following:

note: I bought this equipment less than a year ago, never got my
license and now I need the money to support another expensive hobby of
mine!!! The point is that this equipment was NEVER used, each piece
is still in its box with manuals!!!!

I am now selling this equipment piece by piece!!!!!!!!!!!!!!!!!!!!!!

Free shipping in the USA!!!!!!!!!!

- Realistic 2 meter handheld transceiver, case, and Tucker mobile

antenna = $180

- RF Concepts 30 watt power amp = $100

- Tucker SWR/PWR meter = $60

- Astron 10A power supply = $60

email if interested,
Super-Gut

4591. Re: TVRO LNA (c-band) to 1691 MHz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: ZygomaD & Darkezza <Do_not@spam.here>
Message-ID: <33650508.74AD@spam.here>
Source record: 94471

moritz@ipers1.e-technik.uni-stuttgart.de wrote:
>
> >Even if you only got 1/2 the gain ...half of 50 dB is still 25!!
>
> FYI, half of 50 dB is 47.
>
> 73, Moritz

Well, if he's talking about receive, half of 50 dB is 44 (rated in uV or whatever, rather than power). But you were a lot closer than him :)

73,

--Barney kl7hny--
kl7hny@qsl.net
Soldotna, Alaska, USA

4592. Re: Hi power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19970428192344704 32@zetnet.co.uk>
Source record: 94472

.....go to amateur radio rallies in England, Nederland and Germany..>
OPR.: Jan-Martin Noeding - LA8AK,
========
That sure is a big help. Everybody, but everybody knows that.
Svein
===
OK Svein, I'll be visiting the "Lichtmis" ham flea market in East NL
,last Saturday in September , a dorado for QRO components incl
HiVoltage (20-30KV) capacitors ,tank inductors etc. Please send me a
reminder late August and I'll do my best to get what you require.
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU * EU *
* * *

4593. Re: NEED A TRANSFOMER HELP ME!!!!!!!!!!!!!!!!!!1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19970428195126704 32@zetnet.co.uk>
Source record: 94473

> I NEED A 2800 VOLT TRANSFOMER GIVE OR TAKE A 100 VOLTS
> AT ABOUT 1 AMP CAN YOU HELP ME THANKS
> JKanejr182@aol.com
==========
Suggest you check with Peter Dahl Co Inc.5869 Waycross ,El Paso TX 79924
phone : (915)751 2300

http://www.1eagle1.com/commercial/pwdco/
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU * EU *
* * *

4594. Re: Hi power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: Frank Dinger <frank.dinger@zetnet.co.uk>
Message-ID: <19970428191055704 32@zetnet.co.uk>
Source record: 94474

```
......go to amateur radio rallies in England, Nederland and Germany..
OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
===============
Yes the biggest Euro Ham Fest in Friedrigshafen is on the horizon.
Also on the last Saturday of September there is a big open ham flea
market at a trucker's stop "De Lichtmis" between Zwolle and Meppel in
the eastern part of NL. Usually with a lot of ex-eastern bloc mil
equipment; a true kilowatt alley .......
* * * *
Frank Dinger , Inver by Tain , Ross-shire IV20 1RX - Scotland * UK *
e-mail : gm0csz.kn6wh@ukrs.org * *
Packet : GM0CSZ @ GB7NOS.#76.GBR.EU * EU *
* * *
```

4595. Homebrew Dummy Load

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <3363E0F6.34E4@online.no>
Source record: 94544

I made a dummyload of 6x 300 ohm 1W resistors -star mounted on N-chassis male connector, it measured 16dB reflection loss - at 1296MHz - measured at Rohde&Schwartz stand in Weinheim VHF/UHF meeting, so I believe it is fairly possible to build your own attenuators for frequencies up to above 432MHz
--

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4596. Re: .....Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <3363E99B.438D@online.no>
Source record: 94545

jupiter@europa.com wrote:

> its the 6EV7. (=dissimilar triodes?)
it is fairly easy to design transistor equivalents for certain
application of a valve, but worse to use this 'valve' in another
application. Oscillator valves being quite difficult to redesign, while
dc amplifiers are easy. 6EV7 shouldn't be too difficult for the TR4
--

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4597. Need Stancore Transformer help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: tomash@airmail.net
Message-ID: <A5AE2EC9385DD61C.B158D440F3EFA57A.D14D1F5B47510238@library-proxy.airnews.net>
Source record: 94546

Hello....Does anyone have the specs or any info on a Stancore
transformer P8361 ??? Need spec's to replace it. Thanks in advance
for any help. Tom-Dallas,Tx.

4598. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: kc5egg@ix.netcom.com
Message-ID: <5k12tl$1l6@dfw-ixnews7.ix.netcom.com>
Source record: 94547
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In <01bc5125$62472200$c7c032cc@bravhart.interlynx.net> "Tony Wallace"
<bravhart@interlynx.net> writes:
>
>Jerry;
> Have you considered how you might feel if you find yourself in
the
>line of fire for one of these links? I presume they'll be mostly if
not
>all fixed azimuth beams aimed at one facility's recv. antenna. I'm
not
>trying to rattle your chain about this, but, it seems that if there's
a
>proliferation of these installations (and I think there's bound to
be)
>then ther'll also be a proliferation of hams who can't do much but
pack up
>and relocate. ...or am I missing something??
> regards...
> de VE3 TNW... Tony

There will be a proliferation of very low power signals in very tight
beams. They will presumeably be quite frequency stable (the key to high
data rates) making them easy to filter out. Have you ever noticed the
high power 10GHz microwave links the telecoms have used for years?
In city hams may face a greater challenge but these problems should be
solvable if we don't run off all the technical people in this hobby.
I don't think it is nearly the problem that we were presented in
Central America with the confiscation of the entire UHF spectrum You
can't adapt to new challenges when you have no access at all.

Jerry
>
>> This is actually a good thing.
>>
>> ...very high "gain" antenna directs most of the radiated energy
towards
>> the intended receiver lessening the chance for inadvertant
>> interference. The long and the short of it is this order is to the
hams
>> benefit...
>>
>> Jerry
>

>> >The complete story, including the Report and Order, is now
available
>> online at: http://www.hamradio-online.com
>

4599. DRAKE B-LINE F/S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: jkanejr182@aol.com
Message-ID: <19970428042200.AAA09865@ladder01.news.aol.com>
Source record: 94548

I HAVE TO SELL BY DRAKE:
R-4B RECEIVER
T-4XB TRANSMITTER
AC-4 POWER SUPPLY
MS-4 SPEAKER
L-4B 2KW AMP 2 3-500ZG TUBES
D-104 DESK MIKE
ALL MANULS AND CABLES..
EVERTHING LOOKS AND WORKS
VERY GOOD
1050.00 SHIPPED TO YOUR DOOR
REPLY TO E-MAIL ONLY JKanejr182@aol.com

4600. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: tgm@netcom.com
Message-ID: <tgmE9C414.K2y@netcom.com>
Source record: 94549

toyboat@freenet.edmonton.ab.ca wrote:
: The oil-filled metal units are preferred by audio-buffs for tube
: supplies. They were used for filter service in many heavy-duty power
: supplies. Highly recommended. Because they are fully sealed, they last
: forever (so I'm told). Lots available in surplus stores. I've seen
: several old QST projects using oil-filled caps.

Yeah, but don't forget to change the oil every 10,000 Volts :^)

4601. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-28 00:00:00 UTC
From: archer@netgate.net
Message-ID: <3364323b.1935372@nntp.netgate.net>
Source record: 94550
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On 27 Apr 1997 06:50:01 -0700, Christopher Trask <ctrask@primenet.com>
wrote:

>Thomas G. McWilliams <tgm@netcom.com> wrote:
>: Steve J. Quest (Squest@concentric.net) wrote:
>:
>: As has been mentioned, back to back diodes are an invitation to
>: intermod.
>
> Correct. Most MOSFET devices have back-to-back zener diodes
>connected from the gate(s) to the source.
>
What about MOV varistors (surge suppressors)? I've seen them in 250A
sizes as small as 17 volts. If you've got 17 volts of RF on your
preamplifier, it sort of begs the question of why you've got a
broadband preamp of any sort in your front end. The same would go for
higher-voltage zeners...

> I've just finished testing a unity gain antenna buffer that has
>an IP3 of +35dBm. It uses a lowly J309/310 and a couple of bipolar de-
>vices. I had previously considered using a dual-gate GaAsFET, but the
>discussions here and elsewhere had led me to believe that I should use
>something that's safer ESD-wise.
>
> I gotta go.
>
> Regards,
>
> Chris
>
One of the really cool things about the J310 is that they're only 34
cents each from Motorola. It may be cheap, but there seems to be a
sentiment among some radio experimenters that it's a "golden" part.

> ,----------------------.
> / If you understand it, \ Circuit Design for the
> / then it's obsolete! / RF Impaired
> \ _______,--------------'
> _ |/
> oo\ Chris Trask / N7ZWY
>(__)\ _ Principal Engineer
> \ \ .' `. ATG Design Services
> \ \ / \ P.O. Box 25240

> \ '" \ Tempe, Arizona 85285-5240
> . ( ) \
> '-|)__| :. \
> | | | | \ '.
> c__; c__; '-..'>.__ Email: ctrask@primenet.com
>
> Graphics by Loek Frederiks
>
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^

I don't understand me -- thank gods! ;)

4602. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <33651ECF.508A@online.no>
Source record: 94475
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

michael silva wrote:
>
> In <0MMSeIAVMMZzEw6g@two-way.demon.co.uk> philip de cadenet
> <phil@two-way.demon.co.uk> writes:
>
> >I do like the sense of humour in teaching the population of this ng
> >the difference between nf & pf!
>
> Well, it's taken us long enough to stop thinking uuF, and now it's
> these funny nFs -- where will it all end? However, I'm sure I speak
> for all Americans in saying we promise to start using nF if you all
> will promise to start drawing your resistor symbols correctly instead
> of as those little boxes. Deal?
>
> 73,
> Mike, KK6GM
>
> p.s. :) :)
or you go back to mmf, Meg and M=1000 ??
--

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4603. Standards on-line?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: Rob Bailey <wm8s@pobox.com>
Message-ID: <01bc5437$646b0140$707e65ce@wm8s-1>
Source record: 94476
Cross-posted to: alt.radio.scanner,rec.ham-radio,rec.ham-radio.packet,rec.radio.amateur,rec.radio.amateur.digital,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.packet,rec.radio.commercial-lmr,rec.radio.noncomm,rec.radio.scanner,rec.ra

Working on a baseband sub-processor for killer homebrew rig and need some help: I know of the following commonly used signalling formats - are there others? Especially looking for formats that are public or at least published somewhere. The following list contains lots of (R), TM, etc. - ownership as applicable where not noted:

Continuous Tone Coded Squelch System (CTCSS)
Digital Coded Squelch (DCS)
Single Frequency, Two-tone Sequential like
Motorola Modified General Encoding Code Plan
Motorola General Encoding Code Plan
Motorola Code Type Assignment Method
Metro-Page 10 and 100 Code Plan
Motorola Sub-Audible Code Plan
Modax / Moden / Alert Center Code Plan
GE Code Plan
Quick Call (Code Type Y)
Decimal Digital (5/6) Paging
HF AIRINC SELCAL 2+2 Paging (aviation)
DTMF Code Squelch / ANI
DTMF Paging (the nnn*mmm kind mostly amateurs use)
DTMF Messaging (the Kenwood kind; anybody know if it's on-line anywhere?)
ASCII ANI
Trunked - Motorola
Trunked - Logical Trunked Radio (LTR-E J Johnson)
Trunked - EDACS (GE)
Trunked - SmarTrunk
Single-frequency Inversion
Split-band Frequency Inversion
CODEC means, like Moto ASTRO, SecureNet, GE SecureGuard, etc.
AX.25 Packet (HF, VHF, 9600 baud)
RTTY (all modes, shifts, etc.)
CW (A1 and A2)
SSTV (all modes)
Digital Selective Calling (maritime)
Emergency Alert System (new) and EBS (old)
IMTS (is this still on the air anywhere?)
Station control tones like
Non-Simulcast Key Command Function Tones
Simulcast Key Command Function Tones
Station Group Disable (Knock-down) Tones
The International Radiotelegraph Alarm (maritime)

The International Radiotelephone Alarm (maritime)
Class A/B EPIRB Sweep Alarm

Thanks!

73 de Rob wm8s@pobox.com

4604. RF Loop Stick!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: Kumar Prasad <rajprasad@worldnet.att.net>
Message-ID: <01bc5448$d28f0ca0$37c993cf@default>
Source record: 94477

Does anyone know how to make an RF Loop Stick?
I'd really appriciate it if you would send the info to me. Thanks!
Raj Prasad

4605. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5k3og2$kev@news.Hawaii.Edu>
Source record: 94478
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

When I posted the above question on the Boatanchors email list, Dexter provided the following. (Note that Dexter runs CWest Tube Sales - see his web site below.)

73,
Jeff KH2PZ

From: (Dexter Francis)
To: boatanchors@sco.theporch.com
Subject: the "other" 6146's

6146 heater variants are:

6159 - 26.5 V heater
6883 - 12 Volt heater

a full x-ref looks like this:

4604 - ??
4652/8042 - 1.6 Volt @ 3.2A, Quick heating, 6146A
6146 - 6.3V @ 1.25A - 20W
6146A - dark heater/mobile use - 20W
6146B/8298A - 6V @ 1.125 A - dark heater/mobile use 27W
6146W/7212 - Ruggedized
6159 - 26.5 V heater
6293 - pulse modulator - 10W
6883 - 12 Volt heater
7607 - 6.3V @ 1.6A - 23W

-df

* CWest Tube Sales - P.O. Box 22443 SLC, UT 84122 *
* http://www.usa.net/~dfrancis/CWest_Tube_Sales.html *

4606. HEATHKIT HA-14:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: snider96@aol.com
Message-ID: <19970429064100.CAA17471@ladder01.news.aol.com>
Source record: 94479

I need a 12/12 dc power supply. Thanks, Leon Snider KE4GG

4607. Re: ICOM CI-V?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <33657da2.14217961@news.cmc.net>
Source record: 94480

On 27 Apr 97 19:53:32 GMT, "Steve Dahlqvist"
<steve.dahlqvist@bamsebo.pp.se> wrote:

>Hello all!
>I�m looking for a description of the ICOM CI-V protocoll. It could be
>interesting to do some programs to
>control the rigs.
>Anyone who knows a good site or something -I�m very curious!
>
>73 de SM7IML/Steve
>
>mailto:steve.dahlqvist@bamsebo.pp.se
>
>
ICOM publishes a book titled " The CI-V Reference Manual " that
should be available from your ICOM Distributor

Gary
THIS REPLY DOES NOT REPRESENT ANY OFFICAL POSITION of
MY EMPLOYER. It represents only my personal opinion

4608. WTB: 6 Meter Rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: johnsi@sprynet.com
Message-ID: <5k4anr$s1p@lal.interserv.com>
Source record: 94481

I am looking for an inexpensive 6 Meter transmitter (or transceiver).
It does not have to be high power - only need about 1 watt (voice, not CW)
I already have a 6 Meter receiver.
I don't want to spend more than $150.
Please email me directly if you know where I should look for one.

Thanks,
John N7MTB

4609. KENWOOD TS950SDX: for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: snider96@aol.com
Message-ID: <19970429083201.EAA21391@ladder01.news.aol.com>
Source record: 94482

30 day old, PERFECT in every way, xceiver. NON-smoker. All manuals, never used hand mike and box. $3225 includes shipping FIRM FIRM Thanks, Leon Snider KE4GG

4610. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <336b9b4a.2481854858@news.sci.fi>
Source record: 94483
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

tgm@netcom.com (Thomas G. McWilliams) wrote:

>Steve J. Quest (Squest@concentric.net) wrote:

>
>: Also, how much current can an ionizing neon tube shunt? A diode will
>: switch on and shunt AMPERES at just 700mw while a neon won't conduct
> ^^^^^
>Huh? Do you mean 700 mV?
>
>: before 60 volts, and will only shunt a few milliamperes before it dies.
>
>Wrong again. ESD is *very* low current.

Let's take an example. Long time ago I used an ESD gun for testing some devices. The ESD gun consisted of an EHT generator (several kV) charging a capacitor (nanofarads) and the test charge was launched through a test tip to the device under test. If we assume for simplicity U = 1 kV and C = 1 nF and since C is defined as charge (Q) per voltage (U):

$$C = \frac{Q}{U} \Rightarrow Q = CU$$

$$\Rightarrow Q = 1\ nF * 1\ kV = 1uC = 1\ uAs.$$

However, when you connected the charged capacitor to the device under test, the discharge current is only limited by the series impedance of the circuitry between the capacitor poles. The series resistance in typical ESD cases into metallic objects is minimal, but the inductance is important. I have used a ballpark value of 1 nH/mm for PC tracks and bypass capacitors leads and it should also apply to this case. If the total conductor length between the capacitor poles is 100 mm, the inductance is 100 nH. Calculating the resonance frequency with the 1 nF capacitor will give about 16 MHz and the inductive reactance is 10 ohms. The half cycle time is about 30 ns, in this time the whole 1 uAs charge has flown through, giving an average current of 32 A will flow.

This is a simplified calculation, which is only intended to show the order of magnitude of the current and it should not be used for design calculations.

>Why do you think your wrist
>strap at an ESD work station has over 1 Meg Ohms of resistance to
>ground? It works and it keeps you from being electrocuted in case you
>touch the mains. Apply Ohms law. ESD currents are on the order of
>microamps at best, not even milliamps.

The current starts out as 1 mA from a capacitor charged to 1 kV. At
that current the 1 uAs charge is discharged in 1 ms, but compare this
with the 30 ns time obtained previously. Or calculate the time
constant for 1 nF and 1 Mohm or 1 ms in which time the capacitor
voltage has dropped from 1000 V to 370 V (37 %).

>On a high performance front-end,
>even a Meg ohm resistor across the feed line is far preferable to diode
>mixers.

But only to bleed of the slow build up of the charge, not the sudden
discharge when you touch the antenna. An even better solution to bleed
of the slow build up of charge is to use transformer coupling in the
input, when the antenna is DC-connected to ground through the primary
winding. Unfortunately it does not help much for sudden discharges,
since the dV/dt in the primary will also be transformed to the
secondary and into the amplifier.

>
>If ESD currents were of the order which you claim, then we would all
>be dead. Check out the biological effects of electricity. Current is a
>complete non-issue as far as ESD is concerned.

When the same charge is discharged through the skin, the inductance is
usually much larger and the skin resistance is in kilo-ohms and the
series impedance is many kilo-ohms limiting the current.

>
>Face facts, for a high-performance rx, avoid hanging mixers across a
>feed line. A neon bulb is preferable by far. In fact, I wouldn't even
>worry about ESD if the gate of the device I wish to protect has a
>reasonable path to ground--which means most any normal design.

You forgot the inductive reactance of that path to ground.

Paul OH3LWR

4611. YAESU FT8500 DUAL BAND:

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: snider96@aol.com
Message-ID: <19970429085300.EAA21862@ladder01.news.aol.com>
Source record: 94484

"as new" mobile xceiver....the TOP of the LINE !! Not a scratch....never been around smoke..with manual, mobile bracket and mike.(the one with all the buttons) In the original factory box, shipped to you, $510 FIRM FIRM thanks, Leon Snider

4612. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: Marvin Moss <mmoss@gelac.mar.lmco.com>
Message-ID: <3365D9BD.35A6@gelac.mar.lmco.com>
Source record: 94485
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

W. D. Milner wrote:
>
> geomac@hop-uky.campus.mci.net (George McCouch) wrote:
>
> >In article <33602AE8.4BD5@sn.no>, la3pu@sn.no wrote:
>
> >> Does anyone know of a pin (socket) compatible replacement for the 6146
> >> tube and eventually where it is available?. There is supposed to be a
> >> more rugged version of a different type denomination.
> >> Any information would be appreciated.
> >>
> >> 73 de Svein
> >> la3pu@sn.no
>
> >If memory serves...the 2E26 will work but at reduced power output. I tried
> >this in a Heath DX40 a long time ago and got about 20 watts out of it.
>
> The ruggedized version is the 6146W. This tube is still available
> especially if you have access to a military/surplus source.
>
> ---------------------------------------
> Dean, VE1CBF VE1CBF@qsl.net
> 10-X 31826 FN96VC
>
> - - ... ... - -

and don't forget the ruggedized military version called the 6293.

Marv

4613. Re: TVRO LNA (c-band) to 1691 MHz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5k4ugc$1leu@info4.rus.uni-stuttgart.de>
Source record: 94486

>Even if you only got 1/2 the gain ...half of 50 dB is still 25!!

FYI, half of 50 dB is 47.

73, Moritz

4614. Re: Looking for ceramic IF filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-2904971448410001@k4dii.ksc.nasa.gov>
Source record: 94487

In article <336334ED.FE716B4@sat.cide.upm.es>, "Rafael Garcia (EA4RJ)"
<rgarcia@sat.cide.upm.es> wrote:
> SFE10.7MF 10.7 -30...50 KHz
> If my memory is right, this device is manufactured by Panasonic.

Rafael-

Yes, Panasonic makes ceramic filters. However, I think the SFE filter is
made by Murata.

73, Fred, K4DII

4615. F/S: NEW magnet wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5k5ka8$oje@newssvr02-int.news.prodigy.com>
Source record: 94488

ESSEX WIRE "Solderon" single polyurethane,
solderable magnet wire,
NEW on full spools:

AWG Weight Quan

#14 10 lb 3
#16 10 lb 1
#17 10 lb 2
#18 10 lb 2
#20 10 lb 1
#21 10 lb 1
#22 10 lb 1
#23 10 lb 1
#24 10 lb 1
#25 10 lb 1
#26 10 lb 1
#27 10 lb 1
#28 10 lb 1
#29 10 lb 1
#30 10 lb 1

$1.75/lb plus shipping.
All of it: 190 lb: $300
plus shipping.

4616. F/S: Cathode ray tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5k5l0k$3k5i@newssvr02-int.news.prodigy.com>
Source record: 94489

FOR SALE: cathode ray tubes

Electrostatic instrument types, 1 gun

1 ea 2BP1 used $16.00 2" round
2 ea 2FP7 used flat face $16.00 2" round
1 ea 3ASP1 new " " $41.00 1-1/2" X 3" rect.
1 ea 3RP1A new " " $41.00 3" round
1 ea 3RP7A new " " $41.00 3" round
1 ea 3RP11A new " " $41.00 3" round
1 ea 5ABP/DP7 used " " $26.00 5" round
1 ea 5ABP/DP7 used " " $26.00 5" round
1 ea 5AQP1A used " " $26.00 5" round
2 ea 75ARB31 new " " $41.00 75 mm/3" round
2 ea 130BEB31 new " " $51.00 130 mm/5" round

Electrostatic instrument types, 2 gun

1 ea 7MBP20 new flat face $56.00 4" X 6" rectangular

Electrostatic binary direct-view storage CRT (w/socket)

1 ea H1051P31 new flat face $56.00 5" diam

Magnetic deflection types (70 deg, 12.6 V heater)

1 ea 5ST6111P39A new $26.00 5" rectangular
1 ea 10ST6105P39C new $43.00 10" rectangular

P1: green, medium persistence
P4: white, medium persistence
P7: blue, short persistence/yellow long persistence
P11: blue, short persistence
P20: green, medium-short persistence
P31: green, medium-short persistence
P39: green, long persistence

Prices include shipping and insurance in lower 48 states.

E-mail for info: DQCB48A@prodigy.com

4617. F/S: Electronic test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5k5kvg$jta@newssvr02-int.news.prodigy.com>
Source record: 94490

ASSOCIATED TEST LABORATORIES RK1101 environmental test chamber; hot/cold, requires 300 PSI CO2 for -90C. 120VAC. Approx. 1 cu ft chamber. $100

STODDARD NM-40A RFI METER, 30 Hz - 15 KHz (Yep - Audio!!) with 91182-2 power supply, cables; measures into sub-micro-volt region, variable-bandwidth, tunable. $75

STODDARD NM20A RFI meter, 150 KHz - 25 MHz, with power supply, remote meter, accessory case and cables. 120 VAC or can be battery operated. Use as sub-microvolt sensitivity receiver! $75

-HP- 211A square wave generator, 1 Hz - 1 MHz $25

-HP- 302A wave analyzer, 10 Hz - 50 KHz, 10 Hz bandwidth, phase-lockable; voltmeter ranges 100 uV to 300 V. All solid state, w/manual repro: $150

-HP- 202A function generator, .01 Hz - 1 KHz, sine, square, triangle $35

-HP- 202B LF oscillator, .45 Hz - 55 KHz $50

-HP- 650A test oscillator, 9 Hz - 10.2 MHz $75

-HP- 434A calorimetric power meter, DC-18.4 GHz, 01 - .03 - .1 - .3 - 1 - 3 - 10 Watts F/S $100

-HP- 712B variable power supply, 0-500VDC @ 200 mA, 0-200VDC @ 5 mA, -300V @ 50 mA, 6.3 VCT AC @ 10A $65

Measurements Corp. 65B AM signal generator w/ modulation, 01 uV to 2.0V, 75 KHz to 30 MHz $65

John Fluke 801BR differential voltmeter, 5-digit $50

Cybex Model 81 voltage standard, 0.0000 - 50.000 VDC @ 25 mADC, with zero-center voltmeter (+/- .005 - .05 - 5 - 5 - 50 VFS) $50
****
MUSEUM PIECES - working

SENSITIVE RESEARCH INC "Rhodes Potential Voltmeter", Model PV; wooden case instrument w/galvanometer, bridge, etc., 2 mVDC to 20 VDC $50

Weston Model 45 standard voltmeter, 150-300-750 VDC, wooden case: $50

Weston Model 341 "High Frequency Voltmeter", 1/4%
accuracy to 1 KHz, 30, 75 V F/S, wooden case: $50

4618. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580002904971340330001@news.europa.com>
Source record: 94491
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <5k2qbf$opg@senator-bedfellow.MIT.EDU>, jpd@isoroku.mit.edu (John Doty) wrote:

:A few comments here:
:

:Note that there is nothing magic in gallium arsenide that automatically
:reduces noise. Thermal noise voltage in a GaAs FET is about the same as in
:an Si FET with the same transconductance. What GaAs has is a higher
:electron mobility, so the GaAs FET can be smaller for a given
:transconductance. This reduces the capacitances and transit times. This is
:much more of an issue at microwave frequencies. A nice cheap J308 has
:10-20 times the capacitance of an MRF966, but it has about the same
:transconductance. At HF it's probably quieter, and at LF it almost
:certainly is. GaAs FET sheets don't have noise specs at these frequencies,
:but the Motorola sheet shows minimum noise figure for their MRF966 test
:circuit at 500 MHz.

True. Keep the GASFets to VHF and above.
:
:Also, don't count out bipolars for untuned loops. Thermal noise voltage is
:very low in bipolars relative to FETs, and shot noise is often not a
:problem at low to moderate impedances. The dynamic range rap against
:bipolars is misleading: a bipolar with a well chosen emitter resistor can
:often beat a FET.

For amps not needing isolation between input and output, or where input impedence as a function of ouput termination is not a problem, those popular Norton feedback circuits would probably work well.

Otherwise, I'd try using a FET like J318 with the source-gate feedback as described in Haywards "RF Design" book and used in the Carver "High Performance IF..." QST article.

Rob.

4619. F/S: TUBES!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5k5k7i$oic@newssvr02-int.news.prodigy.com>
Source record: 94492

UPDATED 4/14/97

Lab collection of used tubes. All are guaranteed to be within normal test limits when shipped. All are either American made or made by Amperex, Mullard, Siemens, or Telefunken. TUBES ARE NOT SORTED BY MANUFACTURER, AND SORTING BY MANUFACTURER IS NOT AVAILABLE. (Please don't ask!) All items subject to prior sale. When they are sold, they are gone forever; there will be no restocking. Quantities are limited.

****
* *
* PLEASE DO NOT REPOST THIS ARTICLE IN YOUR REPLY *
* *
****

* * * * * ALL TUBES $1.00 each * * * * *

0A3, 0B2, 0G3/85A2, 1BC2, 1G3GT/1B3GT, 1J3, 1K3, 1V2, 1X2A, 1X2B, 2BN4, 2D21, 2E26, 3A3C, 3BN6, 3BZ6, 3CB6, 3GK5, 3HQ5, 4BZ6, 4CB6, 4DK6, 4JC6, 4JD6, 5AQ5, 5CG8, 5EW6, 5JB8, 6AC7, 6AF4, 6AG5, 6AG7, 6AH6, 6AK5, 6AL5, 6AN5, 6AQ7GT, 6AR6, 6AS6, 6AU8, 6AW8A, 6AV6, 6AX4GT, 6BG6GA, 6BH6, 6BJ8, 6BK7, 6BN6, 6BQ6GA/6CJ6, 6BV11, 6BW4, 6BX6/EF80, 6BZ6, 6CB6A, 6CB6A/6CF6, 6CG8A, 6CH8, 6CL8A, 6CM6, 6CM7, 6CM8, 6CN7, 6CY7, 6DK6, 6DQ6A, 6DZ4, 6EN4, 6FG7, 6FQ7, 6GB5, 6GC5, 6GF7, 6GH8, 6GM6, 6GU7, 6GY6, 6H6, 6HZ6, 6J6, 6JU8, 6KA8, 6KZ8, 6LU8, 6MD8, 6S4A, 6SF5, 6U8, 6W4, 6X4, 6Y6GT, 8B10, 8FQ7, 8JV8, 8KA8, 10JT8, 10LZ8, 11BQ11, 12A6, 12AE10, 12AL11, 12BF6, 12BN6, 12BQ6GTB, 12BV11, 12EQ7, 12H6, 12JB6A, 12MD8, 12R-K9, 12SG7, 12SJ7, 12T10, 14BR11, 15BD11, 15KY8, 17AY3, 17CU5, 17JZ8, 19CL8, 19EA8, 21HB5A, 21LU8, 23Z9, 25Z5GT/G, 33GY7, 34CE3, 42KN6, 5654, 5696, 5725, 5726, 5727, 5735, 5799, 5844, 5933, 5963, 5965, 6135, 6186, 6203, 6211, 6350, 6485, 6661, 6682, 7316, 7788/E810F, 9002. Ballast tubes: 3-14, 9-7, 12-4.

***** QUANTITIES ARE LIMITED! *****

PRICES SHOWN DO NOT INCLUDE SHIPPING

SHIPPING CHARGES (USA ONLY; elsewhere, ask for quote)
Up to 10 tubes: $4.00.
Up to 20 tubes: $5.00
Up to 30 tubes: $6.00
Up to 50 tubes: $8.50

Up to 100 tubes: $9.95
Over 100 tubes: FREE
COD AVAILABLE (CASH ONLY!!) add $5.00

TERMS: Payment with order. Checks will be held 5 business days. Money orders clear in 1 day. COD: $5 additional. All items subject to prior sale. E-mail for information.

ORDERING: Please order by e-mail so that we can confirm your order and hold the tubes for you!

PLEASE DO NOT REPOST THIS ARTICLE IN YOUR REPLY.

4620. Charging 12 Gel Cell

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: hynde@flash.net.no-spam
Message-ID: <336687A6.2D17@flash.net.no-spam>
Source record: 94493

Can I trickle charge a 12V Gel Cell with a 15v supply and an appropriate resistor to give me 40 or 50 ma draw? I figured I'd leave it on for 24 hrs. or so. I don't have a charger. Options?

Need something to power the 38 Special at Dayton next month...

Tim, ka8ddz

4621. Thurlby DVM

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: aa1hb@juno.COM
Message-ID: <19970429.170633.6695.0.aa1hb@juno.com>
Source record: 94494

Can anyone (perhaps one of our friends in G-land) suggest where I might get a user's manual for a Thurlby Model 1905a Intelligent Digital Multimeter? I have figured out the basic stuff but would like to use the PC interface.
Many thanks and 73
Charlie AA1HB ("Home Brew")

4622. Re: Charging 12 Gel Cell

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <5k5ram$20k$1@news5.gte.net>
Source record: 94495

hynde@flash.net.no-spam wrote:
>
> Can I trickle charge a 12V Gel Cell with a 15v supply and an appropriate
> resistor to give me 40 or 50 ma draw? I figured I'd leave it on for 24
> hrs. or so. I don't have a charger. Options?
>
> Need something to power the 38 Special at Dayton next month...
>
> Tim, ka8ddz

Tim,
Although I'm no expert on the subject, I'm informed that gel cells are
very sensitive to overvoltage and will easily gas if so charged. This
will serve to reduce their life. The info with my cells warn me not to
charge at more than 2.35 volts at 68 degrees f, (14.1 v). Check with
your manufacturer to confirm the best charging proceedure.
73,
Ray, W4BYG

4623. Surplus Electronic Components, Equipment, and Computer Hardware For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: Vincent Stemen <vstemen@crel.com>
Message-ID: <m2u3kpdvxm.fsf@quark.crel.com>
Source record: 94496
Cross-posted to: sci.electronics.equipment,ok.marketplace,rec.radio.amateur.homebrew,rec.radio.amateur.equipmentsci.electronics.equipment,alt.comp.hardware.homedesigned,biz.comp.hardware,misc.forsale.computers.net-hardware,misc.forsale.non-computer

```
------------------------------------------------------------------------
Surplus Electronic Components, Equipment, and Computer Hardware For Sale

http://www.concentric.net/~vstemen/surplus-top.html
------------------------------------------------------------------------

Contact information:
Phone: (405) 947-8979
email: clstemen@usa.net

Please check our web page periodically for new stuff. We are still
figuring out what all we have.

We are located in Oklahoma City. If you are not in this area then
shipping costs will be added to your purchase, or on larger items, we
can negotiate arrangements for us to deliver.

============================
8530 hdlc/sdlc ISA cards
============================
Description: Serial cards. Great for HAM packet radio or
any other serial communications under Linux.
Condition: New
Price: $35 each OBO
Quantity available: 200

============================
96 pin male DIN connectors
============================
Description: 90 Degree right angel PCB mount
Same type of connector used on euro-cards
and VME cards.
Brand: Berg Electronics
Part Number: 75882-396 441036
Condition: New
Price: $2.00 ea.
Quantity available: 800

============================
Assorted capacitors
============================
Description: All sorts of big electrolytic capacitors, high and
```

low voltage.
Condition: Used / Pulls
Price: Cheap. All different prices. Too many to document :-)
Quantity available: Hundreds

============================
Assorted components
============================
Description: Resistors, capacitors, diodes, transistors, etc.
Condition: New
Price: Cheap. All different prices. Too many to document :-)
Less than half of Digi-key's prices.
Quantity available: Hundreds of thousands

============================
19 inch racks
============================
Description: 6' high 24" deep. All identical and will bolt
together in a column. Most have doors. These
are nice racks suitable for a TV or radio station
or computer room.
Color: Black with aluminum trim across the top front.
Condition: Used but in excellent condition.
Price: $75 each OBO.
Quantity available: 28

============================
2.2 kw xenon bulbs
============================
Brand: Optical Radiation Corporation
Part Number: 33030-1100461-2 rev L
Condition: New
Price: Make offer
Quantity available: 15

--

Vincent Stemen vstemen@crel.com

Try Linux! The operating system of choice for those who are tired of
trying to perform real tasks with toy operating systems,
or operating systems that have been stripped of
functionality just so they can charge you to put it back
in.

4624. Surplus Electronic Components, Equipment, and Computer Hardware For Sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: Vincent Stemen <vstemen@crel.com>
Message-ID: <m2sp09dux9.fsf@quark.crel.com>
Source record: 94497
Cross-posted to: sci.electronics.equipment,ok.marketplace,rec.radio.amateur.homebrew,rec.radio.amateur.equipmentsci.electronics.equipment,alt.comp.hardware.homedesigned,biz.comp.hardware,misc.forsale.computers.net-hardware,misc.forsale.non-computer

---

Surplus Electronic Components, Equipment, and Computer Hardware For Sale

http://www.concentric.net/~vstemen/surplus-top.html

Contact information:
Phone: (405) 947-8979
email: clstemen@usa.net

Please check our web page periodically for new stuff. We are still
figuring out what all we have.

We are located in Oklahoma City. If you are not in this area then
shipping costs will be added to your purchase, or on larger items, we
can negotiate arrangements for us to deliver.

==========
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==========
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Part Number: 33030-1100461-2 rev L
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Price: Make offer
Quantity available: 15

--

Vincent Stemen vstemen@crel.com

Try Linux! The operating system of choice for those who are tired of
trying to perform real tasks with toy operating systems,
or operating systems that have been stripped of
functionality just so they can charge you to put it back
in.

4625. Re: 90 Degree Power Splitter. - Theory?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: "Dale R. Parfitt" <par@magg.net>
Message-ID: <3366B54E.3A89@magg.net>
Source record: 94498

Tom Faloon wrote:
>
> Can anyone explain the operation of a 90 Degree RF power Splitter.
>
> e.g. I am thinking of the 'Transformer' types offered by Mini
> Circuits. Their catalogue gives a good general description of 0/180
> degree power dividers, but does not explain how the 90 degree version
> works.
>
> Thank you for taking the time to read this. All advice will be
> appreciated.
>
> Tom Faloon

Hi Tom,

The two outputs are 90 degrees out of phase w/ each other- this is typical of hybrid combiners/splitters. If you anticipate using a pair of these to first split pwr to a pair of amps and then recombine- you connect them so that amp a is retarded 90 degrees at input, and amp B retarded at output (or vice versa) so they are in phase after recombining.

Dale
W4OP

4626. Re: DESPERATE ! For compression trimmer source.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <LE$dsAAbxkZzEwca@two-way.demon.co.uk>
Source record: 94499
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.equipment,rec.radio.amateur.misc,rec.radio.shortwave.rec.radio.swap

In article <5k2mth$t00@sjx-ixn5.ix.netcom.com>, michael silva
<mjsilva@ix.netcom.com> writes
>In <0MMSeIAVMMZzEw6g@two-way.demon.co.uk> philip de cadenet
><phil@two-way.demon.co.uk> writes:
>
>>I do like the sense of humour in teaching the population of this ng
>>the difference between nf & pf!
>
>Well, it's taken us long enough to stop thinking uuF, and now it's
>these funny nFs -- where will it all end? However, I'm sure I speak
>for all Americans in saying we promise to start using nF if you all
>will promise to start drawing your resistor symbols correctly instead
>of as those little boxes. Deal?
>
>73,
>Mike, KK6GM
>
>p.s. :) :)
>
>
Deal Mike, hi.

Phil G4ZOW/M
--
philip de cadenet

4627. Re: Bug catcher antenna?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: banderso@eni.net
Message-ID: <MPG.dcf5c4562e8282798968b@news.hlc.net>
Source record: 94500

In article <335996EE.203FFD83@ix.netcom.com>, mchogsto@ix.netcom.com says...
> be interested in hearing of experiences with the bug catcher or any
> other 75 meter mobile antenna. Does anyone know if B&W Mini-ductor is
> still available and where it can be obtained?
>
> 73....Jim....KD6QM.....mchogsto@ix.netcom.com
>
>
Jim ...

It is the king of mobile antennae. I have been using one for a few months and I have a better signal mobile than I do at my condo with attic antennae. GLA systems, PO Box 425, Caddo Mills, Tx 75135 Phone # 1-800-588-2841 to order 903-527-4163 for questions.

--
Barry Anderson K3SUI
Frederick, MD.
banderso@eni.net

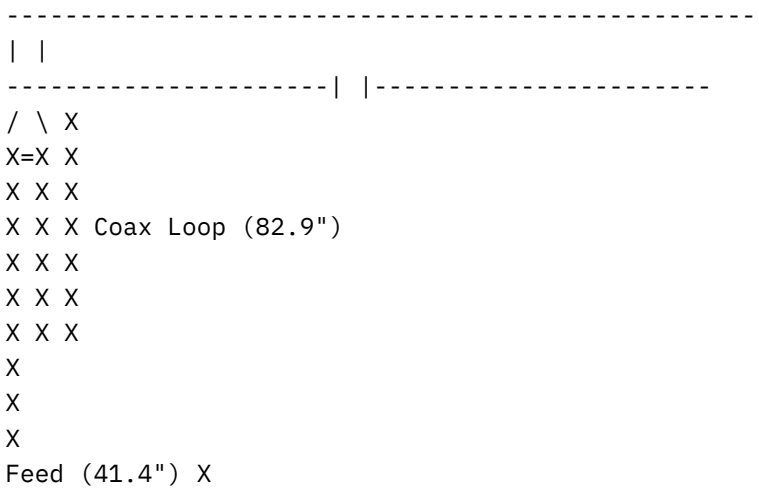
4628. Antenna Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-29 00:00:00 UTC
From: Brian <brianb@hughes.net>
Message-ID: <3366ABBE.5CD4@hughes.net>
Source record: 94501

I am trying to build a directional antenna that I can use with my scanner (receive only) to locate signals.
I have experimented with a number of designs but I am making slow progress since I know only a little about rf stuff. Any help would be appreciated.

The design that sort of works is as follows:

I took a piece of PVC approx. 1/4 wavelength long and wrapped a 1/2 wavelength piece of wire around the perimeter so the antenna ended up being approx. 1" tall and quite wide. The two ends of the antenna loop are hooked to each end of the center conductor of a 1/2 wavelength loop of RG59 coax. The lead in is a 1/4 wavelength long RG59 coax with the center wire tied to one side of the antenna and the shield tied to the shield of the loop of coax.



The antenna picks up signals quite well but the directional aspect of it needs improving. It would also be nice to eliminate the loop of coax and reduce the size of the antenna.

Here are the calculations I used:

Wavelength=300,000,000/47,000,000=6.382979 Meters (251.3 inches)

RG59 Wavelength=.66*6.382979=4.212766 Meters (165.9 inches)

As you can tell I am a beginner at this rf stuff (digital background) so any help would be appreciated.

Please respond via E-Mail.

Thanks,
brianb@hughes.net

4629. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: fgoldstein@bbn.|nospam.|com
Message-ID: <5k6fnlhrq1@daily.bbnplanet.com>
Source record: 94403
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In article <5jbjs0$f5o$1@kanga.accessone.com>, vbook@vbook.com says...
>
>Under terms of the Report and Order in ET Docket 96-8, released April 10,
1997,
>the FCC has announced that it will allow high gain antennas
>for unlicensed transmitters operating in the 2400 and 5800 MHz
>Part 15 allocations. These bands are shared with the Amateur Radio Service.
>
>Under the new rules, very high gain antennas may be deployed at 2400 and
>5800 MHz. Certain transmitter power reduction restrictions apply at 2400 MHz
>but unlimited gain systems may be installed at 5800 MHz. These systems will
>enable high speed Internet access using unlicensed systems. You can expect
to
>see these systems deployed rapidly as soon as 1998 to provide non-commercial
>and commercial services on these frequencies.
I haven't read that R&O yet but I did read the December one which originally allowed a maximum of 4 Watts ERP on the 5.8 GHz U-NII band, with unlimited *receiver* antenna gain and 1 Watt maximum transmitter power. It sounds as if they just decided that the asymmetry wasn't worth the bother, so you can use one highly-directional antenna for both transmitter and receiver. Makes sense to me.

In typical U-NII service, there will be cellular-style base stations with directional antennas pointing at them. Spectral density is VERY limited: The 1W TPO is actually 50 mW/MHz, so if you're not at least 20 MHz wide, you have to derate power. This tends to reduce interference potential dramatically, especially compared with ham-style narrowband emission.

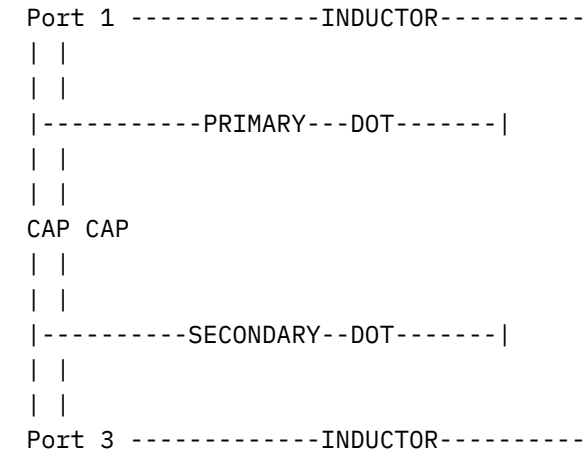
The U-NII band is one of the best things the FCC has done in years, a real gift to the public, finally a chance to do *something* without being beholden to the "Bell" interests. The h-r-online article is so utterly parochial that it seems like a discussion of World War II that begins with the headline "Church artifacts burned in fire". By opening this band up with VERY loose rules, save for power density, the FCC finally allows the public to have useful access to valuable spectrum! We who have been hams are the most likely ones to know how to use this, but it's certainly not in the antiquarian manner to which the A.R.S. has become accustomed.
--
Fred R. Goldstein k1io fgoldstein@bbn.com +1 617 873 3850
Opinions are mine alone; sharing requires permission.

4630. Re: 90 Degree Power Splitter. - Theory?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: rick@area.com
Message-ID: <5k6kgaer1@news.spies.com>
Source record: 94404

In article <862248315.13626.0@tfaloon.demon.co.uk>,
Tom Faloon <tom@tfaloon.demon.co.uk> wrote:
>
>Can anyone explain the operation of a 90 Degree RF power Splitter.
>
>e.g. I am thinking of the 'Transformer' types offered by Mini
>Circuits. Their catalogue gives a good general description of 0/180
>degree power dividers, but does not explain how the 90 degree version
>works.
>Tom Faloon

Perhaps this will be helpful. Anytime I need a quadrature hybrid
(what you are calling a 90 degree RF power splitter), instead of
buying one from Mini-Circuits, I build my own as follows:



The capacitors and inductors have a resistance of 100 ohms at
the center frequency (assuming Zo = 50 ohms). The primary and
secondary are windings of a 1:1 transformer such as the Mini
Circuits T1-1 or T1-6. If you wind your own transformer, you
have the option of using a low permeability high Q core and
combining the inductors with the transformer; ie, the inductances
would be magnetizing inductances.

This design is a lumped element chunk of transmission line. Basically,
signals from port 1 to port 3 or port 2 to port 4 get a phase advance
because they go through capacitors. Similarly, there is a phase
lag from 1 to 2 and 3 to 4 because of the path through the inductors.
You can cascade several sections of this to get more bandwidth
but I've never seen a good paper telling how to do it. You would
have to deduce it from papers on transmission line types of
directional couplers.

To use this, call port 1 the sum port, port 3 the phase lead port, and port 2 the phase lad port. Port 4 gets a 50 ohm resistor to ground that absorbs reflections from ports 2 and 3.

Hope that took some of the mystery out. For more information read Barney Oliver's paper in Proc. IRE about 1954.

Rick Karlquist N6RK
rkarlqu@scd.hp.com

4631. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5k7f3c$eqf@camel3.mindspring.com>
Source record: 94405
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

gary@ke4zv.atl.ga.us (Gary Coffman) wrote:

>In article <334ED244.26AA@concentric.net> "Steve J. Quest" <Squest@concentric.net>
writes:
>>Tom Rauch wrote:
>>>
>>> But the problem is the shield does not shield the antenna from time
>>> varying electric fields. If it did, the antenna would receive no
>>> signals at all.
>>
>> The shield attenuates (reduces greatly) the electrostatic
>>component of the EM wave. The magnetic component travels freely through
>>the cage. Most noise signals are stronger in electrostatic than magnetic
>>due to how they are generated. Broadcast signals typically have much
>>higher magnetic component since they are launched off a resonant "tuned"
>>radiating element (antenna) while the "noise" from your fluorescent
>>lamp, fan motor, computer, etc., is launched off an untuned, non-resonant
>>radiating element (power cord, wires, etc.)

>There is *no* electrostatic component to an electromagnetic wave. The
>electric and magnetic field components of the EM wave are *dynamic*, and
>intimately coupled to each other. Bill Sabin did a very good explanation
>of this in another post. You can't have an EM wave without both the electric
>and the magnetic field. The energy of the wave is transferred back and
>forth between the electric and magnetic field components of the wave
>continously because one continuously generates the other as they travel
>through space. That's what allows an EM wave to propagate through space.
>And since energy must be conserved, the electric and magnetic field
>components *must* be of equal strength (though at different times as the
>energy oscillates back and forth between the electric and magnetic field
>vectors). If you attenuate *one* field vector, you attenuate the other
>as well because the total wave only has one energy.

>The only time this is not exactly true is in the *near* field of the
>radiating source. In the near field, less than 5 wavelengths from the
>source, the EM field hasn't fully established, and the signal can be
>treated as partially separate electric and magnetic induction fields.
>And *those* fields don't have to be of equal strength. That's the case
>for noise generated *very* near the receiving antenna.

>A *partial* shield can then have some effect in differentiating the
>fields from far sources as compared to near sources. But if the
>shielding is *complete* for either field, no EM signal will be
>received. That's why the shielded loop antenna must have a *break*

>in the shield.

>> Shielded magnetic antennas will also nul strong stations in
>>opposite polarity to where it is turned, thus you can blank a station on
>>the same frequency (jammer) that happens to be in a different location
>>geographically from the source you wish to receive. This is the upside,
>>the downside is that shielded magnetic antennas are highly directional,
>>and unless you point it in the direction the signal is coming from, it
>>won't receive the signal at all.

>Well, the idea is basically right, but your terminology is wrong. It
>*is* the pattern of the antenna which results in both the null and
>the peak. It has nothing to do with signal *polarity*. That's a separate
>issue. And the shield has no effect on pattern, so this directionality
>exists whether the loop is shielded or not.

>>With a partial Faraday shield, and by
>>adding a bit of a whip antenna to the device, you can give it less
>>directional characteristics to "find" your station by adjusting until
>>the signal outweighs the noise (best of both worlds). This is how I
>>use mine. I have a "tail" outside the Faraday shield which allows all
>>signals into the resonant loopstick tank so I can find (albeit weakly)
>>the signal I want, then zero in on it, thus having the magnetically
>>induced signal outweigh any noise the "whip" will pull in (high signal
>>to low noise ratio).

>Actually, what a loop (shielded or not) and whip do (when properly
>combined) is change the antenna pattern from bidirectional to cardioid,
>IE sharply unidirectional. That will reject noise and interference from
>all directions except the signal direction. This will have the effect of
>improving the SNR of the desired signal. Improperly combined, the two
>antennas will lose directionality, and *degrade* the SNR of the received
>signal.

>Note that the whip and loop must be physically small with respect
>to a wavelength for this to work. If they grow to be an appreciable
>fraction of a wavelength, then polarity raises its ugly head as an
>issue which must also be considered. Polarity can be exploited for
>other things, such as diversity reception, but it will have the effect
>of degrading the cardioid pattern of a loop and whip combination.

>Gary
>--
>Gary Coffman KE4ZV | You make it, | Due to provider problems
>Destructive Testing Systems | we break it. | with previous uucp addresses
>534 Shannon Way | Guaranteed! | Email to ke4zv@radio.org
>Lawrenceville, GA 30244 | |

It gives me no end of comfort to know that at last someone has come up

with an irrefutable law in Electricity. You cand to **this,** and
some one has proven there is no **that,** and now we have an anchor
for the soul of electricity that is sure and certain.

Or it is until someone else proves different.

I believe one of the first things we were taught in college physics was NEVER TRY TO PROVE A NEGATIVE. All you can prove is you don't know how to do it.

Ciao baby.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

4632. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5k7f33$eqf@camel3.mindspring.com>
Source record: 94406

frussle@erols.com (Jake Brodsky) wrote:

>On Sun, 30 Mar 1997 04:11:13 +0100, schultz@cddis.gsfc.nasa.gov (Dan
>Schultz) wrote:

>>In article <5h3qs3$mou@camel4.mindspring.com>, aruder@pipeline.com wrote:
>>
>>> >I have discovered a way to xmit music over a
>>> >bandspread of =< 100 Hz. Note that is Hertz
>>> >not KiloHertz.
>>>
>>
>>
>>> Since posting the above, I have received 37 replies telling me it
>>> can't be done.
>>>
>>> To most of those I did not replly.
>>>
>>> Several said it caint be done, but if it looks interesting, send it to
>>> me, and I MAY get interested.
>>>
>>> to all but one of those, I said "the world is full of people who
>>> got no idea what is going on, but who know why it won't work.
>>>
>>
>>
>>Your claim does seem a bit extraordinary, and extraordinary claims require
>>extraordinary evidence.
>>
SNIP

>>So show me a working demonstration, or explain clearly how your discovery
>>works. Show me enough detail so I can figure out where you made your mistake,
>>let me examine your apparatus in detail, and if I can't find any mistake
>>then, and only then, I might believe that you have uncovered some new
>>communications principle. Until then I would not advise any investor to
>>put his money behind your discovery, because it does claim to defy well
>>known principles of radio communications which have been around for many
>>years and which I will not abandon easily. Keeping an open mind is one
>>thing, but we still need to see some convincing proof that your claims are
>>correct and that the many experts are wrong.

>Dan, he may very well be able to do just what he says. What he didn't
>say is how much Signal to Noise ratio he'll need to get it to work!

SNIP

>The bottom line, however, is that basic rules of information theory
>still apply. TANSTAAFL.

The REAL bottom line is that nobody KNOWS the basic rules.

Ciao

I remind you that what I asked for, was how to meet someone without
them stealing it.

giving it away doesn't apply.

LH.
Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

4633. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5k7f36$eqf@camel3.mindspring.com>
Source record: 94407

tomb@lsid.hp.com (Tom Bruhns) wrote:

>Lou or Annette Hinshaw (aruder@pipeline.com) wrote:
>: SHOW ME HOW TO PROTECT IT FROM THIEVES AND YOU GOT A DEAL.
>: That was the original intent of my posting. I need to find a way to
>: assure that I will not be told (AGAIN!) that "we don't need you."
>: after the details are revealed.

>Patent it. Or for that matter, just file a patent disclosure
>before showing the details to anybody. Be careful about it till
>the patent is actually issued. Get people to sign non-disclosure
>agreements.

CAREFUL is right. study the work of most of those whose (patented)
work has been stolen. I have two patents and a third abandoned
for lack of money, and all that taught mei s that a patent isn't worth
the paper it's written on unless you can afford to spend your time
and money defending it in court.

>Then--talk with someone who's really competent about it.
About what? If they are competent about the invention, it isn't an
invention. It is at best an improvement.
> Be really willing to listen to the feedback they give you. Be sure you can
>demonstrate to them through tests they buy into that your ideas
>actually do work. Note that their competence and their approval
>of the tests are both critical. Many university communications
>engineering professors would fit the bill: relative lack of
>commercial interest, open-minded, and competent. Don't think
>they are not open-minded just because they disagree with you. And
>be willing to pay a consulting fee for their services.

I don't think academics aren't open-minded. Their minds have the same

openness that a sand shark's mouth has. Been there, done that, wore
out the T-shirt.

>Certainly if you are bright enough to create significant
>intellectual property, you are bright enough to protect it. You
>aren't the first, and won't be the last. If you approach everyone
>like they are a thief, it's not very likely you'll make many
>allies.

>Even companies like Microsoft aren't immune to thievery,

IMHO, Bill Gates is one of the worst.

>but they
>are certainly quite succesful in spite of it; if your invention
>involves hardware, it's likely easier to protect than software.

>This is not to say I have any confidence in your claims.

I don't need confidence in my claims, I need a cogent answer to
my first question.

Ciao baby.

Lou Hinshaw

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

4634. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5k7f38$eqf@camel3.mindspring.com>
Source record: 94408

"'Grif' w. keith griffith" <kgriffit@wolfenet.com> wrote:

>Tom Bruhns wrote:
>>
>> Lou or Annette Hinshaw (aruder@pipeline.com) wrote:
>> : SHOW ME HOW TO PROTECT IT FROM THIEVES AND YOU GOT A DEAL.
>> : That was the original intent
>> Cheers,
>> Tom
>> tomb@lsid.hp.com
> snip/hack

>You might (Lou or Annette) check Don Lancasters books or home page for
>some interesting reading on how to control your property and the steps
>to develop and market it. It shouldn't be a really big deal to be able
>to devise a black box rf modulator/antenna, followed by an rx
>demodulator/antenna, and let the folks look at the spectrum with an
>analyzer while piping some music or audio in, and looking at the
>resultant demodulated audio out.,,, or even if you used a wire link, let
>them put a narrow bandpass filter at the freq of your choice in the data
>link and pump their audio thru the unit and look at the distortion
>figgures. At least, while not the definitive proof of function,,, it'd
>work good enough to get you in the door you're looking for.

Sir, for those kind words, I thank you.

Don Lancaster is my next reading project.

Again, Thank you.

LH
Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

4635. Re: 90 Degree Power Splitter. - Theory?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3367527B.6180@crpl.cedar-rapids.lib.ia.us>
Source record: 94409

Richard Karlquist wrote:
>
> In article <862248315.13626.0@tfaloon.demon.co.uk>,
> Tom Faloon <tom@tfaloon.demon.co.uk> wrote:
> >
> >Can anyone explain the operation of a 90 Degree RF power Splitter.
>

The ARRL Handbook 1995/6/7, chapter 17, has a brief writeup on three types of combiner/splitter circuits, including the 90 degree type, and also several references.

Bill W0IYH

4636. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: Don Wall <d.wall@nunet.neu.edu>
Message-ID: <5k7kb1$5lr@chaos.dac.neu.edu>
Source record: 94410
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

>I'm making solid state versions of the tubes used in a AC-DC
>AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
>
Why would you want to do that? The price of these tubes is at a
very low level, so what is the point of going to all that effort
to replace them, not to mention the fact that the radio would no
longer be original if you put solid state tube replacements in
it. This type of modification is ok as a last resort for
unavailable types, but at the moment, these tubes are so common
that McDonald's may start packing them in Happy Meals!

Don Wall

4637. Re: 90 Degree Power Splitter. - Theory?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5k7sli$no@hpcvsnz.cv.hp.com>
Source record: 94411

Richard Karlquist (rick@area.com) wrote:

: The capacitors and inductors have a resistance of 100 ohms at
^^^^^^^^^^
Hope Rick meant reactance here. ;-)

Thanks to Rick for posting this brief explanation.

--
Cheers,
Tom
tomb@lsid.hp.com

4638. Re: Looking for ceramic IF filters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: "Rafael Garcia (EA4RJ)" <rgarcia@sat.cide.upm.es>
Message-ID: <Pine.LNX.3.93.970430174841.164B-100000@tie.ea4rj.ampr.org>
Source record: 94412

On Tue, 29 Apr 1997, Fred McKenzie wrote:

> In article <336334ED.FE716B4@sat.cide.upm.es>, "Rafael Garcia (EA4RJ)"
> <rgarcia@sat.cide.upm.es> wrote:
> > SFE10.7MF 10.7 -30...50 KHz
> > If my memory is right, this device is manufactured by Panasonic.
>
> Rafael-
>
> Yes, Panasonic makes ceramic filters. However, I think the SFE filter is
> made by Murata.

Thanks for correction! My memory failed: core dumped, :)

Best 73,

Rafael,
Madrid (Spain)

4639. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: mda@cam-orl.co.uk
Message-ID: <5k89gq$8om@lyra.csx.cam.ac.uk>
Source record: 94413
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

--
So when is someone going to end this thread by resorting to the actual equations.
Descriptions of what is happening are useful, but only when I see the equations
and can follow and verify all the steps in the proof will I rest.

Mike (doubting Thomas) Addlesee

4640. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: Randy Guttery <comcents@cybertron.com>
Message-ID: <3367B53F.3E07@cybertron.com>
Source record: 94414
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

Don Wall wrote:
>
> >I'm making solid state versions of the tubes used in a AC-DC
> >AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
> >
> Why would you want to do that? {snip}

Well, for one - I'm hoping he succeeds - it would be a small step from his "working" 12BE6 to a 1L6 ---- and it's makes a _whole_ bunch more sense to experiment with a simple and inexpensive AA5 chassis and tubes than risking - say an H500....

Besides - like many things in life - the trip is sometimes more rewarding than the destination...

best regards
--
randy guttery

Visit the Mississippi Historical Radio and Broadcasting Societies Virtual Museum:
http://www.cybertron.com/~comcents/mhr/mhrlp.html

A Tender Tale - a page dedicated to those Ships and Crews so vital to the Silent Service:
http://www.cybertron.com/~comcents/tendertale/ttp0.html

4641. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: Ed Legenza AA6NI <atued@best.com>
Message-ID: <33680156.6@best.com>
Source record: 94415
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

> :The H stands for "Huh!"..you know..Huh?..I didn't copy that
> :last..Huh?..oh..CQ..who?
> :The A stands for "Aye!...you know..aye...good buddies..let's act like
> :morons on 40meters
> and misspell metres at the same time.
> :The M stands for "Moron!.you know..Huh?..Aye moron yall going to hamfest
> :so we can rip off some unsuspecting newbie?..you know.
> :.HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMERHAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER
>
> ====================================
> To reply via email please remove the XX from my
> return address.

And SICK stands for you!!

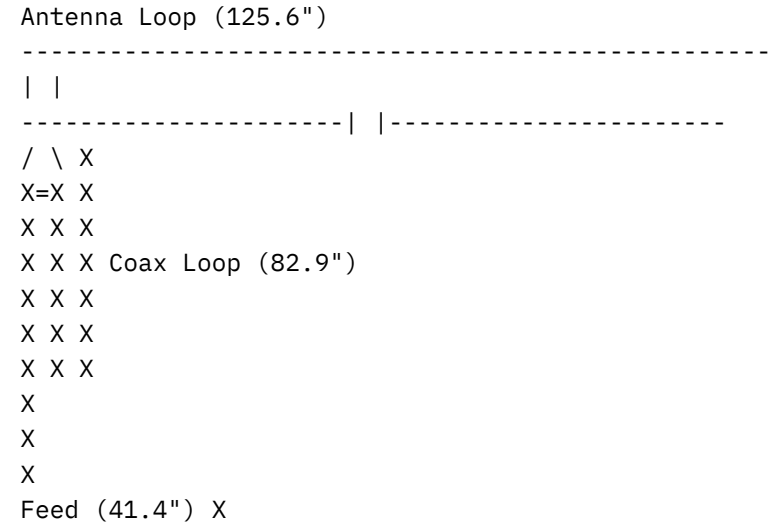
4642. Antenna Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: Brian <brianb@hughes.net>
Message-ID: <3367E0CA.54D1@hughes.net>
Source record: 94416

I am trying to build a directional antenna that I can use with my scanner (receive only) to locate signals.
I have experimented with a number of designs but I am making slow progress since I know only a little about rf stuff. Any help would be appreciated.

The design that sort of works is as follows:

I took a piece of PVC approx. 1/4 wavelength long and wrapped a 1/2 wavelength piece of wire around the perimeter so the antenna ended up being approx. 1" tall and quite wide. The two ends of the antenna loop are hooked to each end of the center conductor of a 1/2 wavelength loop of RG59 coax. The lead in is a 1/4 wavelength long RG59 coax with the center wire tied to one side of the antenna and the shield tied to the shield of the loop of coax.



The antenna picks up signals quite well but the directional aspect of it needs improving. It would also be nice to eliminate the loop of coax and reduce the size of the antenna.

Here are the calculations I used:

Wavelength=300,000,000/47,000,000=6.382979 Meters (251.3 inches)

RG59 Wavelength=.66*6.382979=4.212766 Meters (165.9 inches)

As you can tell I am a beginner at this rf stuff (digital background) so any help would be appreciated.

Thanks,
brianb@hughes.net

4643. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580003004971326030001@news.europa.com>
Source record: 94417
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

In article <5k7kb1$5lr@chaos.dac.neu.edu>, Don Wall <d.wall@nunet.neu.edu>
wrote:

:>I'm making solid state versions of the tubes used in a AC-DC
:>AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
:>
:Why would you want to do that? The price of these tubes is at a
:very low level, so what is the point of going to all that effort
:to replace them, not to mention the fact that the radio would no
:longer be original if you put solid state tube replacements in
:it. This type of modification is ok as a last resort for
:unavailable types, but at the moment, these tubes are so common
:that McDonald's may start packing them in Happy Meals!
:
:Don Wall

Yeah, but try buying some 12AX7's, or anything else that happens to be used
in tube audio equipment. Like my Radiotron Designer's handbook that I
bought in
91 for $5.00 and is now selling for $100 or more in exdellent cndx.

Some tubes are ubiquitous and some are very scarce, kind of like collecting
stamps or coins. Rob.l

4644. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33683CDF.6BF3@concentric.net>
Source record: 94418
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Thomas G. McWilliams wrote:
>
> Steve J. Quest (Squest@concentric.net) wrote:
> : I'm sorry to say, that won't cut it when you're using a MOSFET
> : in your front end. In fact, the break-over is so much lower than 70
> : volts that I laughed when I read this.
>
> You are wrong. Think about why aluminum wiring is generally forbidden
> for use in home construction;

Because aluminum is a flammable metal? :-/ When aluminum is over driven, it burns with a flame temperature higher than oxy-acetylene? Because copper joined to aluminum forms an electrolytic and causes resistance, thus a voltage drop, thus a HOT SPOT where fires start? How does all this relate to the topic? By the way, since we are off topic anyway, application of a little silicone base grease to the junction of CLEAN copper and aluminum will remove oxygen, thus prevent the electrolytic action and THUS, you can then safely join cu and al.

> Now think about metal oxide semiconductor
> gates. 70 volts of static EMF across a feedline is nothing, particularly
> when you consider that a mosfet's gate is already tied to ground via
> a resistor or a transformer winding.

Surge of amperes will vaporize the resistor, regardless of how low it is (tho typically the resistor will be high in value, or in MY designs, abscent because I require maximum gain on my stages. Transformers couple surges (AC spikes) and a 1 to 1 transformer will present just slightly less than 70 volts on the secondary. The gap between the gate and the silicon junction in a MOSFET is only a few MOLECULES THICK! Just a few volts is enough to arc that distance, let alone 70 volts! Remember MOSFET stands for Metal Oxide, field effect transistor. The metal oxide is silicon dioxide, better known as glass. That glass has to be thin for the field effect to take place, too thick, no field, no biasing, no conduction. That's why MOSFETS are so sensitive on the gate, the dielectric material, in this case silicon dioxide, is so very thin and easy to break over with a penetrating arc-through.

> (And as has been pointed out by
> others, most mosfets are diode clamped anyway--yuck).

Best way to protect them is with fast switching diodes when
practical.

>
> : Also, how much current can an ionizing neon tube shunt? A diode will
> : switch on and shunt AMPERES at just 700mw while a neon won't conduct
> ^^^^^
> Huh? Do you mean 700 mV?

Yup, mistyped. Sorry. 700 millivolts. (.7v)

>
> : before 60 volts, and will only shunt a few milliamperes before it dies.
>
> Wrong again. ESD is *very* low current. Why do you think your wrist
> strap at an ESD work station has over 1 Meg Ohms of resistance to
> ground?

Oh, I don't know, OSHA requires it, because if you touch line
HOT, you will be killed if your left wrist is tied to earth ground, and
your right hand touches power line HOT. What is the discharge bleed
time for 10000 statcoulombs through a 1 meg resistor (keeping in mind
that the 1 meg looks very low but not THAT low to high voltage)? How
many ergs can one expect to shunt through 1 meg in 1 second?

> It works and it keeps you from being electrocuted in case you
> touch the mains. Apply Ohms law. ESD currents are on the order of
> microamps at best, not even milliamps. On a high performance front-end,
> even a Meg ohm resistor across the feed line is far preferable to diode
> mixers.

But diodes are prefered for higher gain so long as the signal
voltage is not high enough to turn the diode (read: ZENER) on.

>
> If ESD currents were of the order which you claim, then we would all
> be dead. Check out the biological effects of electricity. Current is a
> complete non-issue as far as ESD is concerned.

I don't know about you, but ESD has destroyed many computers,
many TV's, CD players, etc. I was standing right by my girlfriend when
she reached up and touched the CD player, pop, she pulled her finger
back, and the CD player was dead. Even with a 1k resistor pulling the
row address column address scan IC to VCC, it died. Now what do you
say? I'm sure EVERYONE here has at one time or another reached out,
discharged into an electronic device (computer keyboard, telephone,
whatever) and had it die, forever, from the discharge. Now how do
you argue that one? Hmm? Remember, everyone is watching. :) I touched
a joystick to a video game once, didn't hardly feel the discharge, and
blew the 6532 RIOT out. It has probably happened to MOST people. I
also remember touching a cheap telephone and discharging into it, and
the touch tone encoder IC blew. I'm sure everyone has done this at one
time or another, so you can't really aruge your way out of this one.

>
> Face facts, for a high-performance rx, avoid hanging mixers across a
> feed line. A neon bulb is preferable by far. In fact, I wouldn't even
> worry about ESD if the gate of the device I wish to protect has a
> reasonable path to ground--which means most any normal design.

My designs involve high input impedances. Why buy a device that
has 10 megs input if you tie it low with a 1 meg resistor, effectively
cutting it's potential down! Protect it by shunting just before it's
limits are reached with two back to back zeners of a couple of volts
and you will first protect the device, and second, avoid intermod....sq

>
> Thomas (ars KI4N)

I'm not a ham myself, I'm a professional electrical engineer.
I have a BSEE degree, and remember about half the theory, but ALL of
the practical, as I do this stuff every day on the job.............sq

4645. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33683F28.B89@concentric.net>
Source record: 94419
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

John Doty wrote:
>
> In article <tgmE9CJ06.LIE@netcom.com> tgm@netcom.com (Thomas G.
> McWilliams) writes:
> > Wrong again. ESD is *very* low current. Why do you think your wrist
> > strap at an ESD work station has over 1 Meg Ohms of resistance to
> > ground?
>
> The processes that place large electrostatic voltages on objects tend to
> be very low current, so a large bleeder resistance can drain off the
> charge as fast as it is supplied, preventing a discharge. However, in an
> actual electrostatic discharge event the currents are quite high,
> typically several amps. The duration is short, usually well under a
> microsecond, too short for serious biological effects, but it can easily
> damage a semiconductor device.

John, you are absolutely correct on both points. We are not
concerned however with events taht generate electrostatic differentials
particularly, but the mechanical events which result in ESD (e.g., the
touching of the antenna by a charged body).

>
> A system "protected" by a bleeder isn't protected against a discharge due
> to contact with an unprotected external object (cable, person). The charge
> on a single raindrop may be sufficient to cause damage in extreme cases.

Hmmm... single raindrop? :) I agree with you on your first
point tho, the bleeder will NOT protect from an ESD event.

>
> This is a hard problem to solve. Zeners and MOVs have been mentioned, but
> they tend to have too much capacitance to be useful even at video
> frequencies.

Usually a zener only has a few picofarads of capacitance. My
ONLY gripe is that this capacitance changes with temperature! :(

> Ne bulbs, and their bigger brothers designed for lightning
> protection, have low capacitance but their clamp voltage is generally too
> high (a multilayer approach with a gas discharge tube out front, followed
> by a lower voltage device, can be very effective). High conductance, low
> capacitance diodes (1N914B) are fairly effective, but may produce mixing
> products.

914's are designed as switching diodes, but end up shorting out
with ESD. However, replacing a shorted 914 that gave it's life to
protect the MOSFET is easier AND cheaper. :) They can also only be used
where the signal voltage is at least HALF the bias on voltage (700mv)

> Reverse biasing the diodes with batteries or a quiet power
> supply helps.

That will reverse bias OFF the diode, but what about the varactor
effect? That will vary the capacitance of ALL diodes somewhat.

>
> There's a fairly new IC protection technology I haven't tried yet that may
> be a bit better than diodes: check out
> <http://www.semi.harris.com/datasheets/tvs/sp720/>. These things may still
> produce mixing products, but I suspect they make less than diodes. The
> Harris site also has a lot of useful information on ESD protection in
> general (no connection, just a satisfied customer).

Sounds like (without looking) like a Sidactor (Digi-key sells
them). Sidactors are back to back zeners in one to-92 package......sq

(I use with great success, sidactors on all incoming port lines to the
embedded devices I build. I've never lost a component in one of my
designs to ESD, however, these are digital logic, not RF.............)

4646. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: Steve Phipps <sphipps@clandjop.com>
Message-ID: <336781EE.2745@clandjop.com>
Source record: 94420
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

Don Wall wrote:

> Why would you want to do that? The price of these tubes is at a
> very low level, so what is the point of going to all that effort
> to replace them, not to mention the fact that the radio would no
> longer be original if you put solid state tube replacements in
> it.

Why not? Maybe he's trying to come up with preservation techniques for old radios so they will play well into the future. We can't expect these tubes to be around forever. I say go for it and keep experimenting!

Stephen Phipps
sphipps@clandjop.com

4647. repeater controller?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: Samuel Johnson <samjohnson@Bledsoe.net>
Message-ID: <3367845F.7236@Bledsoe.net>
Source record: 94421

I'm in need of another repeater controller. As usual, the cheaper, the better, as long as it works. E-mail me with any prices.
Thanks,
Sam Johnson KF4GQS

4648. F.S. - Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-04-30 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970430035200.XAA04825@ladder01.news.aol.com>
Source record: 94502

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Large selection of radio related publications. Schematics for many radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more. Now over 1550 different tube types in stock - E-mail Rog42@aol.com and ask for my latest RADIO list - #426-T.

4649. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3368F3EB.1DBE@crpl.cedar-rapids.lib.ia.us>
Source record: 94353

Bill Meara wrote:
>
> I came a cross an interesting book, "The Science of Radio" by Paul
> Nahin. In his introduction he explains why he chose to use vacuum
> tubes as the device with which he explains radio. "Transistors are
> two charge carrier devices (electrons and holes) understandable really
> only in terms of Quantum Mechanics.

Beware of the nattering nabobs of negativism. For engineering and
circuit design purposes the hole/electron discussion is more than
adequate.

Bill W0IYH

4650. FS: Yaesu FT-747GX - $500

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: kf4kjf@post1.com
Message-ID: <3368ee08.20977178@news.icanect.net>
Source record: 94354
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Hi All,

I have a Yaesu FT-747GX to sell. Covers .5-30 mz, all-mode AM,CW,SSB, and FM with optional accessory. Its "as new" in the box not a single mark on it. I would like to get $500.

BTW- I just got a old issue of CQ (1992) and there is a remote mounting mobile kit one can get for the FT-747GX.

.-.
/ \ .-. .-.
/ \ / \ .-. / \
/_Benjamin_Blavat_KF4KJF_kfkjf@post1.com
\ / \ / \ / \ /
\ / `-' `-' \ /
`-' `-'

4651. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000105971336310001@news.europa.com>
Source record: 94355
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

In article <5k0bmd$gj3@blush.jps.net>, John in Roseville <r2d2@cqnet.net> wrote:

:I'm making solid state versions of the tubes used in a AC-DC
:AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
:
:See:
:http://home.cwnet.com/rtwodtwo/tubemod.htm
:
:I'm working on the 12BE6 now.
:Let me know what you think!
:
:John
:

It is very instructive to try to build solid state circuits that have the same characteristics (or better) as vacuum tubes.

I've built modules for replacing the tube mixers in my R4-C and its very difficult.

I've always thought that tube designs were much more elegant than modern solid state ones. Realize it took less than 20 active devices in the 1960's to produce a color TV. Now engineers can simply throw thousands of transistors at an application.

How many millions of transistors are in a new TV? The picture is really not much better- and most people never have their TV adjusted right anyway- too much color for pink and orange flesh tones.

So where is the progress? In more features and gizmos, just like the current state of commercial ham transciever manufacture.

Rob.

4652. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000105971343290001@news.europa.com>
Source record: 94356
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

```
:>
:> Also, I thought that commercial gas discharge tubes were available for
:> transient suppression? Don't they contain hydrogen, a very fast conductor?
:
: Mercury vapor, a very fast conductor. Fast, however, is a
:relative thing. Diodes switch in 10's of nanoseconds. Mercury vapor
:devices and metal oxide varistors, etc., switch in 10,000,000's of a
:nanosecond. Typically fast enough for old bipolars, but not for MOSFET.
:
:sq
```

I think low pressure hydrogen can switch in nanoseconds. I wonder why they don't use that in those transient suppressors? Maybe too big of an explosion hazard for the manufacturing plants.

Rob.

4653. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: miker <mreiney@NOSPAMhevanet.com>
Message-ID: <33690199.65BC@NOSPAMhevanet.com>
Source record: 94357

You have the same problems with tubes. Isn't a vacuum simply the
absence of something that would ordinarily be there? It's a hole
in the air.....:-)

Bill Meara wrote:
>
> I came a cross an interesting book, "The Science of Radio" by Paul
> Nahin. In his introduction he explains why he chose to use vacuum
> tubes as the device with which he explains radio. "Transistors are
> two charge carrier devices (electrons and holes) understandable really
> only in terms of Quantum Mechanics. Electrical Engineering
> professors have, yes, invented lots of smoke and mirrors ways of
> 'explaining" holes in terms of classical physics, but these ways are
> all really, seductive frauds. They're good for their ease in writing
> equations and thinking about how circuits work, but even though they
> look elementary, I don't like to teach a first course in electrical
> engineering with their use. They are really shortcuts for advanced
> students who have had quantum mechanics."
>
> What is Nahin talking about? Are all those descriptions of transistor
> operation that talk about holes really "seductive frauds"? Will we
> have to "understand" QM before we really understand transistors?
>
> What do you guys think of all this? Should I stick with
> (understandable) vacuum tubes?
>
> 73 de Bill N2CQR

--
Please remove NOSPAM from return address before replying.

4654. tracking problem...help anyone??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: raghavan@psych.nyu.edu
Message-ID: <raghavan-0105971826010001@mcsv45-p9.med.nyu.edu>
Source record: 94358

I 'd appreciate help from anyone who has experience designing superhet mixers and oscillators...

I have a ganged air variable with a 365 and 115 pf section and was hoping to use this for a multiband superhet...I know that for the AM band, with an appropriate choice of main tune inductance and oscillator coil inductance this air variable can track decently to yeild a 455 Khz IF. My problem is whether I can use the same capacitor for some of the short wave bands...even if that means I will have to change my choice of the IF.

Anyone have any suggestions?

-Manoj Raghavan

4655. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000105971815530001@news.europa.com>
Source record: 94359

In article <5k9f1l$k7t$1@news.uni-c.dk>, i3683@csc.dk (Anders Heerfordt) wrote:

:I need some cheap low frequency, low noise microphones.
:Electret microphone capsules are cheap, but they are generally not
:low noise and not low frequency. They typically go down 50 Hz. I need
:to go lower.
:
:If I could find a source for electret capsules without the internal
:FET, I could connect a low noise FET amplifier externally, and
:conceivably make a lower noise, lower frequency microphone.
:
:Does anyone here know a source on electret microphone capsules with
:no internal FET. Alternatively a low noise low frequency electret
:capsule?
:
:Regards, Anders

I believe that the low freq response of those mics is a function of their physical size and has nothing to do with the FET. I've taken some apart, and no coupling caps.

Because the Electret has such a high impedence, you would have to feed it with antenna ladder line :) to get enough impendence. With coax, the cap/unit lenght would severely limit the upper frequency. Maybe you would have a mic that would work from 50-1khz. :)

You may be stuck with dynamic elements, Rob.l

4656. Lithium-Ion Battery in a Standard C508A??????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: miker <mreiney@NOSPAMhevanet.com>
Message-ID: <33694250.3319@NOSPAMhevanet.com>
Source record: 94360
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Problem: Standard C508A works very poorly on NiCd batteries.
At 3V, the power is about 1/4 watt. At 2.4V it's about 60 mW.
NiCd batteries just won't cut it.

So, I thought I'd put in a Lithium-Ion Battery.
I'll use one cell and leave the other empty.
If I charge it at 100ma and limit the charging voltage to 3.5V, I won't exceed the rating of the transceiver.
According to the curves I've seem published on the web, I can get about 80-90% of the capacity between 3.5V and 3.0V. One Li-ion cell is about the same mAH capacity as the NiCds. Battery life is not an issue. Just need a little more than 60mw out.

Any flaws in this logic?

Anyone know where I can buy just one AA Li-ion battery at a reasonable price?

Thanks, miker

--
Please remove NOSPAM from return address before replying.

4657. Re: motor synchronization problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5kbhmh$nrh@mtinsc03.worldnet.att.net>
Source record: 94361

Woody:
You might consider some surplus selsyns (synchro/motor)...
...A primary motor drives one of the selsyns, the second selsyn tracks ("phase coupled") the driven unit. Many surplus units may require a 400 Hz. power supply. Some were available for 120vac./60 Hz.
Woody

Michael Pinneo wrote:
> I need to run two motors such that their rotation is synchronous, i.e., same rotational speed and angular alignment. They must maintain the same angular alignment when they are accelerating up to speed and while they are running, but can spin down independently when they are switched off. Mechanical coupling between the two motors is not possible. I need to achieve at least 600 rpm, would like higher if practical. The shafts can be realigned before powerup. The mechanical load is small, probably less than 5 in-oz of torque at full speed, so small motors will do the job. Acceleration time to full speed is not important. Braking of the unpowered shaft is not required. Service is continuous.
>
> Is there a simple and cheap motor/control setup which will do what I need? Thanks for your assistance.
>
> Regards,
>
> JMP

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

4658. WTB: Cushman "plug-ins"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: George Worth <gworth@ibm.net>
Message-ID: <33697CC4.1056@ibm.net>
Source record: 94362
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

I'm trying to find a few Cushman service monitor plug-ins. Specifically,
I'm looking for a 301A oscilloscope, 314 high sensitivity mixer, 302
deviation meter, and 303 broadband mixer. If you have any of the above
and want to sell them, please e-mail me at:

gworth@ibm.net

Thanks,
George

4659. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3369eced.2699361336@news.sci.fi>
Source record: 94363
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

tgm@netcom.com (Thomas G. McWilliams) wrote:

>Steve J. Quest (Squest@concentric.net) wrote:
>: Just stick two high-speed rectifier diodes, capable of conducting
>: forward several amperes of current, back to back, and you are
>: protected. All voltages exceeding 700mw will be clipped thusly.
>
>
>As has been mentioned, back to back diodes are an invitation to
>intermod.

How about using the same system as used in CMOS chips. Connect one reverse biased diode from the input line to V+ and another reverse biased diode to V-. If the DC bias for the input is in the middle between V+ and V-, you have a quite large IMD free input voltage range. As noted previously in this thread, the capacitance varies when the reverse voltage over the diode varies, however if the input potential drifts, the voltage over one diode will increase while the voltage across the other diode will decrease, partially compensating for the capacitance change. The V+ line has to be well bypassed to the V- line at the operating frequency.

The V+ and V- lines also have to be well bypassed to ground close to the diode connection points with capacitors and zeners. If the ESD is flowing down the input line, it will forward bias one of the diodes and there must be a low impedance path from the V+ (or V-) line to ground through the capacitor and the zener in parallel. This will prevent the ESD to flow around the V+ and V- supply lines causing all kind of problems.

I once had a nasty surprise with this kind of protection in a high impedance circuit. I used 1N4148 diodes and they were sensitive to ambient light upsetting the input bias system. I had to cover the diodes to get away with this problem :-).

Paul OH3LWR

4660. motor synchronization problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: mikegem@aol.com
Message-ID: <mikegem-0105971338540001@cox0b.batnet.com>
Source record: 94364

I need to run two motors such that their rotation is synchronous, i.e., same rotational speed and angular alignment. They must maintain the same angular alignment when they are accelerating up to speed and while they are running, but can spin down independently when they are switched off. Mechanical coupling between the two motors is not possible. I need to achieve at least 600 rpm, would like higher if practical. The shafts can be realigned before powerup. The mechanical load is small, probably less than 5 in-oz of torque at full speed, so small motors will do the job. Acceleration time to full speed is not important. Braking of the unpowered shaft is not required. Service is continuous.

Is there a simple and cheap motor/control setup which will do what I need? Thanks for your assistance.

Regards,

JMP

4661. Re: Monochrome computer monitor into a scope?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: miker <mreiney@NOSPAMhevanet.com>
Message-ID: <33696D38.5B65@NOSPAMhevanet.com>
Source record: 94365

Temas wrote:
>
> Anyone have any ideas about converting a monochrome computer monitor into a
> scope. I've played around with the yoke and the inputs a little. The wire
> to the computer has a Horizontal, Vertical, Dual (?), Video, and Ground
> wires. ANy ideas would be appreciated.
> Andy
> KB0MMU
I built a simple 20 mhz digital scope that hooks to the parallel port.
Probably a lot simpler than anything analog you could do to make a
monitor into a scope...

Bottom line is that you can't change the horizontal sweep frequency
very much.
miker
--
Please remove NOSPAM from return address before replying.

4662. Re: TVRO LNA (c-band) to 1691 MHz??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5ka489$mkq@news1.zippo.com>
Source record: 94366

ZygomaD & Darkezza <Do_not@spam.here> wrote:

>moritz@ipers1.e-technik.uni-stuttgart.de wrote:
>>
>> >Even if you only got 1/2 the gain ...half of 50 dB is still 25!!
>>
>> FYI, half of 50 dB is 47.
>>
>> 73, Moritz

>Well, if he's talking about receive, half of 50 dB is 44 (rated in uV or
>whatever, rather than power). But you were a lot closer than him :)

He was speaking of LNA Gain. Half of 50dB is 47dB, but really I think
he was just trying to say was that even if the gain of the LNA fell
off dramaticlly, it would still have alot of gain. Don't beat-up on
Charlie, he's a good guy. The major danger in trying to modify the
LNA's is that you may cause them to become unstable, and the noise
figure will go to pot.

George Carlson KC5RCC
Geotek Design Services, Houston,TX
geotek@comwerx.net

4663. Jennings vacuum variable data; where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: pmarkham@mortimer.com
Message-ID: <5kbl38$e4f@drn.zippo.com>
Source record: 94367

I have a Jennings vacuum variable capacitor with the following markings:

7705 CVCA-2000-5S 20-2000 PF

I could assume a 20-2000 PF variable with a 2000 wvdc rating, mfgd in 05/77, but I would prefer a more definitive source of information from the WWW. Any help?

How can I determine if the vacuum is good without a high voltage source and listening for arcing? ;-)

Pete/wa4hei

4664. 5v to 12v power supply mod.??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: craigS <rapuppa@lightspeed.net>
Message-ID: <527cd$a1522.2bf@LSNT1>
Source record: 94368

hi i have a lambda model lus 9-5 5v 5a.
power supply which was part of a shoebox
bonanza i snapped up at a yardsale
and am wondering if theres a way to
convert,modify,massage,it into a 12v 1 or 2amp
supply?? any info +or- is a help thanks
craig

4665. Re: motor synchronization problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <5kb2t8$kc4$1@news1.rmi.net>
Source record: 94369

Michael Pinneo (mikegem@aol.com) wrote:
: I need to run two motors such that their rotation is synchronous, i.e.,
: same rotational speed and angular alignment. They must maintain the same
: angular alignment when they are accelerating up to speed and while they
: are running, but can spin down independently when they are switched off.
: Mechanical coupling between the two motors is not possible. I need to
: achieve at least 600 rpm, would like higher if practical. The shafts can
: be realigned before powerup. The mechanical load is small, probably less
: than 5 in-oz of torque at full speed, so small motors will do the job.
: Acceleration time to full speed is not important. Braking of the
: unpowered shaft is not required. Service is continuous.

: Is there a simple and cheap motor/control setup which will do what I
: need? Thanks for your assistance.

VERY interesting problem!

You might drop this query into sci.electronic.design

73
Jonesy W3DHJ

--
SK

--
Marvin Jones jonz@rmi.net
Gunnison, Colorado

4666. Re: motor synchronization problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <5kb44b$kc4$2@news1.rmi.net>
Source record: 94370

Jonesy (jonz@shell.rmii.com) wrote:

: You might drop this query into sci.electronic.design

Typo!! Of course, I meant: sci.electronics.design

73
Jonesy W3DHJ

--
SK

4667. Re: Stick a fork in ham radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: barryoXX@fastlink.com.au
Message-ID: <33681062.919797@news.fastlink.com.au>
Source record: 94422
Cross-posted to: ec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy

free <free@space.net> wrote:

:Ed Legenza AA6NI wrote:
:>
:> JoeDWadd wrote:
:> >
:> > In article <01bc4d34$e5319000$0fa42399@94387684762264> "Pom E Granate"
<seno417b@themall.net> writes:
:> > >From: "Pom E Granate" <seno417b@themall.net>
:> > >Subject: Re: Stick a fork in ham radio
:> > >Date: 20 Apr 1997 02:42:01 GMT
:> >
:> > >...perhaps better to stick a fork in "ham radio" instead of
:> > >the ham operator. Just got back from a hamfest (my 3rd)
:> > >and I've never seen more overweight, slopply dressed, chain
:> > >smoking greezeballs in any one place. My guess is that if
:> > >you stuck a fork in a few of the ones I saw this day, they'd
:> > >likely fly off into the air like an un-corked party balloon.
:> > >(SFX follows, imagine : Plink-Ponk! PPPFHHBLTTTTTT!!!!!!)
:> >
:> > >Sorry guys, I't's only my 3rd visit to a hamfest, and it was
:> > >just as scary as visits # 1 and # 2. Some real space-cases
:> > >were there too....Oy!
:> >
:> > >PomEGranate
:> > fits me to a tee.joez@k5zcx
:>
:> Ah yes....but did you take the time to check his thermometer...if that
:> ham was already done....then sticking a fork in him would not cause a
:> release of air. Everybody know that only under done hams elicit air.
:>
:> Oh, and some observers are just telling it like it is!!!
:
:
:
:The ham defined:
:
:The H stands for "Huh!"..you know..Huh?..I didn't copy that
:last..Huh?..oh..CQ..who?
:The A stands for "Aye!...you know..aye...good buddies..let's act like
:morons on 40meters
and misspell metres at the same time.
:The M stands for "Moron!.you know..Huh?..Aye moron yall going to hamfest

:so we can rip off some unsuspecting newbie?..you know.
:.HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMERHAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER..HAMMER

==========
To reply via email please remove the XX from my
return address.

4668. Re: RF Loop Stick!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5k9167$2tj@cletus.bright.net>
Source record: 94423

```
OBTAIN A FERRITE ROD AND WRAP WIRE ARROUND IT. THATS A LOOP STICK.
IF YOU CAN FIND OLD AM RADIOS THE ANTENNA ON THE BACK IS A LOOP STICK

NORM N8RGR
```

4669. Re: F/S: Electronic test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5k91an$2tj@cletus.bright.net>
Source record: 94424

HOW BIG IS THE TEST CHAMBER AND WHAT DOES IT WEIGH, DOES IT WORK AND
WHERE IS IT

NORM HOCKLER N8RGR

4670. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseE9HFMH.EGu@netcom.com>
Source record: 94425
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

In article <5k7kb1$5lr@chaos.dac.neu.edu> Don Wall <d.wall@nunet.neu.edu> writes:
>
>>I'm making solid state versions of the tubes used in a AC-DC
>>AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
>>
>Why would you want to do that? The price of these tubes is at a
>very low level, so what is the point of going to all that effort
>to replace them, not to mention the fact that the radio would no
>longer be original if you put solid state tube replacements in
>it. This type of modification is ok as a last resort for
>unavailable types, but at the moment, these tubes are so common
>that McDonald's may start packing them in Happy Meals!
>
I think he is doing it as an academic "what if" exercise, to see if it
could be done. Besides, today's common tubes may start getting scarse
in another fifty years. And if the "solid state tubes" are built using
7 pin male plugs that fit the existing tube sockets, the AA5 radio
wouldn't even "know" it happened. Actually, 8 pin octal sockets are
more easily had, one could do a "tube" set for octal AA5's.

4671. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33684060.5C8F@concentric.net>
Source record: 94426
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

jupiter@europa.com wrote:
>
> :complete non-issue as far as ESD is concerned.
> :
> :Face facts, for a high-performance rx, avoid hanging mixers across a
> :feed line. A neon bulb is preferable by far. In fact, I wouldn't even
> :worry about ESD if the gate of the device I wish to protect has a
> :reasonable path to ground--which means most any normal design.
> :
> :Thomas (ars KI4N)
> :tgm@netcom.com
> :[use the word "rabbit" in the subject line of e-mail directed to me]
>
> I didn't know the discussion was about ESD. I thought we were talking
> about high voltage induced on the rcvr input via nearby transmitters, since
> the early posts talked about IMD. With transmitters, you could have
> considerable current into the rcvr.

Item one was to protect the device. Question then arose as to
what if the incoming signal was above break-over. Then you'd get mixing
and intermod. I posted solutions which were to use higher voltage
devices (series diode strings or parallel zeners).

>
> Also, I thought that commercial gas discharge tubes were available for
> transient suppression? Don't they contain hydrogen, a very fast conductor?

Mercury vapor, a very fast conductor. Fast, however, is a
relative thing. Diodes switch in 10's of nanoseconds. Mercury vapor
devices and metal oxide varistors, etc., switch in 10,000,000's of a
nanosecond. Typically fast enough for old bipolars, but not for MOSFET.

sq

4672. WTB: 10 meter amp - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: johnsi@sprynet.com
Message-ID: <5k9e7j$pd5@lal.interserv.com>
Source record: 94427

People are so paranoid about CB'ers getting a hold of 10 meter amps that they
are as rare as chicken's teeth.
Where does a legitimate ham get a 10 meter amp?
Please email me directly if you know where I should look for one.
Thanks,
John N7MTB

4673. Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5k9f1l$k7t$1@news.uni-c.dk>
Source record: 94428

I need some cheap low frequency, low noise microphones.
Electret microphone capsules are cheap, but they are generally not
low noise and not low frequency. They typically go down 50 Hz. I need
to go lower.

If I could find a source for electret capsules without the internal
FET, I could connect a low noise FET amplifier externally, and
conceivably make a lower noise, lower frequency microphone.

Does anyone here know a source on electret microphone capsules with
no internal FET. Alternatively a low noise low frequency electret
capsule?

Regards, Anders

4674. Re: Charging 12 Gel Cell

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <336853ba.0@cheese.pcug.org.au>
Source record: 94429

hynde@flash.net.no-spam wrote:
>Can I trickle charge a 12V Gel Cell with a 15v supply and an appropriate
>resistor to give me 40 or 50 ma draw? I figured I'd leave it on for 24
>hrs. or so. I don't have a charger. Options?
>

I suppose it would work, but it may shorten the life of the battery.
You'd be better off building a simple charger. The one in the 1988 ARRL
Handbook p27-12 uses one LM723 chip and one transistor and works well for
me. I can keep it connected to the battery at all times, and be sure that
the battery is ready any time I want it without the risk of it being
overcharged.

73, Peter

--

____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

____

4675. simple SW reciever design

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: willard561@aol.com
Message-ID: <19970501083200.EAA19575@ladder01.news.aol.com>
Source record: 94430

Two possible ideas for this are the following 2 articles EDN Design Ideas
Aug 1, 1996 had a 3 IC superhet the only problem maybe finding the Plessey
ZN414 .
The second was a design using a Motorola MC3359 FM rcvr Chip, you use
the Quad detector as a product detector so you can pick up CW and ssb,
the article
was in QST Sep 1986. I have played with this design and have used a MC3371

in my last version, I haven't tried this but the 3371 has a Signal
strength output which could be used for AVC, and it looks like you could
use a Radio Shack
experimenters board to build it on, the 3371 requires a slight change
which you can see when you look at its data sheet. The data sheets come
from the Motorla
Web site, http//:www.Motorola.com.
I also used a MC3361 from a dead cordless phone to build one of these
recently,
I also salvaged the 455khz filter and other parts for this reciever from
the phone.
Bill Higdon
RF Optimization Engineer CDMA 850
Lucent Tech.
Willard561@aol.com/ wahigdon@lucent.com

4676. Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3368a610.90888297@news.erols.com>
Source record: 94431

I came a cross an interesting book, "The Science of Radio" by Paul Nahin. In his introduction he explains why he chose to use vacuum tubes as the device with which he explains radio. "Transistors are two charge carrier devices (electrons and holes) understandable really only in terms of Quantum Mechanics. Electrical Engineering professors have, yes, invented lots of smoke and mirrors ways of 'explaining" holes in terms of classical physics, but these ways are all really, seductive frauds. They're good for their ease in writing equations and thinking about how circuits work, but even though they look elementary, I don't like to teach a first course in electrical engineering with their use. They are really shortcuts for advanced students who have had quantum mechanics."

What is Nahin talking about? Are all those descriptions of transistor operation that talk about holes really "seductive frauds"? Will we have to "understand" QM before we really understand transistors?

What do you guys think of all this? Should I stick with (understandable) vacuum tubes?

73 de Bill N2CQR

4677. Pointer to New Ham Radio FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0105970653060001@wd1v.mv.com>
Source record: 94432
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On my home page

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

4678. QST Hams with Macs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0105970655410001@wd1v.mv.com>
Source record: 94433
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing New WWW Site for Macintosh Ham Radio Enthusiasts

http://www.mv.com/ipusers/wd1v

Mac Ham Software including:

Macnet Roster:
a database of all hams in the world using Mac computers

WD1V's Ham Radio EXAM Simulators:
the fast path for upgrading your ham license with a Mac

Plus more Mac information - come see!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

4679. WTB: Zilog SCC I.C. (4MHz)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: k1el@aol.com
Message-ID: <19970501114300.HAA25064@ladder01.news.aol.com>
Source record: 94434

I am looking for a 4MHz version of the the Zilog SCC (8530) serial communications controller IC. Does anyone have any leads on these parts ?

Thanks, Steve K1EL

4680. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: caf@agora.rdrop.com
Message-ID: <5ka07q$j7j$1@hermes.rdrop.com>
Source record: 94435
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

In article <5k7kb1$5lr@chaos.dac.neu.edu>,
Don Wall <d.wall@nunet.neu.edu> wrote:
>
>>I'm making solid state versions of the tubes used in a AC-DC
>>AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
>>
>Why would you want to do that? The price of these tubes is at a
>very low level, so what is the point of going to all that effort

So how about a solid state 1L6 (or whatever the hard to get mixer
tube is for Trans-Oceanics)??? Make sure the input and output
capacitances match the Real Thing closely.

--
Chuck Forsberg WA7KGX caf@omen.COM http://www.omen.com
Omen Technology Inc "The High Reliability Software"
Author of YMODEM, ZMODEM, RZ, SZ, Pro-YAM, ZCOMM, GSZ, and DSZ
TeleGodzilla BBS: 503-617-1698 FTP: ftp.cs.pdx.edu pub/zmodem
POB 4681 Portland OR 97208 503-614-0430 FAX:503-629-0665

4681. Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3367af65.18110506@netnews.worldnet.att.net>
Source record: 94436
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

On 30 Apr 1997 20:19:38 GMT, mda@cam-orl.co.uk (Mike Addlesee) wrote:

>
>--
>So when is someone going to end this thread by resorting to the actual equations.
>Descriptions of what is happening are useful, but only when I see the equations
>and can follow and verify all the steps in the proof will I rest.
>-------------
>Mike (doubting Thomas) Addlesee

The reason you won't see that Mike is simple. The equations will not explain the answer.

We have limited means to measure the effects of radiation, and the very different induction fields.

We explain them by using the same terms, and that makes people think they are the same thing.

It's a lot like using two senses to explain fire, like heat and smell. Just because we might mix them in the right combination, it does not mean something is burning.

Shielding a small loop makes no more difference than replacing the loop with a single conductor of the same electrical characteristics as the shield. If the loop is properly constructed, the shield makes no difference at all.

In the real world, as others have stated here and as my own experience building dozens of loops for medical and receiving applications has indicated, shielding is a waste of time unless the noise is directly coupled into the loop instead of being radiated.

If the noise source is within a loop diameter or so, you might see a change. If the noise source is much further away than a small loops diameter, the shield almost always just helps support the antenna. ;-)

73 Tom

4682. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Don Wall <d.wall@nunet.neu.edu>
Message-ID: <5ka44j$56o@chaos.dac.neu.edu>
Source record: 94437
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

You're absolutely correct, but he said he was making replacements
for AA5 tubes, and that's what my comments were based on.

Don

4683. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Don Wall <d.wall@nunet.neu.edu>
Message-ID: <5ka49u$56o@chaos.dac.neu.edu>
Source record: 94438
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

If that's the objective, Randy, then he'd be better off working on a 3-way portable and developing a solid-state 1R5, which would be closer to a 1L6 than a 12BE6 would be! A solid-state 1L6 would sell, a 12BE6 would have to be priced at about fifty cents to attract any buyers.

Don

4684. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Jim Conn <jconn@gte.net>
Message-ID: <5ka4ql$s41$1@news5.gte.net>
Source record: 94439

Bill Meara wrote:
>
> I came a cross an interesting book, "The Science of Radio" by Paul
> Nahin. In his introduction he explains why he chose to use vacuum
> tubes as the device with which he explains radio. "Transistors are
> two charge carrier devices (electrons and holes) understandable really
> only in terms of Quantum Mechanics. Electrical Engineering
> professors have, yes, invented lots of smoke and mirrors ways of
> 'explaining" holes in terms of classical physics, but these ways are
> all really, seductive frauds. They're good for their ease in writing
> equations and thinking about how circuits work, but even though they
> look elementary, I don't like to teach a first course in electrical
> engineering with their use. They are really shortcuts for advanced
> students who have had quantum mechanics."
>
> What is Nahin talking about? Are all those descriptions of transistor
> operation that talk about holes really "seductive frauds"? Will we
> have to "understand" QM before we really understand transistors?
>
> What do you guys think of all this? Should I stick with
> (understandable) vacuum tubes?
>
> 73 de Bill N2CQR

Which came first, the hole or the electron?

73,
Jim - AD4VL

4685. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Don Wall <d.wall@nunet.neu.edu>
Message-ID: <5ka4cu$56o@chaos.dac.neu.edu>
Source record: 94440
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

I don't know, Steve, the tubes he mentions will be around long after you and I are gone! How many millions of AA5's were produced?

Don

4686. Re: Zilog SCC I.C. (4MHz)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Dana Gould <Xdgould@bev.etn.com>
Message-ID: <01bc5635$9a07f740$4ce06e97@pc3527.bev.etn.com>
Source record: 94441

K1EL <k1el@aol.com> wrote in article
<19970501114300.HAA25064@ladder01.news.aol.com>...
>
> I am looking for a 4MHz version of the the Zilog SCC (8530) serial
> communications controller IC. Does anyone have any leads on these parts ?
>
> Thanks, Steve K1EL
>

Jameco carries the 4MHz version for 3.95 and JDR Microdevices carries the
6MHz version for 5.49.

Check out http://www.jameco.com and http://www.jdr.com.

Dana Gould, WA1UIW
*dgould@bev.etn.com

4687. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: fgoldstein@bbn.|nospam.|com
Message-ID: <5ka8h0$h1a$4@daily.bbnplanet.com>
Source record: 94442
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

In article <5jbjs0$f5o$1@kanga.accessone.com>, vbook@vbook.com says...
>
>Under terms of the Report and Order in ET Docket 96-8, released April 10,
1997,
>the FCC has announced that it will allow high gain antennas
>for unlicensed transmitters operating in the 2400 and 5800 MHz
>Part 15 allocations. These bands are shared with the Amateur Radio Service.

I read the R&O, as well as the original NPRM, last night. The FCC has a pretty decent web site, though posting Word Perfect files and their ASCII output is not quite the same as HTML-izing.

>Under the new rules, very high gain antennas may be deployed at 2400 and
>5800 MHz. Certain transmitter power reduction restrictions apply at 2400 MHz
>but unlimited gain systems may be installed at 5800 MHz. These systems will
>enable high speed Internet access using unlicensed systems. You can expect
to
>see these systems deployed rapidly as soon as 1998 to provide non-commercial
>and commercial services on these frequencies.

To clarify: Very high gain antennas may be used in the 5800 MHz band but ONLY for "point to point" operation, such as wireless T1 links. Point to multipoint (access systems, pseudo-cellular, etc.) and sectorized (a bunch of directional antennas in a circle) systems are explicitly prohibited from using unlimited ERP; such systems are still limited to 4W ERP, and have to derate their transmitter power dB for dB when antenna gain goes up.

At 2400, it's 1 dB TPO reduction per 3 dB antenna gain increase.

These bands are ONLY for spread-spectrum use. Narrowband is prohibited at such power levels via spectral-density caps; if the bandwidth goes down, the power goes down too. However, frequency hoppers can dwell up to 400 ms on a sigle frequency, which can create noticeable interference to some kinds of narrowband operation. Direct-spread systems have no such effects.

The R&O actually makes a halfway decent primer on spread spectrum, in part because it discusses (and provides) new, clarified definitions for some of the terminology!

When I read these recent FCC rules, dollar signs swell in front of my eyes. Nice ones, not the boodlesque kind that so many govt. decisions display. Somebody is going to make money on this stuff. I wish I had the resources. Oh well -- anybody want to hire us for a consulting engagement? :-)

--
Fred R. Goldstein k1io fgoldstein"at"bbn.com
BBN Corp., Cambridge MA USA +1 617 873 3850
Opinions are mine alone; sharing requires permission.

4688. Re: Replacement for 6146 ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: rubertot@snowshoe.ksc.nasa.gov
Message-ID: <5ka8a6$6po@niven.ksc.nasa.gov>
Source record: 94443
Cross-posted to: sci.electronics.components,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I've got some 6293's if you are interested.
In article <3365D9BD.35A6@gelac.mar.lmco.com>, mmoss@gelac.mar.lmco.com
says...
>
>W. D. Milner wrote:
>>
>> geomac@hop-uky.campus.mci.net (George McCouch) wrote:
>>
>> >In article <33602AE8.4BD5@sn.no>, la3pu@sn.no wrote:
>>
>> >> Does anyone know of a pin (socket) compatible replacement for the
6146
>> >> tube and eventually where it is available?. There is supposed to
be a
>> >> more rugged version of a different type denomination.
>> >> Any information would be appreciated.
>> >>
>> >> 73 de Svein
>> >> la3pu@sn.no
>>
>> >If memory serves...the 2E26 will work but at reduced power output.
I tried
>> >this in a Heath DX40 a long time ago and got about 20 watts out of
it.
>>
>> The ruggedized version is the 6146W. This tube is still available
>> especially if you have access to a military/surplus source.
>>
>> ---------------------------------------
>> Dean, VE1CBF VE1CBF@qsl.net
>> 10-X 31826 FN96VC
>>
>> - - ... ... - -
>
>
>and don't forget the ruggedized military version called the 6293.
>
>Marv

4689. WANTED: B+W HDVL Plug In Coils

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Chuck O'Neal <CONEAL@microtouch.com>
Message-ID: <01bc563c$53239a80$f7512ec0@coneal>
Source record: 94444

Hi Folks,
I'm looking for a set of these plug in coils, these are the KW versions on the ceramic jack bar with the 1/4" bannana plugs. Looking for ones in excellent shape or NOS if possible.
Thanks es 73,
Chuck...

4690. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Matt Reilly <reilly@tiac.net>
Message-ID: <3368B14B.7C181721@tiac.net>
Source record: 94445

Bill Meara wrote:
>
> I came a cross an interesting book, "The Science of Radio" by Paul
> Nahin. In his introduction he explains why he chose to use vacuum
> tubes as the device with which he explains radio. "Transistors are
>two charge carrier devices (electrons and holes) understandable really
>only in terms of Quantum Mechanics. Electrical Engineering
>professors have, yes, invented lots of smoke and mirrors ways of
>'explaining" holes in terms of classical physics, but these ways are
>all really, seductive frauds. They're good for their ease in writing
>equations and thinking about how circuits work, but even though they
>look elementary, I don't like to teach a first course in electrical
>engineering with their use. They are really shortcuts for advanced
>students who have had quantum mechanics."

Bill,
I haven't read Mr. Nahin's book, but I'd suggest that anyone
who takes his approach in a TECHNICAL BOOK for the reason he cites
is either lazy or lost. I don't understand quantum mechanics, but
have designed a few bipolar and MOS widgets. I can also do the
non-linear analysis for an amplifier or oscilator. I don't leap tall
buildings and won't pretend to be smarter than Mr. Nahin, but I think
he's wrong here and you shouldn't waste your time with him. If he is
teaching an Electrical Engineering course with this book, he
shouldn't be (IMHO). If he's sticking to vacuum tubes in the course
of explaining something in a general science publication, then
that's his choice. Is "The Science or Radio" aimed at the
general reading public?

If you'd like a REALLY good treatment of RF circuit design
with bipolar devices that doesn't whine about quantum mechanics
(in fact, it doesn't even mention the subject) take a look at
Clark and Hess : "Communications Circuit Design" (the title might
be wrong, my copy is at work...) The book is out of print, but
it is a masterful treatment of the subject.

4691. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: Matt Reilly <reilly@tiac.net>
Message-ID: <3368B6F8.587EE1BB@tiac.net>
Source record: 94446

TWIMC

In my previous note, I may have been a little harsh. Make no mistake, I don't agree that students need an understanding of Quantum Mechanics to understand bipolar devices, but Dr. Nahin has written a book that according to www.amazon.com has an interesting looking table of contents. I've ordered a copy and will report back to the group. (At 19.95, it is at least worth a look. The table of contents suggest that the book is a systems approach to radio rather than a circuit design text. Personally, at that level of abstraction transistor circuits aren't any scarier than tubes, so I still don't agree with Dr. Nahin's choice here, but I'll keep an open mind.)

Check the book out...

http://www.amazon.com/

Matt Reilly

kb1vc

4692. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3368bb4a.10686604@news.atl.bellsouth.net>
Source record: 94447

On Thu, 01 May 1997 14:28:26 GMT, wmeara@erols.com (Bill Meara) wrote
>I came a cross an interesting book, "The Science of Radio" by Paul
>Nahin. In his introduction he explains why he chose to use vacuum
>tubes as the device with which he explains radio. "Transistors are
>two charge carrier devices (electrons and holes) understandable really
>only in terms of Quantum Mechanics. Electrical Engineering
>professors have, yes, invented lots of smoke and mirrors ways of
>'explaining" holes in terms of classical physics, but these ways are
>all really, seductive frauds. They're good for their ease in writing
>equations and thinking about how circuits work, but even though they
>look elementary, I don't like to teach a first course in electrical
>engineering with their use. They are really shortcuts for advanced
>students who have had quantum mechanics."
>
>What is Nahin talking about? Are all those descriptions of transistor
>operation that talk about holes really "seductive frauds"? Will we
>have to "understand" QM before we really understand transistors?
>
>What do you guys think of all this? Should I stick with
>(understandable) vacuum tubes?

If you want to understand *why* a transistor works, you need QM. If you only need to know *how* to use a transistor for practical purposes, you don't.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4693. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5kag0t$lfe@hpcvsnz.cv.hp.com>
Source record: 94448

Bill Meara (wmeara@erols.com) wrote:

: I came a cross an interesting book, "The Science of Radio" by Paul
: Nahin. In his introduction he explains why he chose to use vacuum
: tubes as the device with which he explains radio. "Transistors are
: two charge carrier devices (electrons and holes) understandable really
: only in terms of Quantum Mechanics. Electrical Engineering
: professors have, yes, invented lots of smoke and mirrors ways of
: 'explaining" holes in terms of classical physics, but these ways are
: all really, seductive frauds. They're good for their ease in writing
: equations and thinking about how circuits work, but even though they
: look elementary, I don't like to teach a first course in electrical
: engineering with their use. They are really shortcuts for advanced
: students who have had quantum mechanics."

: What is Nahin talking about? Are all those descriptions of transistor
: operation that talk about holes really "seductive frauds"? Will we
: have to "understand" QM before we really understand transistors?

My opinion is that you don't need quantum mechanics to understand
transistors at a level quite satisfactory to designing very high quality
circuits with them. I'd certainly not waste my money on a course
which taught vacuum tube receivers or exciters.

There are a great many things we use that we don't need to know
the details of how they work to be able to use well. Do you know
how Teflon is made, and all the chemical reactions that go on to make
it? Do you know why from a chemical and physics standpoint it has the
electrical properties it does? If not, does that prevent your using
it in electrical designs? I suspect not. Does a lack of understanding
of exactly what life is, keep a doctor from saving lives??Z

Without knowing more about it, it appears to me that that author is
hung up on a detail that should never have been a concern in the
apparent subject matter, and he does a disservice to modern radio
practice by ignoring solid state devices.

--
Cheers,
Tom
tomb@lsid.hp.com

4694. FS: HP SHF Signal Generators

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: d.NOrdquest@juno.COM
Message-ID: <19970501.093259.4247.0.d.nordquest@juno.com>
Source record: 94449

One HP-618C and one HP-620A SHF signal generator. Together cover from
3.8 to 11 Ghz. $150 for both plus shipping. Given their bulk, pickup in
or near Erie, PA would be preferable.
Dave KE9ED
d.nordquest@juno.com

4695. Ham Trader Yellow Sheets - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: johnsi@sprynet.com
Message-ID: <5ka9af$32p@lal.interserv.com>
Source record: 94450

HELP! - I lost the address for the Ham Trader Yellow Sheets.
Please email me with the address.
All I have is the old winter address in Florida.
P.S. If you know of another place to post an ad I would be grateful.
Thanks,
John N7MTB

4696. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: rohrwerk@pconline.com
Message-ID: <rohrwerk-0105971204170001@tsc-p18.pconline.com>
Source record: 94451
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

In article <jupiter-ya023580003004971326030001@news.europa.com>,
jupiter@europa.com wrote:

> In article <5k7kb1$5lr@chaos.dac.neu.edu>, Don Wall <d.wall@nunet.neu.edu>
> wrote:
>
> :>I'm making solid state versions of the tubes used in a AC-DC
> :>AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
> :>
> :Why would you want to do that?
> :
> :Don Wall

Why not? :-)... It doesn't trip my trigger to apply this to the
All-American 5, but it's fun to try.

I remember some folks in the 70's were selling direct plug-in replacements
that would even work with the full tube plate voltages. I have no idea
how well they worked.

I also remember various articles in QST in the 70's about solid-stating
your tube rigs, usually with plug-in approaches. There were suggested
approaches for various kinds of stages (usually using the hot new product,
FETs, so your tuned circuit impedances were still in the ballpark) -- I
think they expected you to change the voltage on these stages. One I
remember is for the Super Pro SP-600 receiver.

I myself have solid-stated an old T-368 exciter, and it's a nice
VFO/multiplier for 1.5-24 MHz. I went much further than plug-in modules,
though, with new circuitry/wiring for everything but the bandswitches and
tuned circuits. For anything more complex than that, I'd feel a little
odd about total solid-stating like this, though -- I think I'd want the
warm glow of the firebottles on a cold winter night while chatting on 75
meters...

John Seboldt K0JD

4697. Help: Micor 80's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-01 00:00:00 UTC
From: cmlong@mtu.edu
Message-ID: <5kanat$c6o@techsrv1.tech>
Source record: 94452

I just bought two Motorola Micor's hi-band, 30watt radios. They are one channel crystal radios. I would like to build a vfo to use in place of the crystals but do not know how to go about finding the equation needed to figure out what frequency crystal would be used to say put the radio on 146.58 or somethin. Any help would be greatly appreciated!

Thanks in advance!
Mike

--
/\
\ Michael Long || President /
/ Callsign: N3YPA || for HARC (W8YY) \
\ Email: cmlong@mtu.edu || Email: harc-l@mtu.edu /
/ Phone: (906)487-5664 || Majors: EET and EMT \
\/\

4698. Re: motor synchronization problem?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <33692BF4.359E@online.no>
Source record: 94371

Michael Pinneo wrote:
>
> I need to run two motors such that their rotation is synchronous, i.e.,
> same rotational speed and angular alignment. They must maintain the s
the only possibility I can think of is the use of selsyn motors.....
but I have no experience

--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4699. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3369676e.140389837@news.erols.com>
Source record: 94372

Thanks to all those who responded to my question.

I really like Nahin's book. He is clearly someone with a love of radio and a desire to share his understanding of it. He is very humble in his approach - not at all "know-it-all." The book is full of interesting historical information about the development of radio.

In several chapters the math gets (for me) overwhelming.

Nahin starts out by saying that he's going to explain how a superhet receiver really works. He simply chose to look at a vacuum tube version, because he thinks that the theory behind tubes is simpler than transistor theory (I agree).

While I agree with the notion that we don't need to understand how the transistor works, I think the more you understand about radio, the more rewarding ham radio becomes.

Now , if Nahin is saying that you have to understand QM to understand the transistor, I guess he is saying that nobody really understands them! I remember reading about Feynman's saying that even he didn't really understand QED.

But how close to "reality" does the standard electron, holes, depletion region explanation come?

73 de Bill N2CQR

4700. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: markm@banspam.mdhost.cse.tek.com
Message-ID: <33693b88.284663486@goodnews.tek.com>
Source record: 94373

On Thu, 01 May 1997 11:05:47 -0400, Matt Reilly <reilly@tiac.net>
wrote:

>
>Bill,
> I haven't read Mr. Nahin's book, but I'd suggest that anyone
>who takes his approach in a TECHNICAL BOOK for the reason he cites
>is either lazy or lost. I don't understand quantum mechanics, but
>have designed a few bipolar and MOS widgets. I can also do the
>non-linear analysis for an amplifier or oscilator. I don't leap tall
>buildings and won't pretend to be smarter than Mr. Nahin, but I think
>he's wrong here and you shouldn't waste your time with him. If he is
>teaching an Electrical Engineering course with this book, he
>shouldn't be (IMHO). If he's sticking to vacuum tubes in the course
>of explaining something in a general science publication, then
>that's his choice. Is "The Science or Radio" aimed at the
>general reading public?
>
> If you'd like a REALLY good treatment of RF circuit design
>with bipolar devices that doesn't whine about quantum mechanics
>(in fact, it doesn't even mention the subject) take a look at
>Clark and Hess : "Communications Circuit Design" (the title might
>be wrong, my copy is at work...) The book is out of print, but
>it is a masterful treatment of the subject.

Before dismissing poor Mr. Nahin out of hand, I suggest you take a
look at his book. In my opinion, it's quite excellent, and I assure
you that in his writing Mr. Nahin does not whine and is neither lazy
nor lost. :-)

His book is developed from a lifetime of teaching. And I think he's
really saying that too many undergraduate and graduate electrical
engineering programs produce students who arrive at the conclusion of
a PhD program but cannot answer such questions as "How and why does an
antenna radiate?". (Mind you, I have a little trouble with that one
myself.)

Intended for students in the first year or two of an EE program, it's
an excellent mix of mathematical rigor and radio history. I found it
to be lots of fun when read for the history alone. (Someday I'll go
back and do the math!) Nahin places emphasis on "demystifying"
traditional radio topics and shows that they do in fact have a
mathematical basis -- but without diving down so deep in the math as
to be inaccessible to the "rest of us".

I recommend it highly for your bookshelf.

Regarding the question of discarding the study of solid-state devices, I'd reply "Certainly not!". The little beasties are extremely useful, even when (especially when?) deployed by the millions. It's just useful to remember from time to time that the models with which we work are really only approximations to reality, whether describing transistors or vacuum tubes. Nahin is trying to make us sensitive to that distinction.

Regards,

Mark McPherson
K7MPH

4701. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: jeffa@ix.netcom.com
Message-ID: <5kbi4b$8mr@dfw-ixnews12.ix.netcom.com>
Source record: 94374

In <3369676e.140389837@news.erols.com> wmeara@erols.com (Bill Meara) writes:
>
>Nahin starts out by saying that he's going to explain how a superhet
>receiver really works. He simply chose to look at a vacuum tube
>version, because he thinks that the theory behind tubes is simpler
>than transistor theory (I agree).
>

I like his book too - I picked it up a year or so ago after reading a review of it, and I'm a sucker for any book on radios. It's an interesting mixture of history AND mathematics - don't expect alot of circuits, though. The math is varied, and includes Fourier Transforms, Convolutions, and even the Hilbert Transform!

It's definitely a systems book, and provides a good mathematical foundation for the whys and hows of radio operation.

Regarding vacuum tubes - there actually isn't much mention of them in the book - they're really only discussed in a chapter titled, appropriately, "The Birth of Electronics," and this is the perfect place for their introduction.

- Jeff, WA6AHL

P.S. Way back in my University days, one of my Aged Professors (Prof. Silver - for whom I had a great deal of respect), lamented to us in class one day that engineering students were no longer taught vacuum tubes, but tossed directly into a sea of semiconductor physics, there to sink or swim. We all thought he was an old curmudgeon - after all, who in their right mind would design something with TUBES? But in looking back, I have to wonder if he wasn't right? For me at least the operation of a vacuum tube is so much more intuitive than that of a transistor - after all, we can all easily picture negative electrons boiling off the cathode, attracted by the positive plate, zinging like fast-balls through the grid which, as it becomes more negative, repells more and more of them. On the other hand, my mental pictures of transistors consist of potential gradiants and depletion regions, diffusion currents, and other diagrams which, unfortunately, have become fuzzy with time and lack of use.

4702. Monochrome computer monitor into a scope?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: Temas <temas@hotmail.com>
Message-ID: <01bc569f$2d7eba40$2db37780@oit.umass.edu.umass.edu>
Source record: 94375

Anyone have any ideas about converting a monochrome computer monitor into a scope. I've played around with the yoke and the inputs a little. The wire to the computer has a Horizontal, Vertical, Dual (?), Video, and Ground wires. ANy ideas would be appreciated.
Andy
KB0MMU

4703. Roller (for roller inductor) wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: jeffreyh@Hawaii.Edu
Message-ID: <5kbl42$b97@news.Hawaii.Edu>
Source record: 94376
Cross-posted to: rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Hi Folks - I have a roller inductor that's missing the roller that runs over the wire windings. If you've got one that about 2-3 mm (or about 1/8 inch) in width, please contact me. I'll name my firstborn after you.

ZUT,
Jeff KH2PZ / KH6
jeffreyh@hawaii.edu

4704. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: wa2ise@netcom.com
Message-ID: <wa2iseE9JAt0.HAo@netcom.com>
Source record: 94377
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

Soild state mixer/converter "tube" (ss12BE6) ideas: Build a differential pair of transistors, seperate bases, seperate collectors and collector resistors (both same value), tie emitters together. Suck a constant current from the node of the two emitters tied together. Bias both bases thru seperate resistors of same value. Bypass one to ground, couple the other to signal source. If signal transistor pulls more current, the other transistor gets less current, because the constant current sucker draws a fixed amount of current, and wont take more or less. And there's nowhere else it can go. This is linear for very small signal levels, if the signal gets bigger than a few millivolts, add resistors between each emitter and the constant current sucker. Op Amp people call this "degeneration" of the diff amp.

Any noise in the constant current sucker will manafest itself during times when one of the transistors is pulling much more current than the other one gets. You get amplitude modulated noise. If that transistor hogs 80% of the constant current, it also gets 80% of the noise, and if at 50% current, 50% noise, at 20% current, 20% noise. At least to a first order approx. Now, lets remove the noise and replace it with a single frequency continious wave oscillation. You get AM modulation. Or a hetrodyner, same thing, a mixer stage.

Buffer the antenna input to keep the input capacitence to 12BE6 specs, and maybe some signal gain. And build the oscillator to use the existing LC hartley circuit, and add gain to the mixer output (one of the collectors of the differential pair of transistors and make it high impedance to drive the IF transformer.

This is getting to be a lot of stuff, but the 12BE6 tube was a complex design that was made easy and cheap to manufacture. It could be though of as a "vacuum IC".

4705. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <336a5e41.270359621@netnews.worldnet.att.net>
Source record: 94378

On Thu, 01 May 1997 13:50:03 -0600, "William E. Sabin"
<sabinw@crpl.cedar-rapids.lib.ia.us> wrote:
>Beware of the nattering nabobs of negativism.

And I thought I was the only one who remembered Spiro's speech.

Fred
jfriley@airmail.net

4706. WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: "W.S.H." <shane@multipro.com>
Message-ID: <01bc56ba$48eb0980$70b278cf@shane.multipro.com>
Source record: 94379
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

I would like to purchase the necessary PC software/hardware to program
Motorola Radius P110, P200 and GP350 VHF Portable Radios.

Any and all information regarding this matter is Greatly Appreaciated!

Send any and all replies to the e-mail address below!
--
Shane H.
shane@multipro.com

4707. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33699898.4764@concentric.net>
Source record: 94380
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

jupiter@europa.com wrote:
>
> :>
> :> Also, I thought that commercial gas discharge tubes were available for
> :> transient suppression? Don't they contain hydrogen, a very fast conductor?
> :
> : Mercury vapor, a very fast conductor. Fast, however, is a
> :relative thing. Diodes switch in 10's of nanoseconds. Mercury vapor
> :devices and metal oxide varistors, etc., switch in 10,000,000's of a
> :nanosecond. Typically fast enough for old bipolars, but not for MOSFET.
> :
> :sq
>
> I think low pressure hydrogen can switch in nanoseconds. I wonder why they
> don't use that in those transient suppressors? Maybe too big of an
> explosion hazard for the manufacturing plants.
>
> Rob.

Actually, hydrogen is not all that dangerous, especially if it
is produced "as needed" for the process by electrolysis of water. Many
industries, two of which are the production of vegetable oil, and the
basement "dope lab" production of methamphetamine, use hydrogen gas in
their process. However, a dope lab can substitute lithium anhydride for
hydrogen/catalyst/parr apparatus methods. Lithium anhydride is the guts
from a lithium battery, fyi.

However, hydrogen isn't used in thyratrons. However, if you
ionize hydrogen, you get a nifty glow. Hydrogen is only explosive when
mixed in the proper ratio, 2 hydrogen to 1 oxygen, and ignited by
discharge, heat, or flame. Hydrogen can be used in ionizing laser tubes
as a moderator gas, subject to intense ionization and plasmazation....sq

4708. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <33699ABE.E9E@concentric.net>
Source record: 94381
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Paul Kein&#65533;nen wrote:
>
> tgm@netcom.com (Thomas G. McWilliams) wrote:
>
> >Steve J. Quest (Squest@concentric.net) wrote:
> >: Just stick two high-speed rectifier diodes, capable of conducting
> >: forward several amperes of current, back to back, and you are
> >: protected. All voltages exceeding 700mw will be clipped thusly.
> > >
> > >
> >As has been mentioned, back to back diodes are an invitation to
> >intermod.
>
> How about using the same system as used in CMOS chips. Connect one
> reverse biased diode from the input line to V+ and another reverse
> biased diode to V-. If the DC bias for the input is in the middle
> between V+ and V-, you have a quite large IMD free input voltage
> range. As noted previously in this thread, the capacitance varies when
> the reverse voltage over the diode varies, however if the input
> potential drifts, the voltage over one diode will increase while the
> voltage across the other diode will decrease, partially compensating
> for the capacitance change. The V+ line has to be well bypassed to the
> V- line at the operating frequency.

I think I mentioned the "varactor effect" in a previous message.
This will work, but typically, from my experience, capacitance of the
protection diodes are not that big of a deal. It's not like they are
used in the _mixer_ stage or anything. :)

>
> The V+ and V- lines also have to be well bypassed to ground close to
> the diode connection points with capacitors and zeners. If the ESD is
> flowing down the input line, it will forward bias one of the diodes
> and there must be a low impedance path from the V+ (or V-) line to
> ground through the capacitor and the zener in parallel. This will
> prevent the ESD to flow around the V+ and V- supply lines causing all
> kind of problems.
>
> I once had a nasty surprise with this kind of protection in a high
> impedance circuit. I used 1N4148 diodes and they were sensitive to
> ambient light upsetting the input bias system. I had to cover the
> diodes to get away with this problem :-).

The photodiode effect. :) Package NOT thy semiconductors in glass, lest ye be wanting photonic effects. ;) The 12th commandment of electronic component engineering. ;) You should try playing light upon an erasable EPROM version of the 8051 microcontroller sometime! Some of the gates don't like light AT ALL, and they typically act goofy, freeze, or even dump and lock up when they see enough light. That's why I cover the windows on those with BLACK TAPE, and not white paper stickers. White paper may block UV for erasure, but it doesn't block the IR which is the band that affects the logic circuits inside.

Did you know they make black epoxy diodes in the same price range as the 1N914 whereby you could eliminate the photonic effects? Just buy 1N4001's and swap them for your 1N914's in the circuit....sq

4709. Re: Monochrome computer monitor into a scope?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970502084000.EAA21591@ladder01.news.aol.com>
Source record: 94382

That's DIDDLE not DUAL. For small wiggles of the trace for doing text.

W4ZCB

4710. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <3369A04C.3D32@rcru.rl.ac.uk>
Source record: 94383

I have been wondering about this from the standpoint of antennas.

If the aluminium/metal bond oxidises with time, which it surely must do if outside, what happens to the RF performance of say, a yagi, that assumes the boom and elements are connected?

Perhaps the capacitance of the oxidised junction is enough to make it still work?

There might be a grounding implication and static build up problems as presumably, although the dielectric strength of the oxide is high, the thickness is only a few microns.

4711. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <3369ed28.174617669@news.erols.com>
Source record: 94384

On Fri, 02 May 1997 01:24:42 GMT, markm@banspam.mdhost.cse.tek.com (Mark McPherson) wrote:

>
>His book is developed from a lifetime of teaching. And I think he's
>really saying that too many undergraduate and graduate electrical
>engineering programs produce students who arrive at the conclusion of
>a PhD program but cannot answer such questions as "How and why does an
>antenna radiate?". (Mind you, I have a little trouble with that one
>myself.)
>

Mark: I bought Nahin's book because it looked like it woul provide a pretty good presentation on the mysterious subject of why antennas radiate. While he put out a lot of useful info, I was a bit diappointed by his presentation on this subject. I thought his explanation of current distribution on a quarter wave antenna (current "shunting off" through distributed capacitance to ground?) was kind of wierd.

Nahin: " I went to a good undergraduate school with fine professors who showed me how to cram my head full of all sorts of neat technical details; but when I received my first engineering degree I still didn't know at the intuitive, gut level what the devil was really going on inside a kitchen radio. That, like my thickening girth and thinning hair, came with time."

That's the kind of understanding I'd like! Gut level! That's why his "seductive fraud" comment about transistor theory was a bit worrisome. I thought I'd come to understand how the transistors work!

One other comment: On the "how antennas radiate" question, I think the textbooks too often sell the reader short by saying "if you can't handle the differential equations you really can't understand how the antenna radiates." I disagree. I think it is possible to come to a "gut level" understanding of EM radiation without really dominating the math. We can take our inspiration from Faraday!

73 de Bill N2CQR

4712. Authors Seeking Publication

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: Tim@idt.net
Message-ID: <5kckjp$aap@bolivia.earthlink.net>
Source record: 94385

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offices: 2 in NEW=YORK and one in <FLORIDA.>
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4713. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3369F698.462B@crpl.cedar-rapids.lib.ia.us>
Source record: 94386

Bill Meara wrote:
>
>
> What do you guys think of all this? Should I stick with
> (understandable) vacuum tubes?

Do you really think that vacuum tubes are "easy" to understand? They are more complex than any of us can imagine. Einstein got a Nobel prize for his work of vacuum tubes (photo-electric cells).

Nevertheless, we understand vacuum tubes "well enough" to use them and design circuitry. The exact same situation is true with transistors.

You don't have to be a super-scientist to *design* a high quality one-stage bipolar audio amplifier. As a matter of fact, all you need is a transistor data sheet, and an understanding of what the data sheet means in terms of device principles at a "macroscopic" level (junction behavior and carrier flow).

A knowledge of quantum electrodynamics and electromagnetic principles is just as important for a deeper understanding of vacuum tubes.

I think that particular author is incorrect.

Bill W0IYH

4714. Re: motor synchronization problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: Dave Keyser <nospam.david.keyser@ln.ssw.abbott.com>
Message-ID: <336A08CF.4073@ln.ssw.abbott.com>
Source record: 94387

Mike, I second Woody's motion on the synchro/motors. I happen to have had at one time (I think I still have them) a pair of them that run on 120V/60Hz. My Dad used to work at a shop that made stuff for the Military and I think these came out of a radar-based gun sight. As I recall they're very smooth running and precise, and very difficult to "unsynch." I'll try to dig them up this weekend (they should be _somewhere_ in the basement). If I can find them, they're yours.

73 de KE6PHU/9

Dave Keyser | The opinions expressed herein are not necessarily
Gurnee, Illinois | those of my employer, Abbott Laboratories.
| Please remove "nospam." for e-mail replies.

Woody White wrote:
>
> Woody:
> You might consider some surplus selsyns (synchro/motor)...
> ...A primary motor drives one of the selsyns, the second selsyn tracks
> ("phase coupled") the driven unit. Many surplus units may require a 400
> Hz. power supply. Some were available for 120vac./60 Hz.
> Woody
>
> Michael Pinneo wrote:
> >
> > I need to run two motors such that their rotation is synchronous, i.e.,
> > same rotational speed and angular alignment. They must maintain the same
> > angular alignment when they are accelerating up to speed and while they
> > are running, but can spin down independently when they are switched off.
> > Mechanical coupling between the two motors is not possible. I need to
> > achieve at least 600 rpm, would like higher if practical. The shafts can
> > be realigned before powerup. The mechanical load is small, probably less
> > than 5 in-oz of torque at full speed, so small motors will do the job.
> > Acceleration time to full speed is not important. Braking of the
> > unpowered shaft is not required. Service is continuous.
> >
> > Is there a simple and cheap motor/control setup which will do what I
> > need? Thanks for your assistance.
> >
> > Regards,
> >
> > JMP
>
> --
> de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)

> Work: Electron Microscopist/Microanalysist
> Balance: Ham radio "homebrewer", shade tree mechanic,
> '90 Nissan 240SX, wish still had my Mcycle too!
> http://www.geocities.com/capecanaveral/3722
> .

4715. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-0205971059320001@k4dii.ksc.nasa.gov>
Source record: 94388

In article <jupiter-ya023580000105971815530001@news.europa.com>,
jupiter@europa.com wrote:
> I believe that the low freq response of those mics is a function of their
> physical size and has nothing to do with the FET. I've taken some apart,
> and no coupling caps.

Rob.l-

I agree. I recall a variation of the Electret microphone, called the "PZM" (Pressure Zone Microphone), that was popular several years ago. It was mounted in/on a square plate, about 5" X 5". For best low frequency response, it was recommended that it be mounted on a larger surface.

Perhaps the PZM technology would have a frequency response low enough to meet Anders' needs.

73, Fred, K4DII

4716. Re: Jennings vacuum variable data; where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: Bill Schaff <schaff@iiiv.tn.cornell.edu>
Message-ID: <5kd0kv$ik5@newsstand.cit.cornell.edu>
Source record: 94389

In article <5kbl38$e4f@drn.zippo.com> , pmarkham@mortimer.com writes:
>Subject: Jennings vacuum variable data; where?
> I have a Jennings vacuum variable capacitor with the following markings:

>7705 CVCA-2000-5S 20-2000 PF

> I could assume a 20-2000 PF variable with a 2000 wvdc rating,

This is a 5KV (tested at 60Hz) cap.

William J. Schaff 607-255-3974 / 607-279-7021
415 Phillips Hall 607-255-4742 FAX
Cornell University schaff@iiiv.tn.cornell.edu
Ithaca, NY 14853 http://www.iiiv.cornell.edu/~schaff/

4717. Re: Jennings vacuum variable data; where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <899AD4F3569CCFBC.BECAA0EC3444A27B.74457596174322BA@library-proxy.airnews.net>
Source record: 94390

On 2 May 1997 15:18:55 GMT, Bill Schaff <schaff@iiiv.tn.cornell.edu>
wrote:
>This is a 5KV (tested at 60Hz) cap.

With only a 50 Amp current rating.
And the date code suggests it's 20 years old;
hope it ain't gassy.

Fred, W8OY
JFRILEY@AIRMAIL.NET

4718. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya02358000020597140234000l@news.europa.com>
Source record: 94391

In article <frederick.mckenzie-1-0205971059320001@k4dii.ksc.nasa.gov>,
frederick.mckenzie-1@kmail.ksc.nasa.gov (Fred McKenzie) wrote:

:In article <jupiter-ya02358000010597181553000l@news.europa.com>,
:jupiter@europa.com wrote:
:> I believe that the low freq response of those mics is a function of their
:> physical size and has nothing to do with the FET. I've taken some apart,
:> and no coupling caps.
:
:Rob.l-
:
:I agree. I recall a variation of the Electret microphone, called the
:"PZM" (Pressure Zone Microphone), that was popular several years ago. It
:was mounted in/on a square plate, about 5" X 5". For best low frequency
:response, it was recommended that it be mounted on a larger surface.
:
:Perhaps the PZM technology would have a frequency response low enough to
:meet Anders' needs.
:
:73, Fred, K4DII

I think Radio Shack still sells one of those

4719. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5kd7si$72m@hpcvsnz.cv.hp.com>
Source record: 94392

Fred McKenzie (frederick.mckenzie-1@kmail.ksc.nasa.gov) wrote:
: In article <jupiter-ya023580000105971815530001@news.europa.com>,
: jupiter@europa.com wrote:
: > I believe that the low freq response of those mics is a function of their
: > physical size and has nothing to do with the FET. I've taken some apart,
: > and no coupling caps.

: Rob.l-

: I agree. I recall a variation of the Electret microphone, called the
: "PZM" (Pressure Zone Microphone), that was popular several years ago. It
: was mounted in/on a square plate, about 5" X 5". For best low frequency
: response, it was recommended that it be mounted on a larger surface.

I believe you will find that the low frequency response of a capacitor mic is determined by some other factors: the main one usually is the capacitance and the preamp input impedance. Obviously, smaller mics would generally have less capacitance, so that's a factor, but if you can get a higher preamp input impedance (up to where the insulation in the mic shorts things out), you can get to lower frequencies. I'm not sure how realistic the expectations of the original poster are with respect to improvement, though. I think the fets used in the cheap capsules aren't too shabby. You can get to better response with instrumentation capacitor mics, but then you are up in the $1000 range right away. (A lot of our customers use capacitor mics for acoustical measurements.)

--
Cheers,
Tom
tomb@lsid.hp.com

4720. Re: 5v to 12v power supply mod.??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: KC5YWX <jboros@thighfiber.com>
Message-ID: <336A6CAB.93FF0F49@thighfiber.com>
Source record: 94393

craigS wrote:

> hi i have a lambda model lus 9-5 5v 5a.
> power supply which was part of a shoebox
> bonanza i snapped up at a yardsale
> and am wondering if theres a way to
> convert,modify,massage,it into a 12v 1 or 2amp
> supply?? any info +or- is a help thanks
> craig

Probably won't work. I suspect it is a linear supply which means
that there is a bulk DC supply before the regulator of 8-10V. With
this configuration, the output must be lower. You could get 6 volts
out of it, maybe even by adjusting a pot on board. A 15 volt supply
could be adjusted though.

However, if the bulk supply is a two diode full wave supply, it
may be possible to do this. Keep in mind the amperage will be
halved, and be sure the capacitor can handle it (need be 25V).
Then the divider circuit to the regulator can be adjusted. To do this,
you need to remove the center tap, and place the two outer leads
of the xfmr to the ac input of a bridge rectifier. Get one that is
about 100PIV, 5 to 6 amp. Then hook the + and - to the filter
cap. Then maybe you can do this.

Hope this helps

To reply, take the 't' out of my return address.
-Jim

4721. NHRC-2 Repeater Controller Review

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: Jim Devenport <jdport@concentric.net>
Message-ID: <336A159B.7B45@concentric.net>
Source record: 94394

I have just finished installing and setting up the innovative and relatively inexpensive NHRC-2 Repeater Controller and would like to share some of my observations:
Negative Comments:
-I was disappointed that the pots (CW ID tone level, master audio level, etc) were not labeled on the board. I had to mark them myself with a magic marker to ease level setting stress.
-There is NO I/O available from this controller except for repeater PTT. Most controllers have at least one or 2 I/O functions available for controlling CTCSS, etc, but no such thing with this board.
-I was disappointed in the temporary nature of the 4 "ID" voice message buffers. While maintaing the recorded voice audio through power disruptions, if you mess around with many of the controller settings, it will summarily forget all voice messages in storage. Just enabling the simplex repeater mode will erase all voice storage.
-No method is available for shortening the required 8-digit sequence required to change ANY setting. For instance, to set the CW ID, EIGHT digits must be entered for EACH character and digit being set up for the callsign ID etc. That's a long string of DTMF tones to send...
-No simpler "user" functions are available, such as a simple DTMF entry to activate the "announcement" voice message about the latest club meeting, etc. You have to use the SYSOP password and the user function code (again, 8 digits) to activate any of the messages, and this is hardly information any sysop wants the general public to have.
-No function exists to tell the controller to "read back" to the sysop what current settings are set up. You can enter a function but cannot tell what it is before you enter it.

Good features I like:
-All functions are able to be set via DTMF entry.
-Small size and low current drain
-Surprisingly good voice quality in the digital voice storage (this can be a DISadvantage if a known ham is used for the voice ID, it will invariably result in someone calling him/her to "chat" almost every time the ID occurs; if the ham doesn't respond, the caller sometimes gets annoyed as if the "ID'er" is ignoring him)
-Very satisfactory message length in voice storage, using simplex rptr mode is a lot of fun and very useful when setting up or testing, and "conversational" transmissions are possible.
-Even in simplex repeater mode "kerchunking" the system will get you a satisfactory "squelch tail" indicating there is a live repeater listening, so users don't get excited and think the repeater has died. In other words it acts very "normal" while in simplex repeater mode.

All in all, I really enjoy this controller, my main complaint is its
lack of auxiliary input/output (I/O) functions.

--
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |
|Anti-Spam: Remove the "_" from address to respond |
http://www.concentric.net/~jdport/

4722. Re: Need schematic for heath SW717

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: Robert Scarlett <scarlett@nanospace.com>
Message-ID: <336A8973.7F02@nanospace.com>
Source record: 94395
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono

Try w7fg@w7fg.com or http://www.w7fg.com. They have a SW717 listed.

4723. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <336a0ec7.4241381@news.atl.bellsouth.net>
Source record: 94396

On Fri, 02 May 1997 09:05:32 +0100, Mike Willis <"mjw "@rcru.rl.ac.uk> wrote:
>I have been wondering about this from the standpoint of antennas.
>
>If the aluminium/metal bond oxidises with time, which it surely must do
>if outside, what happens to the RF performance of say, a yagi, that
>assumes the boom and elements are connected?

It would be very bad, *if* you didn't use the compound supplied with the
antenna for use in the slip joints. This compound, trade name NoAloX,
is a conductive grease. It seals the joint from air so that the oxide layer
cannot form. This usually comes in little plastic squeeze ampules from
the antenna manufacturers, but you can buy it in bulk from your local
electrical supply house. It is required for aluminum house wiring.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4724. Re: Dead TS50s digital board question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: "Robert W. Lewis" <rlewis@staffnet.com>
Message-ID: <336AB493.4BBB@staffnet.com>
Source record: 94397

Gary wrote:
>
> I have a Kenwood TS50s and I was experiencing a ground loop in my pll
> board. I had to remove the digital board in order to tighten the
> screws on the pll board. After tightening the screws I placed the
> Digital board back in it's place, hooked up all it's cables/ribbons
> and pushed the power button.....nothing....dead. Well breaking out
> the schematics I traced out the power up circuit (5c,psw & psc
> continuity)...ok....checked all the fuses(inside & outside)...ok.
>
> The only thing I can think of that might be the problem is that I
> inadvertently shorted the lithium battery and lost the memory in the
> Microprocessor. I can't get a straight answer from Kenwood and
> perhaps one of my fellow Hams can help.
>
> TNX Gary KF9CM

Try a processor reset. Hold the A=B key and switch the power on.

4725. Re: Jennings vacuum variable data; where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000205972238210001@news.europa.com>
Source record: 94398

In article <5kbl38$e4f@drn.zippo.com>, pmarkham@mortimer.com wrote:

: I have a Jennings vacuum variable capacitor with the following markings:
:
: 7705 CVCA-2000-5S 20-2000 PF
:
: I could assume a 20-2000 PF variable with a 2000 wvdc rating, mfgd in
: 05/77, but I would prefer a more definitive source of information from the
: WWW. Any help?
:
: How can I determine if the vacuum is good without a high voltage source
: and listening for arcing? ;-)
:
: Pete/wa4hei

20 years is young for a vacuum variable that has not been mistreated.

You can build a simple 12vdc high voltage source using a flyback tranformer and one 2N3055. There is lots of info on the web under "Solid State Tesla Coil" or variants thereof.

Also, there are commercial coils used for testing vacuum leaks in chemistry apparatus. Try Fisher Scientific. If you can take it to hamfests, you are at a big advantage.

rob.

4726. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: mgkepner@facstaff.wisc.edu
Message-ID: <5kdqf8$4pka@news.doit.wisc.edu>
Source record: 94399

miker <mreiney@NOSPAMhevanet.com> wrote:

>You have the same problems with tubes. Isn't a vacuum simply the
>absence of something that would ordinarily be there? It's a hole
>in the air.....:-)

In the Universe as a whole, there is much "more" vacuum than air! Does
that make the air the "minority carrier" in this case? ;-)

Jim

Melissa Kepner Jim Adney
mgkepner@facstaff.wisc.edu jim.adney@mpcug.com
Laura Kepner-Adney
Madison, Wisconsin

4727. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: padgett@goat.orl.mmc.com-antispam
Message-ID: <padgett.1904.0008EFB4@goat.orl.mmc.com-antispam>
Source record: 94400
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

>:>I'm making solid state versions of the tubes used in a AC-DC
>:>AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
>:>
>:Why would you want to do that?

Actually a shrewd marketing move IMNSHO since it demonstrates the ability
to do so. Something like a 200 mph Pinto would impress more people than
the same Thunderbird.

Add in the fact that an AA5 radio will typically be much more tolerant of
minor differences that a TransOceanic on 16m plus the fact that a minor
error causing max smoke would not result in much of a loss and the use of
that platform as a technology demonstrator makes a lot of sense.

Would be surprised if any SS tube could be sold for less than $25 so that
is really not a factor. Of course the gentleman might just have wanted to...

A. Padgett Peterson, P.E. Cybernetic Psychophysicist
http://www.freivald.org/~padgett/index.html
http://www2.gdi.net/~padgett/index.html
to avoid antispam use mailto:padgett@gdi.net PGP 4.5 Public Key Available
for evil to triumph, all that is necessary is for good (wo)men to do nothing

4728. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: Jeremy Hopkins <jhop@toltbbs.com>
Message-ID: <336A49C8.B88@toltbbs.com>
Source record: 94401
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

W.S.H. wrote:
>
> I would like to purchase the necessary PC software/hardware to program
> Motorola Radius P110, P200 and GP350 VHF Portable Radios.
>
> Any and all information regarding this matter is Greatly Appreaciated!
>
> Send any and all replies to the e-mail address below!
> --
> Shane H.
> shane@multipro.com
contact motarola parts or check out their web page

--
Jeremy W. Hopkins
KC8GWH
http://www.toltbbs.com/~jhop/
mailto:jhop@toltbbs.com
or
mailto:jeremyhopkins@juno.com
442.850 + mhz in nw ohio

4729. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-02 00:00:00 UTC
From: Phil Sussman <pactor@pactor.com>
Message-ID: <336A648C.4CB1@pactor.com>
Source record: 94402
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

W.S.H. wrote:
>
> I would like to purchase the necessary PC software/hardware to program
> Motorola Radius P110, P200 and GP350 VHF Portable Radios.
>
> Any and all information regarding this matter is Greatly Appreaciated!
>
> Send any and all replies to the e-mail address below!
> --
> Shane H.
> shane@multipro.com

All Motorola software is Licensed.
You must sign a license agreement with Motorola or face
criminal prosecution. And BOY do they prosecute!
Their attorneys are constantly finding software violators
and when they do they are neither kind nor merciful.

Suggestion: Just buy the software from them directly. 800-422-4210
The software may be expensive, but after all it comes
nowhere close to paying an attorney or legal fees.

BTW: I am NOT employed nor am I a representative of Motorola.

4730. Dead TS50s digital board question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: turtle@wwa.com
Message-ID: <5kdpo4ajm1@kirin.wwa.com>
Source record: 94303

I have a Kenwood TS50s and I was experiencing a ground loop in my pll board. I had to remove the digital board in order to tighten the screws on the pll board. After tightening the screws I placed the Digital board back in it's place, hooked up all it's cables/ribbons and pushed the power button.....nothing....dead. Well breaking out the schematics I traced out the power up circuit (5c,psw & psc continuity)...ok....checked all the fuses(inside & outside)...ok.

The only thing I can think of that might be the problem is that I inadvertently shorted the lithium battery and lost the memory in the Microprocessor. I can't get a straight answer from Kenwood and perhaps one of my fellow Hams can help.

TNX Gary KF9CM

4731. Help-data-1P28 photomultiplier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: gsargent@gil.COM.AU
Message-ID: <199705030925.TAA16190@iccu6.ipswich.gil.com.au>
Source record: 94304

Wanted: Data, specifically the spectral response, for an RCA 1P28
photomultiplier tube, thanking you in anticipation, Gerald VK4ZSG.

4732. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: n4xy@bellsouth.net
Message-ID: <336faf6b.4882330@news.atl.bellsouth.net>
Source record: 94305

Hi Anders... as has already been said-more or less-the other name for
an Electret mike w/o the FET is a: condenser microphone. It seems to
me that one of the surplus dealers was selling high quality condenser
microphone elements the last time I looked through their catalog.
Problem is: I don't remember which. It could have been Hosfelt
Electronics I think. Try them and see. If not, maybe M.P. Jones, or
All Electronics, or Altronics. It almost certainly WAS one of those.
GL
72/73

Ed Tanton N4XY EMAIL: n4xy@bellsouth.net
189 Pioneer Trail
Marietta, GA 30068-3466 TEL: (770)579-3933 V/MBX/FAX

QRP-ARCI #7663 G-QRP #6779 OK-QRP #172 QRP-L #758
AdvRC #140 NORCAL #1779 NCDXF SEDXC

Life Member: ARRL AMSAT INDEXA QCWA

INTERESTS: DX QRP BoatAnchors Test Equipment Photography

~~~~~~
"Think you can, think you can't: either way you're right!" Henry Ford
~~~~~~

4733. Cavity Modification???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: Alan Johnson <kninectf@mo.net>
Message-ID: <01bc577b$4f507c80$6be78bcd@localhost.mvp.net>
Source record: 94306

I have a db Products cavity that is rated at 30-36mhz and would like to convert it for use on 6 meters. Has anyone tried this before and if so how big of a job was it.
73
--
Alan
K9CTF
St. Peters, MO

Repeaters serving the St. Louis area
145.43
443.35
53.35

4734. HIGH POWER TRANSMITTING TUBES FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5kfcrk$t7a@cletus.bright.net>
Source record: 94307

Eimac type YC156. This is the same basic tube as a 4CX5000. It is a high mu triode with beam forming cathode and grid that provides the gain of a tetrode. Power gain is 15 db.It was designed for the medical industry and has a rating of 6500 volts at 4 amps (67 amps peak in pulse mode !) This tube will operate with full output to 110 Mc. No socket is necessary for this tube, it will mount in a 3 1/2 inch diameter clear hole, and the grid ring will bolt to the chassis. Height overall is 8�.
I have all data sheets. Tubes are used but emission is guaranteed for full output. $325 each.
Norman N8RGR
norsan@bright.net

4735. Re: Help-data-1P28 photomultiplier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: Dave Hills <dhills@onramp.net>
Message-ID: <336B47C8.2D33@onramp.net>
Source record: 94308

Gerald Sargent wrote:
>
> Wanted: Data, specifically the spectral response, for an RCA 1P28
> photomultiplier tube, thanking you in anticipation, Gerald VK4ZSG.

The 1P28 has a Cs3Sb (cesiun-antimony) photocathode. It has a narrow spectral response with a peak responsivity of 5.5mA/Watt @ approx 425nM. Responsivity is down 50% at 375nM and 575nM (approximate).

Burle Industries purchased the PMT business from RCA some years ago and still makes them. http://www.burle.com/ Ask for a copy of thier "Photomultiplier Handbook" for applications information and all the theory you will ever want to know.

--
Dave Hills
DH Associates
Power Supply Engineering, Design, & Consulting
dhills@onramp.net

4736. SEVERAL DOUBTS. HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <336d4a65.2577671@noticias.mundivia.es>
Source record: 94309
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hello colleagues and friends
I have a tuner MFJ-945D the which it has the problem of that it lacks the BYPASS button that allows to don't use the tuner although this in it line. My problem is that or else I want to use the tuner I have to remove it. I would like to include a BYPASS button in order to could tune or not to my will. I could utilize the external switch for ON OFF the light of the SWR meter, but do not know how to make the interior connections. (I Believe that a posterior model 945E include this function). Thank you ahead of time for yours helps.
Another doubt that I have is that I own a vertical antenna for WARC bands and do not know which that mark it is. It has an aluminum inferior part for 24Mhz, then a reel for 18Mhz consecutive from an aluminum piece and then another trap for 10Mhz consecutive lastly of another aluminum piece. I have put a radial for perpendicular strip to the antenna but in 18Mhz don't succeed in having less of 1.8 or 2 swr, for more than I lengthen or I cut the radial. I have good SWR in 18,500, but although I lengthen the ground radial I don't get that down to 18.140 for example. If you could tell me the brand of this antenna is this and their characteristics or how I could make it resonate well and which height is good for the aerial to stay in.

I wait for yours answers and aids.
or better by post to F. Garcia
Apartado 123
E- 46080 Valencia
SPAIN

/|\
@ @
-----oOO-(_)-OOo----------

Francisco Garcia
e-mail: jorgegc@mundivia.es

4737. PLEASE READ ME. ICOM.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <336e4ada.2693842@noticias.mundivia.es>
Source record: 94310
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Dear friends I have one question and want you to help me. I
own a Icom 706 rig and two sticks for 20 and 40 meters. The
antennas are Valor Pro-am 3/8" conectors and they provide me
very good performance when used with a single magnet mount
on the roof of my 1990 Ford Fiesta car. The problem is that
I can not use it when moving the car because of the poor
catch (streght) of me magnet mount. I have tried several times to
mount the aerials in a hatchback mount, but performance and
SWR are very bad indeed. I do not know how to improve it or
how to use it on the move. The aerials are almost 2 meters
long, half helicoidal half steel stick.
Also will be wellcome any mods, commnets, improvements or
anything about the ICOM 706 rig, how much power can it run,
etc.
Any commnets and improvements for an old ATLAS 210X will be
wellcomed. I will apreciatte also comments on how to install a
vertical aerial for WARC bands which has two traps (coils). Which will
be the best height for best performance? How can I get the best SWR ?
How long and how many and which angles must I need for radials for 18
and 24Mhz ? (As I do not expect to use the 10Mhz band). Will it
perform better on 18 and 24Mhz than my windom aerial for 10-80 metres
which is at 3 metres over my roof which is in the top of a 40 metres
high building?

Sorry for my English, thanks for your help.

/|\
@ @
-----oOO-(_)-OOo--
Francisco Garcia
e-mail: jorgegc@mundivia.es

4738. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <3374fbfd.2834349078@news.sci.fi>
Source record: 94311
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

"Steve J. Quest" <Squest@concentric.net> wrote:

>Paul Kein&#65533;nen wrote:

>> I once had a nasty surprise with this kind of protection in a high
>> impedance circuit. I used 1N4148 diodes and they were sensitive to
>> ambient light upsetting the input bias system. I had to cover the
>> diodes to get away with this problem :-).
>
> The photodiode effect. :) Package NOT thy semiconductors in
>glass, lest ye be wanting photonic effects. ;) The 12th commandment
>of electronic component engineering. ;) You should try playing light
>upon an erasable EPROM version of the 8051 microcontroller sometime!

So they still have that problem. In the early days of EPROMs, a big official international delegation was on an industry visit and the new system was shown to the distinguished guests. There was a lot of media people present and some photographer took a picture of a card and the photo flash zapped one EPROM and the system went down in front of all the quests. Very embarrassing. Since then their policy has been to cover the EPROM window :-)

> Did you know they make black epoxy diodes in the same price
>range as the 1N914 whereby you could eliminate the photonic effects?
>Just buy 1N4001's and swap them for your 1N914's in the circuit....sq

Well, there are a few minor details to consider, the switching time for 1N400x series is measured in usecs, while the 1N914/4148 it is usually quoted in nanosecs. The ESD discharge times are usually below 1 usec. Also just wondering what the capacitance range for the 1N400x series might be. Didn't some kit maker use it as a varactor in an HF-oscillator.

The reverse leakage for 1N400x is quoted in uAmps, while nanoAmps are more typical for switching diodes. This may upset the circuit bias and add an additional path for the power supply noise to sneak into the input line.

Returning back to the original tread about active antennas, it looks like some kind of current limiting would be preferable between antenna whip and the gate of the source follower so that the protecting diodes (any configuration) could survive, since the ESD current can be several Amperes in the worst case. Putting a series resistor between the antenna and amplifier has the drawback, that the thermal noise

generated by the resistor is in series with the antenna voltage. For 1 kohm and 3 kHz bandwidth at room temperature, the added noise voltage is 0.2 uV and for 1 Mohm 7 uV. This might or might not be a problem, depending on the background noise level picked up by the whip.

Paul OH3LWR

4739. Big Bucks 2 !

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: "C. Black" <cblack@nfld.com>
Message-ID: <01bc57da$26cbaaa0$cb6aa5c6@default>
Source record: 94312

friend asked me if this was legal.
I told him that I would review it and get back to him. When I first
read
the letter my new client brought me I thought it was some off-the-wall
idea
to make money. However, a week and-a-half later we met in my office to
discuss the issue. I told him the letter he originally brought to me
was
not 100% legal. I suggested a few changes with which the letter would
be
100% legal.

I was curious about this letter, and my client told me how this plan
works
and suggested that I give it a try. I thought it was a long shot and
would
be a waste of time, so I decided against participating.

However, before my client left, I asked him to keep me updated of his
results. About two months later he called me to tell me he had received
over $800,000 in cash!!

I didn't believe him, so he suggested that I try this idea and find out
for
myself. I thought about it for a couple of days and decided that I
didn't
really have anything to lose, so I asked my client for a copy of the
letter. I followed the instructions exactly, sent out 200 copies, and
sure
enough, the money started arriving! It came slowly at first, but after
3
weeks, I was getting more mail than I could open in a day! The money
stopped
coming after about three months. I kept a precise record of my
earnings,
and
they totaled $968,498.00!! I was earning a good living as a lawyer, but
anyone
in the legal profession, or even anyone who owns their own business will
tell you, there is a lot of stress that comes with the job. I told
myself
that if things worked out, I would retire from my job and travel. I
decided to try the letter again, but this time I sent out 500 letters.
Well, three months later, my earnings totaled $2,344,178.00!!! I just
could not believe it. I met with my former client (and now my friend)

for
lunch to find out how it worked. He told me there are quite a few
similar
letters going around.

What made THIS ONE DIFFERENT WAS THE FACT THAT 6 ADDRESSES APPEAR ON THE
LIST, AND NOT 5 LIKE MOST OF THE OTHERS. This fact alone results in
your
name being on far more returns. Of course I was thankful that he had
shown
this plan to me, but he was just as thankful that I had suggested the
changes to ensure that this plan was legal since most people don't want
to
risk doing something illegal.

I'll bet that by now you are curious to know the little change I
suggested
in my friend's original letter. Well, if you sent a letter like this
out,
to be legal you must actually sell a product or service if you expect to
receive a dollar. I told my friend that anyone sending a dollar back to
him must receive something in return. You have received this letter due
to
the participation of each of the 6 persons given below. This letter and
the plan given within this letter are a "product" that you have
received.
Thus, you will be sending $1.00 USD to each of the 6 persons given below
in
exchange for receiving this letter and for asking them to provide the
"service" of adding you on their mailing list. THIS IS A SERVICE AND IS
A
100% LEGAL BUSINESS OPPORTUNITY WHICH IS COVERED IN TITLE 18, SECTION
1302
AND 1342 OF THE POSTAL AND LOTTERY LAWS.

NOW, PLEASE FOLLOW THESE TRIED AND TRUE STEPS TO OBTAIN THE AMOUNT YOU
DESIRE: Immediately send a $1 US dollar bill to each of the 6 people on
the list below. Wrap this dollar in a note with the words: "Please put
me on your mailing list." (Remember, in this way, you're not just
sending
a
dollar to someone; you're paying for a legitimate service.) Include
your
address. You do not need to include your name if you don't want to.
This
is
the key to the program!

Make sure that you retain EVERY name and/or address sent to you, either
on
computer or hard copy, but do not discard the names and notes that

people
send to you. This is PROOF that you are truly providing a service, and
should
the IRS or some other government agency question you, you can provide
them
with

this proof! Therefore, you will start a list of all the people who send
you a
dollar requesting to be added on a mailing list. Actually, you will
want
to safeguard this list because it can generate even better responses and
much more money later!

See step #4 below.

Remove the #1 name on the list, and move the rest of the names up one
position. Then place your name in the #6 spot. Thus, #6 becomes #5, #4
becomes #3, etc., and YOU will be #6 on the list. DO NOT EDIT THIS
LETTER
ANYMORE BEYOND THIS POINT. If you are mailing this letter, you may edit
the reference to the Internet.

Post this letter in at least 250 newsgroups, I do 30 groups per post.
You
can simply copy the contents of this letter and post it to the
newsgroups
of your choice. (If you're not sure how, see my directions
at the bottom.)

IMPORTANT NOTE: Please pay attention to the newsgroups in which you
post.
If there is an abundance of similar letters, you may want to seek
another
newsgroup. Thus, pay respect to the harmony of the newsgroup and use
common sense. There are plenty of newsgroups on the Internet. (I
think there are close to 18,000 of them.) ALSO, PLEASE POST IN
APPROPRIATE
GROUPS AND SPREAD YOUR POSTINGS OVER MANY DIFFERENT LOCAL &
INTERNATIONAL
AREAS (SPREAD THE WORD) !

Keep a copy of this letter so you can use it more than once. Also keep
EACH
AND EVERY NAME AND ADDRESS SENT TO YOU as instructed in #1. Then, send
out
more copies in about 6 months, but mail it to the addresses you received
(your new mailing list) with each dollar! It will work again, only much
better! Here are the addresses that you must send a dollar to with your
slip of paper requesting placement on their mailing list, as instructed
above:

1. F.P. Tine
1 Pine Glen Drive
Sickerville,NJ 08081-1319
USA

2. Robert Greene
Rt 3389
P.O. Box 582
Meally,KY 41234
USA

3. Ben Ruben
C/o P.o. 2006
Chino Valley,Arizona 86323
USA

4. R.A. Buenemann
3204 Fleet Lane
St. Charles,MO 63301
USA

5. M.LAfreniere
148 Maplewood Cres.
Ont. Canada
P3L 1G9

6. C. Blackmore
7 Pinware Cres.
Mount Pearl, NF.
Canada
A1N 2M3

-!NOTE!- YOU PAY $6 TOTAL ONE TIME ONLY! -!NOTE!-

****
* D I R E C T I O N S
*
* How to Re-Post
*
****

OK. This is how I did it (Windows95/PC). Do not re-type this
email (as this post previously instructed). First, open up an
empty Notepad file. (In Windows it should be under the
Accessories
menu.) Then, put your cursor at the beginning of this document,
hold the left mouse button down, drag it to the bottom and
release.
Now hold the Control key down and press 'C' (CTRL-C). This will
copy the highlighted text to the clipboard. Now get back to
your
notepad file (in Windows95 it's down in your taskbar), put the
cursor at the top of the notepad file, then hold the control key
down and press 'V' (CTRL-V). This will copy the contents of the

clipboard into your notepad file. Now you can edit the file.
Don't forget to remove name #1, put your name in at #6 and
re-number
accordingly. Save this file (as a .txt file.) If you want to
break up your sessions of posting you'll always have this file
to go back to.

FOR NETSCAPE USERS:

1) Click on any newsgroup. From a newsgroup, click on the 'TO
NEWS'
button, which should be in the top left corner of the newsgroups
page. This will bring up a message box.

2) Fill in the Subject.

3) Highlight the entire contents of your .txt file, do a CTRL-C to
copy
the document into the clipboard, get back to the e-mail you are
posting to the newsgroup and press CTRL-V to copy your file into
the
body of the e-mail.

4) Hit the 'SEND' button in the upper left corner. You're done
with
your first one!

5) Go to another newsgroup, press 'TO NEWS' button, type in the
Subject
line, press CTRL-V, press 'SEND'. That's two! Repeat as
needed...

INTERNET EXPLORER USERS:
(Directions are pretty much the same, except for the names of the
buttons.)

1) Go to newsgroups and press 'POST AN ARTICLE'.

2) Fill in the Subject.

3) Same as #3 above.

4) Hit the 'POST' button

4740. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5kfdn9$t7k$1@news.uni-c.dk>
Source record: 94313

In article <5kd7si$72m@hpcvsnz.cv.hp.com>, tomb@lsid.hp.com says...
>I believe you will find that the low frequency response of a capacitor
>mic is determined by some other factors: the main one usually is the
>capacitance and the preamp input impedance. Obviously, smaller mics
>would generally have less capacitance, so that's a factor, but if you
>can get a higher preamp input impedance (up to where the insulation
>in the mic shorts things out), you can get to lower frequencies.

I agree to that.

> I'm
>not sure how realistic the expectations of the original poster are
>with respect to improvement, though. I think the fets used in the
>cheap capsules aren't too shabby.

The lettering on the transistor inside the electret microphone, that I
took apart, was Q169. I am not familiar with a transistor of that name.
Does anyone know this one?

>You can get to better response with
>instrumentation capacitor mics, but then you are up in the $1000 range
>right away.

True. Having destroyed a few of the $1000 microphones, I feel a need for
a cheaper type of microphone. Perhaps a homebuilt capacitor microphone
10 inches in diameter would be more realistic than modifying the small
electret microphones. I could achieve a higher capacitance, and I would
not need an amplifier with > 100 Mohm input resitance.

Regards, Anders

4741. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: ballnt@aztec.asu.edu
Message-ID: <5kg7sd$r87@news.asu.edu>
Source record: 94314

In a previous article, wmeara@erols.com (Bill Meara) says:

>
>What is Nahin talking about? Are all those descriptions of transistor
>operation that talk about holes really "seductive frauds"? Will we
>have to "understand" QM before we really understand transistors?
>
>What do you guys think of all this? Should I stick with
>(understandable) vacuum tubes?
>
>73 de Bill N2CQR
>
The same quantum mechanics that describes conduction in semiconductors
also describes conduction in a copper wire. No one I know of says you have
to understand quantum mechanics to learn Ohm's Law or Kirchoff's laws in
elementary Physics.

--
John Ballentine WB2SNB Divina natura dedit agros,
Chandler, Arizona ars humana aedificavit urbes.

4742. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <336BA799.2AF7@online.no>
Source record: 94315

John Ballentine wrote:
No one I know of says you have
> to understand quantum mechanics to learn Ohm's Law or Kirchoff's laws in
> elementary Physics.
>
> --
wasn't the quantum mechanics used at school for an excuse that the
teachers did not have anything more practical to tell us?? Several of
the stupidities we had to learn has later dissappeared!
OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interests: Amateur radio technical experiments, VHF/UHF/SHF CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295

4743. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000305971525030001@news.europa.com>
Source record: 94316

Has anyone ever tried using a speaker with whizzer cone as a mike? You should get great low freq response.

I've used them before just for experimenting sake. You need an preamp or input designed for a dynamic type mike.

Rob.

4744. 6 meter web page -updated

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: James Cotterill <canberraboy@msn.com>
Message-ID: <01bc5815$57f40a60$8a11868b@default>
Source record: 94317

Hello to all,

Re: Strictly 6 web page.

I have now included a list of all known 6 meter capable radio's, with
hyperlinks to relevant info on the net.
Hope you find it useful!
There is also a new section on homebrew- do you know of any homebrew links
I can add to this section? needs to have 50Mhz/VHF content.

Cheers...Jim VK1ZFG

http://www.qsl.net/vk1zfg

4745. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: "Steve J. Quest" <Squest@concentric.net>
Message-ID: <336BF483.7638@concentric.net>
Source record: 94318
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Paul Kein&#65533;nen wrote:
>
> "Steve J. Quest" <Squest@concentric.net> wrote:
>
> >Paul Kein&#65533;nen wrote:
>
> >> I once had a nasty surprise with this kind of protection in a high
> >> impedance circuit. I used 1N4148 diodes and they were sensitive to
> >> ambient light upsetting the input bias system. I had to cover the
> >> diodes to get away with this problem :-).
> >
> > The photodiode effect. :) Package NOT thy semiconductors in
> >glass, lest ye be wanting photonic effects. ;) The 12th commandment
> >of electronic component engineering. ;) You should try playing light
> >upon an erasable EPROM version of the 8051 microcontroller sometime!
>
> So they still have that problem. In the early days of EPROMs, a big
> official international delegation was on an industry visit and the new
> system was shown to the distinguished guests. There was a lot of media
> people present and some photographer took a picture of a card and the
> photo flash zapped one EPROM and the system went down in front of all
> the quests. Very embarrassing. Since then their policy has been to
> cover the EPROM window :-)

I have always been paranoid about exposure of the die to light
after programming, as the erasure is a linear thing, and at some level
of light exposure, the EPROM becomes "stupid" and will give ambiguous
bit values, SOMETIMES! This can lead to major hair-pulling! However,
I discovered that ambiguous code values (which result typically in
lock-up or output data errors) can be induced with heat, and REduced
with cold, thus diagnostics of this failure are pretty simple.

Just so everyone who is unfamiliar with flash/Eprom reactions,
the flash will cause the Eprom to become stupid, locking the CPU, but
a simple reset will return things to normal, and there shouldn't be
any permanent damage to the data burned into the Eprom.

>
> > Did you know they make black epoxy diodes in the same price
> >range as the 1N914 whereby you could eliminate the photonic effects?
> >Just buy 1N4001's and swap them for your 1N914's in the circuit....sq
>

> Well, there are a few minor details to consider, the switching time
> for 1N400x series is measured in usecs, while the 1N914/4148 it is
> usually quoted in nanosecs. The ESD discharge times are usually below
> 1 usec. Also just wondering what the capacitance range for the 1N400x
> series might be. Didn't some kit maker use it as a varactor in an
> HF-oscillator.

1N400x series diodes (in my opinion) are fast enough for ESD.
I mean, they use MOV's for ESD protection, typically! :) The
capacitance of 1amp rectifiers shouldn't matter much, it would be the
bigger 4amp or higher diodes that would have sufficient variactor effect
to cause problems, but if your power supply is stable, can be "tuned out"
and forgotten about.

>
> The reverse leakage for 1N400x is quoted in uAmps, while nanoAmps are
> more typical for switching diodes. This may upset the circuit bias and
> add an additional path for the power supply noise to sneak into the
> input line.

This is usually true, but there are higher quality rectifier
manufacturers out there. Look for mil-spec, and you're WAY ok. ;)

sq

4746. FS: Teflon Wire #18,20,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-03 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <5kedpn$qrn@news1.hlc.net>
Source record: 94319
Cross-posted to: rec.radio.amateur.homebrew,rec.antiques.radio+phono,sci.electronics.repair

I have the following colors available at the prices noted. Limit is
100 ft./size/color. Shipping is $3.00 for any amount.

Size Color Price/Ft.

18 2,9 .10

20 1,4,7 .10

22 0,2,3,4,6,7,9 .07

24 0,5,7 .07

26 2,6 .07

Regards,
Dale

4747. 288MHz coax notch filter?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <336BBF25.39B0@online.no>
Source record: 94320

Hi
I made a halfwave notch filter of RG214 for 288MHz (quarterwave for 2m), but the notches seems too sharp. I rather use LDF5-50 (7/8" cable) for better power handling, but I need some technique to widen the notch responce. The notch depth was somewhere about 33dB. I need two cable notches with quarterwave line in between to improve my 144MHz linear amplifier second harmonic suppression
--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interest: Amateur radio technical experiments, QRV: 3.5-10369MHz CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295, NMT:944-26396

4748. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: stubstad@ix.netcom.com
Message-ID: <5kgpa4$31q@dfw-ixnews6.ix.netcom.com>
Source record: 94321
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In <33699ABE.E9E@concentric.net> "Steve J. Quest"
<Squest@concentric.net> writes:

>
> Did you know they make black epoxy diodes in the same price
>range as the 1N914 whereby you could eliminate the photonic effects?
>Just buy 1N4001's and swap them for your 1N914's in the circuit....sq

Not a good idea, 4001s have way too much capacitance, and they switch
much more slowly because of it too...but fast signal diodes do come in
black epoxy too, all the SMT ones are that way except for some of the
old style MELFs.

Jim

4749. Please help with VHF FM Crystal Filter bandwidth specs.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: rburden@student.ecel.uwa.edu.au
Message-ID: <336ce6c6.7099605@news.uwa.edu.au>
Source record: 94322

Hi,

I picked up some surplus commercial VHF radios at a recent Hamfest and
wondered if anyone knew the bandwidth for the following crystal filters:

HyQ "QF10701" and "QF10A7"
HCM "10M-4B"
Phillips "10.7N" and "10.7P"

Thanks in advance,
Richard

Richard VK6FKB
"Nothing better than home-brew"

4750. Fujitsu Ten Radio Programming

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: maury@flash.net
Message-ID: <336c1505.89555102@news.flash.net>
Source record: 94323

Does anyone have the software necessary to program the fujitsu Ten 2 way radios. The service manual states that the programming software can be written in basic, but that is all. Any help would be appreciated. Thanks maury@flash.net

4751. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: mafrye01@ix.netcom.com
Message-ID: <5kh44a$1oh@sjx-ixn5.ix.netcom.com>
Source record: 94324
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

In <336A648C.4CB1@pactor.com> Phil Sussman <pactor@pactor.com> writes:
>
>W.S.H. wrote:
>>
>> I would like to purchase the necessary PC software/hardware to
program
>> Motorola Radius P110, P200 and GP350 VHF Portable Radios.
>>
>> Any and all information regarding this matter is Greatly
Appreaciated!
>>
>> Send any and all replies to the e-mail address below!
>> --
>> Shane H.
>> shane@multipro.com
>
>All Motorola software is Licensed.
>You must sign a license agreement with Motorola or face
>criminal prosecution. And BOY do they prosecute!
>Their attorneys are constantly finding software violators
>and when they do they are neither kind nor merciful.
>
>Suggestion: Just buy the software from them directly. 800-422-4210
> The software may be expensive, but after all it comes
> nowhere close to paying an attorney or legal fees.
>
>BTW: I am NOT employed nor am I a representative of Motorola.

If Motorola would support their products like other radio mfgs, they wouldn't have a software pirate problem. King, (sub) Standard, and many others only charge minimal fees for software or will post on their bulletin boards for free! I know many shops who have sent in radios for repair only to find it was re-programmed with a newer ver. software and now the shop has to bend over and purchase MORE software just to be able to program a radio they have owned for years! Or one city PD that purchased a large qty of Mots and needed several versions of software to program identicial radios in the same shipment. I have seen more than one radio dealer financially ruined by Mot for software infringment. My personal opinion is SCREW Motorola!!!!! I wish someone out of the country would post the software on the internet so everyone can have it free, and make those big Motorola lawyers squirm.

4752. @@@HOWARD STERN ENEMIES LIST@@@@@@@@@@@@@@@@@@@@@@@@

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: sternism@geocities.com
Message-ID: <336c2ab2.15361071@news.zippo.com>
Source record: 94325

Hi,

Here is a cool site, check it out!!!
Sewing

Check out Enemies of Stern Site at:
http://www.geocities.com/Hollywood/Set/9693
x-no-archive:yes

4753. Re: Cleaning inductor ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: skerns@mail.talon.net
Message-ID: <5ki26p$2ol$1@news3.microserve.net>
Source record: 94326

The antenna may detune and/or become intermittant. The best bet is to coat each joint with no-ox (or products by other trade names that are avaliable at your local electrical supply house for use with aluminium electrical wiring. It also makes it a lot easier if you ever have to disassemble the antenna!

Steve N3FTI

In article <3369A04C.3D32@rcru.rl.ac.uk>, "mjw"@rcru.rl.ac.uk says...
>
>I have been wondering about this from the standpoint of antennas.
>
>If the aluminium/metal bond oxidises with time, which it surely must do
>if outside, what happens to the RF performance of say, a yagi, that
>assumes the boom and elements are connected?
>
>Perhaps the capacitance of the oxidised junction is enough to make
>it still work?
>
>There might be a grounding implication and static build up problems as
>presumably, although the dielectric strength of the oxide is high, the
>thickness is only a few microns.

4754. Re: WTB: 10 meter amp - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: unit77 <non@yadamned.business>
Message-ID: <336CA23E.7E2F@yadamned.business>
Source record: 94327

johnsi wrote:
>
> People are so paranoid about CB'ers getting a hold of 10 meter amps that they
> are as rare as chicken's teeth.
> Where does a legitimate ham get a 10 meter amp?
> Please email me directly if you know where I should look for one.
> Thanks,
> John N7MTB
WHY do you NEED an amp on 10 mtr?

4755. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: Bob Sull <wa8imo@kellnet.com>
Message-ID: <336CC241.400C@kellnet.com>
Source record: 94328
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

W.S.H. wrote:
>
> I would like to purchase the necessary PC software/hardware to program
> Motorola Radius P110, P200 and GP350 VHF Portable Radios.
>
> Any and all information regarding this matter is Greatly Appreaciated!
>
> Send any and all replies to the e-mail address below!
> --
> Shane H.
> shane@multipro.com

What has this got to do with DX?

Anothre newsgroup ruined by those who can't or won't follow the basic
ideas.....

Bob
--
<> Bob Sull WA8IMO <>
"73, CUL, es keep the FUN in Ham radio."
>Life Member-ARRL QCWA< >Member-NODXA NCDXF<
>DXCC WAS RCC < >8P9BC<
>QSL Mgr for 8P6JG<
>WA8IMO@W8IZ.#NEOH.OH.USA<
>WA8IMO@KELLNET.COM<

4756. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <336CA119.74E1@up.net>
Source record: 94329

jupiter@europa.com wrote:
>
> In article <frederick.mckenzie-1-0205971059320001@k4dii.ksc.nasa.gov>,
> frederick.mckenzie-1@kmail.ksc.nasa.gov (Fred McKenzie) wrote:
>
> :In article <jupiter-ya023580000105971815530001@news.europa.com>,
> :jupiter@europa.com wrote:
> :> I believe that the low freq response of those mics is a function of their
> :> physical size and has nothing to do with the FET. I've taken some apart,
> :> and no coupling caps.
> :
> :Rob.l-
> :
> :I agree. I recall a variation of the Electret microphone, called the
> :"PZM" (Pressure Zone Microphone), that was popular several years ago. It
> :was mounted in/on a square plate, about 5" X 5". For best low frequency
> :response, it was recommended that it be mounted on a larger surface.
> :
> :Perhaps the PZM technology would have a frequency response low enough to
> :meet Anders' needs.
> :
> :73, Fred, K4DII
>
> I think Radio Shack still sells one of those

As I recall, they used about 3v on these mikes...try increasing
voltage to 5 volts for better output and response.

4757. Galena crystal??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: Ray LaRue <raylarue@gte.net>
Message-ID: <5kihto$6gm$1@news7.gte.net>
Source record: 94330

Recently found my original Cat's whisker crystal holder, less the crystal. This was my part of my first "radio" many years ago. Would love to find another crystal and build a set, to show my kids and grandchildren. Anyone able to suggest where I might get a piece of Galena? The holder looks like it takes a piece about 7/16" in diameter. Thanks for any help you can offer.
73,
Ray, W4BYG

4758. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc58bc$5dc32fa0$4b102399@peter->
Source record: 94331
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Mike A. Frye <mafrye01@ix.netcom.com> wrote in article
<5kh44a$1oh@sjx-ixn5.ix.netcom.com>...
> infringment. My personal opinion is SCREW Motorola!!!!!

Why do all the royalties always go to Motorola and not the real creators of
the work?

You can talk all day about "work for hire" but I still think all the talk
about intellectual
property rights is just another money grab by large corporate interests.
There would
be NO talk of this if software creation was treated like an art, with such
common
niceties as CREDIT to the actual writers, and ROYALTY agreements. A
multimillion
dollar movie credits even the manufacturers of the film and cameras, but in
a similarly
sized software project any credit to anybody is hidden, at best.

4759. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc58bc$e0bfe6a0$4b102399@peter->
Source record: 94332
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Bob Sull <wa8imo@kellnet.com> wrote in article
<336CC241.400C@kellnet.com>...
> What has this got to do with DX?
>
> Anothre newsgroup ruined by those who can't or won't follow the basic
> ideas.....

This ended up being cross posted. This is easy to inadvertently do, as
most mail
programs simply copy multiple group postings in subsequent postings and
replies.

Until the mail programs change, you will see this happen a lot. Not really
a big
deal. Do you really think a glitch this small ruins a newsgroup?

4760. Re: Galena crystal??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <336CE64E.1C7@crpl.cedar-rapids.lib.ia.us>
Source record: 94333

Ray LaRue wrote:
>
> Recently found my original Cat's whisker crystal holder, less the
> crystal. This was my part of my first "radio" many years ago.

Call Antique Electronic Supply in Tempe Arizona at 602-820-4643 and ask
for item P-Q111 galena crystal, also P-H415 cat whisker, if you need it.
Have them send you a catalog.

Bill W0IYH

4761. Re: Galena crystal??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <336CE701.11EE@crpl.cedar-rapids.lib.ia.us>
Source record: 94334

William E. Sabin wrote:
>

> Call Antique Electronic Supply in Tempe Arizona at 602-820-4643

Correction: phone number is 602-820-5411.

The 4643 number is their fax number.

Bill W0IYH

4762. Re: Galena crystal??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <336d19ff.4135358@news.erols.com>
Source record: 94335

On 4 May 1997 17:44:24 GMT, Ray LaRue <raylarue@gte.net> wrote:

>
>Recently found my original Cat's whisker crystal holder, less the
>crystal. This was my part of my first "radio" many years ago. Would
>love to find another crystal and build a set, to show my kids and
>grandchildren. Anyone able to suggest where I might get a piece of
>Galena? The holder looks like it takes a piece about 7/16" in diameter.
> Thanks for any help you can offer.
>73,
>Ray, W4BYG

Ray: Antique Electronic Supply stocks them.

AES
6221 South Maple Avenue
Tempe, Arizona 85283

Tel: 602-820-5411
FAX 602-820-4543

I built a Crystal radio with Galena from AES. It was a lot of fun and
very educational. I'd heard about having to find a sensitive spot on
the crystal, but until I actually had to do it I didn't really
understand. Once I got the receiver together, I had to control the
urge to build the corresponding spark transmitter!

73 Good luck. Bill N2CQR

4763. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: Bob Sull <wa8imo@kellnet.com>
Message-ID: <336D01CB.1562@kellnet.com>
Source record: 94336
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Peter Gottlieb wrote:
>
> Bob Sull <wa8imo@kellnet.com> wrote in article
> <336CC241.400C@kellnet.com>...
> > What has this got to do with DX?
> >
> > Anothre newsgroup ruined by those who can't or won't follow the basic
> > ideas.....
>
> This ended up being cross posted. This is easy to inadvertently do, as
> most mail
> programs simply copy multiple group postings in subsequent postings and
> replies.
>
> Until the mail programs change, you will see this happen a lot. Not really
> a big
> deal. Do you really think a glitch this small ruins a newsgroup?

Sure.

First it is just as easy to pay attention to where things are going and
erase the newsgroups that have nothing to do with the subject.
Inadvertant is really inconsiderate.

This is a small ng but why does that mean it can't be "pure". That was
one of the things that was discussed when this ng was born. Postings
that are not "on topic" are a waste of bandwidth and space in my
computer and on the server. How much is wasted when the sender posts
the article across the entire spectrum? A lot.

What it boils down to is that this ng was dedicated to DX. Not FS, not
WTB, not Help my toaster is burning when I'm on 15 cw, etc etc etc.....

73, Bob
--
<> Bob Sull WA8IMO <>
"73, CUL, es keep the FUN in Ham radio."
>Life Member-ARRL QCWA< >Member-NODXA NCDXF<
>DXCC WAS RCC < >8P9BC<
>QSL Mgr for 8P6JG<
>WA8IMO@W8IZ.#NEOH.OH.USA<
>WA8IMO@KELLNET.COM<

4764. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc58d8$6b776be0$fd0f2399@peter->
Source record: 94337
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Bob Sull <wa8imo@kellnet.com> wrote in article
<336D01CB.1562@kellnet.com>...
> > . Do you really think a glitch this small ruins a newsgroup?
>
> Sure.
>
> First it is just as easy to pay attention to where things are going and
> erase the newsgroups that have nothing to do with the subject.
> Inadvertant is really inconsiderate.
>

I rest my case. You yourself cross posted your reply.

It's not as simple as you make it out to be!!!

4765. Re: Galena crystal??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: cjdumar@westelcom.com
Message-ID: <5kj6bi$bo2@news.emi.com>
Source record: 94338

On 1997-05-04 raylarue@gte.net said:
:Newsgroups: rec.radio.amateur.homebrew
:Recently found my original Cat's whisker crystal holder, less the
:crystal. This was my part of my first "radio" many years ago.
:Would love to find another crystal and build a set, to show my kids
:and grandchildren. Anyone able to suggest where I might get a
:piece of Galena? The holder looks like it takes a piece about
:7/16" in diameter. Thanks for any help you can offer.
:73,
:Ray, W4BYG

forward your mailing address and I will mail one out to you. I have spares.

Charlie, KA2VCS (cjdumar@westelcom.com)

If you really want to know , you won't ask me.

Net-Tamer V 1.09 Beta - Registered

4766. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: Mark McPherson <markm@teleport.com>
Message-ID: <336D226F.9C937808@teleport.com>
Source record: 94339
Body handling: HTML body converted to readable text

Bill Meara wrote:

Mark: I bought Nahin's book because it looked like it woul provide a

pretty good presentation on the mysterious subject of why antennas

radiate. While he put out a lot of useful info, I was a bit

diappointed by his presentation on this subject. I thought his

explanation of current distribution on a quarter wave antenna (current

"shunting off" through distributed capacitance to ground?) was kind of

wierd.

Nahin: " I went to a good undergraduate school with fine professors

who showed me how to cram my head full of all sorts of neat technical

details; but when I received my first engineering degree I still

didn't know at the intuitive, gut level what the devil was really

going on inside a kitchen radio. That, like my thickening girth and

thinning hair, came with time."

That's the kind of understanding I'd like! Gut level! That's why

his "seductive fraud" comment about transistor theory was a bit

worrisome. I thought I'd come to understand how the transistors work!

One other comment: On the "how antennas radiate" question, I think

the textbooks too often sell the reader short by saying "if you can't

handle the differential equations you really can't understand how the

antenna radiates." I disagree. I think it is possible to come to a

"gut level" understanding of EM radiation without really dominating

the math. We can take our inspiration from Faraday!

73 de Bill N2CQR

Bill, I know what you mean about "gut level" understanding and you've
inspired me to go back and read what Nahin has to say about antenna radiation.

I did find the passage which originally inspired this thread. It
can be found on page xvi of "The Science of Radio", in a sidebar entitled
"Three Pedagogical Notes":

"When the writing of this book reached the point of introducing electronic
circuitry (Chapter 8), I had to make a decision about the technology to
discuss. Should it be vacuum tubes or transistors? Or both?
I quickly decided against both, if only to keep the book from growing like
Topsy. The final decision was for vacuum tubes. My reasons
for this choice are both technical and historical. Vacuum tubes are
single-charge carrier devices (electrons) understandable in terms of "intuitive",
classical freshman physics. Transistors are two-charge carrier (electron
and holes) devices, understandable really only in terms of quantum mechanics.
Electrical engineering professors have, yes, invented lots of smoke and
mirror ways of "explaining" holes in terms of classical physics, but these
ways are, really, seductive frauds. They're good for their ease in
writing equations and in thinking about how these circuits work, but even
though they look elementary, I don't like to teach a first course in electrical
engineering with their use. They are really shortcuts for advanced
students who have had quantum mechanics. From a historical view,
of course, it was the vacuum tube that made AM broadcast radio commercially
possible, and to properly discuss the work of Fleming and De Forest, the
vacuum tube is the the only choice. And finally, students should
be told that the small-signal equivalent-circuit model for the junction-field-effect
transistor (JFET) is identical to that for the vacuum tube triode!
Plus ca change, plus c'est meme chose."

And how can you not like a textbook author who cites Garrison Keillor and
Woody Allen as spiritual influences???

Somewhere I have a copy of a nice paper on electromagnetic radiation which
is essentially a non-mathematical treatment involving current and charge
distributions on antennas and the corresponding behavior of their associated
electric and magnetic fields. I'll try to dig it out and post the
reference for you.

Me, I still think about transistors in terms of a model I learned long
ago from a very good analog IC designer named Jim Dunkley. A very
advanced and technically-savvy guy, his instructional model for bipolar
transistors involved (as I recall) a giant box of ping pong balls with
a slot on one wall which could be raised and lowered, a tilting conveyor
belt below the slot with ping-pong-ball-sized holes in it, and a large
hopper. :-)

I suspect Nahin would not approve!

All the best,

Mark McPherson

K7MPH

4767. Re: WTB: 10 meter amp - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: Bubba <"<bigjon1"@ix.netcom.com>
Message-ID: <336D1D6C.4445@ix.netcom.com>
Source record: 94340

unit77 wrote:
>
> johnsi wrote:
> >
> > People are so paranoid about CB'ers getting a hold of 10 meter amps that they
> > are as rare as chicken's teeth.
> > Where does a legitimate ham get a 10 meter amp?
> > Please email me directly if you know where I should look for one.
> > Thanks,
> > John N7MTB
> WHY do you NEED an amp on 10 mtr?

DONT WORRY BOUT IT!!!! JUST ANSWER HIS QUESTION! IF NOT, DON'T POST!!!

4768. Re: QST Hams with Macs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: scott@allnetinc.com
Message-ID: <scott-0405972024590001@allnet.pr.mcs.net>
Source record: 94341
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Thank you, Thank You, THANK YOU!!!
It is about time!!!

Scott

In article <john-0105970655410001@wd1v.mv.com>, john@wd1v.mv.com (John D.
Seney) wrote:

> Announcing New WWW Site for Macintosh Ham Radio Enthusiasts
>
>
> http://www.mv.com/ipusers/wd1v
>
>
> Mac Ham Software including:
>
> Macnet Roster:
> a database of all hams in the world using Mac computers
>
> WD1V's Ham Radio EXAM Simulators:
> the fast path for upgrading your ham license with a Mac
>
> Plus more Mac information - come see!
>
> 73,
>
>
> John D. Seney |_|_|_|_| john@wd1v.mv.com
> 144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
> Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
> Voice Mail 617.686.9882 | | | | | Fax 603.627.1623
>
> http://www.mv.com/ipusers/wd1v

4769. Re: Build or Buy BS-8 / PanAdapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: WA0KDS <WA0KDS@mcipnet.com>
Message-ID: <336D56D9.2E19@mcipnet.com>
Source record: 94342
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

Mike Kraml wrote:
>
> Hello All:
> Here I go again, wanted, to either build or buy (used) a panadapter for my
> scope. I believe Kenwood's number is BS-8. If anyone knows how to simply
> build on, please, fill me in!!!! Thanks in advance, 73, Mike - WQ0N

When you find out how let me know.

4770. Mailing Lists

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <336D6223.7450@primenet.com>
Source record: 94343

HomeBrew is a mailing list (reflector) devoted to amateur radio
and electronics experimentation and construction:

* building kits
* scratch construction
* radios, antennas, widgets
* design
* accessories
* station construction
* digital, analog, uP
* repair, modification, surplus

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe homebrew

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe homebrew

To post items to the reflector, send email as follows:
TO: homebrew@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Books is a mailing list (reflector) devoted to the literature
and periodicals of amateur radio:

* publishers
* magazines
* newsletters
* books
* old and "collector" books
* new book announcements

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-books

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: unsubscribe ham-books

To post items to the reflector, send email as follows:
TO: ham-books@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Ham-Software is a mailing list (reflector) devoted to software
of all types used for amateur radio:

* logging
* propagation prediction
* digital modes
* award tracking
* commercial, shareware, freeware
* electronic design and simulation
* amateur software development

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: subscribe ham-software

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe ham-software

To post items to the reflector, send email as follows:
TO: ham-software@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

Mobile-Portable is a mailing list (reflector) devoted to mobile
and portable operation of amateur radio (QRP and QRO, HF and VHF+):

* rigs, antennas, tuners
* installation
* batteries
* generators
* solar and alternative energy
* camping/RVs/backpacking
* laptop/palmtop computers
* portable packet
* roving and mountain-topping
* GPS, APRS

To be added to the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:

BODY: subscribe mobile-portable

To be deleted from the mailing list, send email as follows:
TO: majordomo@qsl.net
SUBJECT:
BODY: unsubscribe mobile-portable

To post items to the reflector, send email as follows:
TO: mobile-portable@qsl.net

If you have questions or need assistance contact: k7on@qsl.net

---

4771. RTTY TU Collector! *WTB*

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <336D5FB8.56A1@primenet.com>
Source record: 94344

RTTY TU Collector! *WTB*
Collector looking for older homebrew (or commercial)
RTTY Terminal Units

ke7gh@primenet.com

4772. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: n9jig@TheRamp.net
Message-ID: <n9jig-ya023080000405972351280001@news.theramp.net>
Source record: 94345
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

If you work for a corporation and develop software or other intelectual property on company time, the results belong to the corporation. They are paying you for your time and deserve the results of your work. Think of it as working in an auto plant. Since you installed the windshield, does that mean you get to take the car home with you?

If you wish to keep the benefits of your work, then you must produce it independently without the support and resources of the corporation.

Peter Gottlieb <peter_gottlieb@msn.com> wrote:

> Why do all the royalties always go to Motorola and not the real creators of
> the work?

> You can talk all day about "work for hire" but I still think all the talk
> about intellectual property rights is just another money grab by large
> corporate interests. There would be NO talk of this if software creation was
> treated like an art, with such common niceties as CREDIT to the actual
> writers, and ROYALTY agreements. A multimillion dollar movie credits even the
> manufacturers of the film and cameras, but in a similarly sized software
> project any credit to anybody is hidden, at best.

--
Rich Carlson, N9JIG N9JIG@TheRamp.Net
ScannerMaster Illinois Communications Guide (800)722-6701
CARMA (Chicago Area Radio Monitoring Association
CARMA Web Page: http://www.theramp.net/shabec/carma.htm
CARMA BBS (630) 852-1292

4773. Web Page Updated http://www.qsl.net/k7on

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <336D72A5.40F8@primenet.com>
Source record: 94346

Web Page Updated http://www.qsl.net/k7on

4774. ** WTB: ** Packet Radio Equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-04 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <336D7BDD.F@primenet.com>
Source record: 94347

```
Looking for high speed packet equipment:
-9k6 and up modems/TNCs
-GRAPES, PI, Gracillis
-Data Engines
-Data Radios
-Transverters
-Other?

What do you have available?

ke7gh@primenet.com
```

4775. F/S: Electronic test equipment (5/4/97)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5kji9v$3cvg@newssvr01-int.news.prodigy.com>
Source record: 94253

ASSOCIATED TEST LABORATORIES RK1101 environmental test
chamber; hot/cold, requires 300 PSI CO2 for -90C. 120VAC.
Approx. 1 cu ft chamber. $100
90#

-HP- 302A wave analyzer, 10 Hz - 50 KHz, 10 Hz bandwidth,
phase-lockable; voltmeter ranges 100 uV to 300 V.
All solid state, w/manual repro: $150
40#
-HP- 712B variable power supply, 0-500VDC @ 200 mA,
0-200VDC @ 5 mA, -300V @ 50 mA, 6.3 VCT AC @ 10A $65
85#

Measurements Corp. 65B AM signal generator w/ modulation,
01 uV to 2.0V, 75 KHz to 30 MHz $65

John Fluke 801BR differential voltmeter, 5-digit,
working: $50
25#
John Fluke 801BR differential voltmeter, 5-digit,
as is: $20
25#

Both of them: $65
45#
****
MUSEUM PIECES - working

SENSITIVE RESEARCH INC "Rhodes Potential Voltmeter",
Model PV; wooden case instrument w/galvanometer, bridge,
etc., 2 mVDC to 20 VDC $50
25#
Weston Model 45 standard voltmeter, 1/2% 150-300-750 VDC,
wooden case: $50
15#
Weston Model 341 "High Frequency Voltmeter", 1/4%
accuracy to 1 KHz, 30, 75 V F/S, wooden case: $50
15#

4776. F/S: Fluxgates, gaussmeters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5kji83$28ia@newssvr01-int.news.prodigy.com>
Source record: 94254

Prices include shipping in Lower 48.

MEDA uMAG-02WB Handheld, battery-operated digital fluxgate magnetometer. Sensitivity: +/-0 - 20.00 - 200.0 - 2000 milliGauss F/S, DC-400 Hz (-3dB @ 400 Hz ref to DC). Analog output +/- 2.000 V F/S. Linearity .02% or better. Absolute accuracy +/- 0.5% or better, traceable to NIST. With 10 meter cable and transverse probe, 6 spare batteries in storage case, multiple-battery harness for up to 8 batteries (approximately 12 days continuous operation), analog output cable w/BNC (to oscilloscope input), manual, calibration certificate, transit case. In new condition. Current price from manufacturer is $900. Sell at $500.

WALKER SCIENTIFIC 3D1. Handheld, battery-operated digital fluxgate magnetometer. Sensitivity: +/-0 - 20.00 - 200.0 - 2000 milliGauss F/S, DC-100 Hz (-3dB @100 Hz ref to DC). Analog output +/- 2.000 V F/S. Linearity .02% or better. Absolute accuracy +/- 0.5% or better, traceable to NIST. With 6 foot cable and axial probe, carrying case. Almost-new condition, $350.

DEXSIL MAGNUM 310. Handheld, battery-operated, micropro-cessor based 3-axis digital induction milliGaussmeter. Auto-ranging; 0.04-9.96 milliGauss (+/- 2%), 10 - 99.6 milliGauss (+/- 5%), 100-996 milliGauss (+/- 5%), 1.00 - 10.0 Gauss (+/- 5%) for 60 Hz signals in 60 Hz mode. F/S accuracy in 3rd harmonic mode is +/- 5%. In braodband mode (40-310 Hz @ -3dB) accuracy is +/- 10%. Displays all three vector components plus resultant or resultant only. Has low battery indication and automatic shutoff. Fully self-contained. WIth carrying case, manual and calibration certificate. Used, very good condition; $250.

MERLYN & NIMUE 900. Handheld, battery-operated single axis digital induction milliGaussmeter. 4 ranges; +/- 0 - 20.00 - 200.0 - 2000 milliGauss - 20.00 Gauss F/S. +/- 2% all ranges except 20 Gauss (+/- 5%). -3dB 20 Hz - 1.5 KHz. Fully self-contained, w/carrying case. Used, excellent condition. $125

LEEDS & NORTHRUP SERVO RECORDER 136-304-304-304-00-00-00-L0088-L0088-L0088-6-BV-000. Three-channel servo recorder, modified for potential inputs. Can be internally adjusted from +/- 1 millivolt F/S to +/- 2V F/S. Set at +/- 1V F/S. Chart speed @ 60 Hz 2cm/hr or 2 cm/minute (at 50 Hz = 1.67 cm/min or 1.67 cm/hr). Internal line voltage selection for

100/120 V, 220 V or 240 V. Power burden: 27 VA. Power input; 3-wire IEC connector. (Uses standard IEC cords). With 2 sets spare pens, 2 boxes charts, a few spare parts, NEMA (USA) line cord, carrying case; Used, good condition; $150.

UNIVERSAL IEC LINE CORD SET. Each 6-foot line cord has a standard female 3-wire IEC connector at one end, and a male connector at the other; one of each from the following list:

Australia 3-pin w/ground male pin
Denmark 3-pin w/ground male pin
Europe 2-pin w/ground female & strap
India/South Africa 3-pin w/ground male pin
Israel 3-pin w/ground male pin
Italy 3-pin w/ground male pin
Switzerland 3-pin w/ground male pin
United Kingdom Fused 3-pin w/ground male pin
USA/NEC/Japan (100/120V) 3-pin w/ground male pin

One of each of the known electrical connections in the world; 9 cords in carrying case, NEW: $100

4777. Build or Buy BS-8 / PanAdapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: tenorman@i1.net
Message-ID: <5kjl2a$s1r$1@news1.i1.net>
Source record: 94255
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

Hello All:
Here I go again, wanted, to either build or buy (used) a panadapter for my scope. I believe Kenwood's number is BS-8. If anyone knows how to simply build on, please, fill me in!!!! Thanks in advance, 73, Mike - WQ0N

4778. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5kk59udvs1@news.uni-c.dk>
Source record: 94256

...
>I believe you will find that the low frequency response of a capacitor
>mic is determined by some other factors: the main one usually is the
>capacitance and the preamp input impedance.
..
> I'm
>not sure how realistic the expectations of the original poster are
>with respect to improvement, though.
...

Having looked at the specs of some microphone preamplifiers for
condendsor and electret microphones, I see that to reach down to
2 Hz, a (half-inch) microphone-preamplifer typically has an input
impedance of
32 GigaOhm, and a stray capacitance of 0.4 pF. And a noise voltage
of 2 microVolt.

These specifications are extreme compared to most quickly made
electronic equipment. I think it is unlikely that I could easily
build a preamplifier with such specifications.

With a 10 inch diameter microphone, maybe one could use a preamplifier
with 32/20/20 = 80 MegaOhm input resistance. That may be more realistic
for quick construction.

Regards, Anders

4779. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: Iwo Mergler <Mergler@tu-harburg.d400.de>
Message-ID: <336DBD32.7959@tu-harburg.d400.de>
Source record: 94257
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

Don Wall wrote:
>
> >I'm making solid state versions of the tubes used in a AC-DC
> >AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
> >
> Why would you want to do that? The price of these tubes is at a

Power saving! ;)

4780. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <336ddd88.2908168@news.erols.com>
Source record: 94258
Body handling: HTML body converted to readable text

On Sun, 04 May 1997 16:57:36 -0700, Mark McPherson
wrote:

>
Bill, I know what you mean about "gut level" understanding and you've
>inspired me to go back and read what Nahin has to say about antenna radiation.
>

>
I did find the passage which originally inspired this thread. It
>can be found on page xvi of "The Science of Radio", in a sidebar entitled
>
And how can you not like a textbook author who cites Garrison Keillor and
>Woody Allen as spiritual influences???
>

>
Somewhere I have a copy of a nice paper on electromagnetic radiation which
>is essentially a non-mathematical treatment involving current and charge
>distributions on antennas and the corresponding behavior of their associated
>electric and magnetic fields. I'll try to dig it out and post the
>reference for you.

Thanks Mark. I really like Nahins book!

Please dig up that paper. Those of us seeking gut level undestanding
need all the help we can get!

73 Bill N2CQR

4781. Re: Build or Buy BS-8 / PanAdapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <336DD7B3.3612@aeneas.net>
Source record: 94259
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

There are plans in Ham Radio Magizane, Feb. 1983; pages 26 thru 38.
The article is titled "Design notes on a Panoramic Adapter/Spectrum
Analyzer".
73's,
Mark

4782. F.S. - Tubes, radios, books and much more...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970505153300.LAA09361@ladder01.news.aol.com>
Source record: 94260

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1550 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #426-T.

4783. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <336DFF0C.1C7E@online.no>
Source record: 94261

Iwo Mergler wrote:
>
> Don Wall wrote:
> >
> > >I'm making solid state versions of the tubes used in a AC-DC
> > >AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
> > >
> > Why would you want to do that? The price of these tubes is at a
>
> Power saving! ;)

indeed ...and heating voltage become less critical.....

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interest: Amateur radio technical experiments, QRV: 3.5-10369MHz
CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295,
NMT:944-26396

4784. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: "Justin H. Blackstock" <jblackst@utk.edu>
Message-ID: <336E0420.19AEFC00@utk.edu>
Source record: 94262
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

>What has this got to do with DX?
> What it boils down to is that this ng was dedicated to DX. Not FS, not
> WTB, not Help my toaster is burning when I'm on 15 cw, etc etc etc.....

Check out the title of the NG - rec.radio.swap not rec.radio.dx

Justin

4785. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: "Harry H. Brown" <hbrown@vf.lmms.lmco.com>
Message-ID: <336E06A2.41C67EA6@vf.lmms.lmco.com>
Source record: 94263
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

Back in the 70's, ham radio magazine had (as I recall) an article on a complete conversion of a tube receiver to solid state. More recently, there were commercial replacements for most if not all of the tubes in for the Collins S Line.

There are lots of reasons for making transistor equivalents. Some are to improve the reliability. Remember that as heat increases, reliability decreases.

73, Harry, W3IIT

4786. Re: REPEATER MAILING LIST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: guaz@aol.com
Message-ID: <19970505173000.NAA16842@ladder01.news.aol.com>
Source record: 94264

Please put me on your repeater mailing list.

4787. Re: Transistor Theory - seductive fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5kkvam$336q@info4.rus.uni-stuttgart.de>
Source record: 94265

>What do you guys think of all this? Should I stick with
>(understandable) vacuum tubes?

Stick with tubes, Bill.

As a first introductory project you might try to convert your
internet-adapter or modem to tubes.

OTOH, if all engineers working with tubes would have fully tried
to understand the Richardson equation, work functions et.c.,
there still would be no microelectronics.

Moritz

4788. Re: Dead TS50s digital board question.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: turtle@wwa.com
Message-ID: <5kl81o$991$1@kirin.wwa.com>
Source record: 94266

"Robert W. Lewis" <rlewis@staffnet.com> wrote:

>Gary wrote:
>>
>> I have a Kenwood TS50s and I was experiencing a ground loop in my pll
>> board. I had to remove the digital board in order to tighten the
>> screws on the pll board. After tightening the screws I placed the
>> Digital board back in it's place, hooked up all it's cables/ribbons
>> and pushed the power button.....nothing....dead. Well breaking out
>> the schematics I traced out the power up circuit (5c,psw & psc
>> continuity)...ok....checked all the fuses(inside & outside)...ok.
>>
>> The only thing I can think of that might be the problem is that I
>> inadvertently shorted the lithium battery and lost the memory in the
>> Microprocessor. I can't get a straight answer from Kenwood and
>> perhaps one of my fellow Hams can help.
>>
>> TNX Gary KF9CM

>Try a processor reset. Hold the A=B key and switch the power on.
Thanks for the input Robert but, I think it's a little beond a
software reset. I think I'll pay the $114 for Digital board and go
with that.

TNX & 73 Gary KF9CM

4789. Microwave Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: p.day@virgin.net
Message-ID: <336e3112.24919408@news.virgin.net>
Source record: 94267

My "World Above 1000MHz" pages are now available (fast download time)
at: http://www.geocities.com/SiliconValley/Vista/7012 and mirrored
at http://www.qsl.net/g3pho

Microwave news and info is welcome!

73
73 from Peter, G3PHO

****
Ex: ZL2BDA 1966-68, ZL2LA 1975-80
Editor: RSGB Microwave Newsletter
Microwave Homepage: http://freespace.virgin.net/p.day/ghz.htm
(mirror site at: http:www.geocities.com/SiliconValley/Vista/7012

****

4790. F.S. - Rechargeable Power Center

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: "Roger H. Smith" <goldwing@iquest.net>
Message-ID: <5kldkrcpg1@news.iquest.net>
Source record: 94268
Cross-posted to: in.ham-radio,misc.forsale.non-computer,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.swap,sci.electronics,sci.electronics.equipment,sci.electronics.misc,sci.electronics.repair

I have only 1 more of these to sell :

BRAND NEW, UNUSED, & IN-BOX : Portable Rechargeable Power Center :

Provides 12 vdc @ 4 amp (4 A.h.) and 3,6,&9 vdc @ 1 amp. Has pop-up carry handle,

Nylon shoulder strap, Built-in work light, Twin cigar (ciggarette) lighter outlets, Fuse

protected, Charge & Discharge status indicator LED's, and Auto DC charger

cord (recharges in your vehicle). Runs a lap-top computer for about 6

hrs., A cellular telephone for about 4 hrs (TALK) and 70 hrs. (STANDBY),

And who knows how long it will run an H.T. !!!

I HAVE ONE, (1), OF THESE TO SELL (Maybe more later.....MAYBE) $25.00 plus

actual shipping charges from IN. to you. E-mail me WITH YOUR ZIP-CODE

if interested ....

Thanks ! .... Roger N9PMC :-)

4791. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5kkle7$h80@news2.zippo.com>
Source record: 94269
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

jupiter@europa.com wrote:

>I've always thought that tube designs were much more elegant than modern
>solid state ones. Realize it took less than 20 active devices in the
>1960's to produce a color TV. Now engineers can simply throw thousands of
>transistors at an application.

>How many millions of transistors are in a new TV? The picture is really
>not much better- and most people never have their TV adjusted right anyway-
>too much color for pink and orange flesh tones.

>So where is the progress? In more features and gizmos, just like the
>current state of commercial ham transciever manufacture.

I guess the fact that modern TV's use far less power, cost less,
almost never need convergance, and have a far better MTBF, means
nothing.

George Carlson KC5RCC
Geotek Design Services, Houston,TX
geotek@comwerx.net

4792. +WTB: YAESU FV-102DM DIGITAL REMOTE VFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: wb6elm@juno.com
Message-ID: <5klqd2$a36@poisson.nosc.mil>
Source record: 94270

Hi there,
I am seriously looking for the matching remote Digital VFO(FV-102DM)for the
YAESU FT-102 HF transceiver.

Rubin
wb6elm@juno.com

4793. WTB: Staple gun for telephone wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: robbarge@telis.org
Message-ID: <336e186b.7071476@news.telis.org>
Source record: 94271

Looking to buy a staple gun that shoots those "U": shaped staples like
are used to tack down four conductor telephone wire, both indoors and
out. I know Arrow makes one, and there may be others. The staples
may come in different widths too.

If anyone can suggest a better place to post this msg, I'd appreciate
knowing. Also, suggestions as to a good source for new would be
welcome.
Robert Arge
Covelo
California

Email in "From:" is wrong. It should only have one "b" in it.
Correct email address is robarge@telis.org

4794. MFJ-1228 Interface - HACKERS!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: Mike Rettig <rettig@cct.infi.net>
Message-ID: <336EBC87.4BE7@cct.infi.net>
Source record: 94272

SOMEBODY must have converted theirs to interface to an IBM compatable!
How did you do it? Bought one for $2 at a ham fest and don't know the
pinouts. Will settle for pinouts of C64 user port if you have that (I
think I threw my user guide away a couple of years ago)

Thanks !

4795. Re: WTB: 10 meter amp - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: Demolition Man <demoman@rollanet.nospam.org>
Message-ID: <336E9C83.7EF6@rollanet.nospam.org>
Source record: 94273

unit77 wrote:
>
> johnsi wrote:
> >
> > People are so paranoid about CB'ers getting a hold of 10 meter amps that they
> > are as rare as chicken's teeth.
> > Where does a legitimate ham get a 10 meter amp?
> > Please email me directly if you know where I should look for one.
> > Thanks,
> > John N7MTB
> WHY do you NEED an amp on 10 mtr?
why do you need an amp on any band?
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

4796. Jennings: real co. name? URL? address? email?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: pmarkham@mortimer.com
Message-ID: <5kkukf$1t8@drn.zippo.com>
Source record: 94274

I wish to locate information about "Jennings" vacuum variable capacitors. I have so far failed to locate the "Jennings" company. Any information relative to the full company name, address, URL, E mail address, phone #, etc., would be appreciated.

Pete/wa4hei

4797. Re: Build or Buy BS-8 / PanAdapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: tenorman@i1.net
Message-ID: <5klnnm$fj7$1@news1.i1.net>
Source record: 94275
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

Great, now if I only had a copy of that magazine. Any ideas where I could get a copy? Thanks again, 73, Mike...

In article <336DD7B3.3612@aeneas.net>, mmans@aeneas.net wrote:
>There are plans in Ham Radio Magizane, Feb. 1983; pages 26 thru 38.
>The article is titled "Design notes on a Panoramic Adapter/Spectrum
>Analyzer".
>73's,
>Mark

4798. Re: F/S: TUBES!! (5/4/97)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: no.spam@no.ads
Message-ID: <336e7389.11447907@news.mnsinc.com>
Source record: 94276

Don - I think you should change this ad.

It is deceptive! It appears that you are selling the tubes for $1.00
each.

When I e-mailed you about one of them you told me the price was $5.00

Confusing to us dummies out here!

On 5 May 1997 02:52:34 GMT, DQCB48A@prodigy.com (Don Klipstein) wrote:

>UPDATED 5/1/97
>
>Lab collection of used tubes. All are guaranteed to be within
>normal test limits when shipped. All are either American made
>or made by Amperex, Mullard, Siemens, or Telefunken. TUBES
>ARE NOT SORTED BY MANUFACTURER, AND SORTING BY MANUFACTURER
>IS NOT AVAILABLE. (Please don't ask!) All items subject to
>prior sale. When they are sold, they are gone forever; there
>will be no restocking. Quantities are limited.
>
> **
> * *
> * PLEASE DO NOT REPOST THIS ARTICLE IN YOUR REPLY *
> * *
> **
>
> * * * * * ALL TUBES $1.00 each * * * * *
>
>0B2, 0G3/85A2, 1BC2, 1G3GT/1B3GT, 1J3, 1K3, 1V2, 1X2A, 1X2B,
>2BN4, 2D21, 2E26, 3A3C, 3BN6, 3BZ6, 3CB6, 3GK5, 3HQ5, 4BZ6,
>4CB6, 4DK6, 4JC6, 4JD6, 5AQ5, 5CG8, 5EW6, 5JB8, 6AC7, 6AF4,
>6AG5, 6AG7, 6AH6, 6AN5, 6AQ7GT, 6AR6, 6AS6, 6AU8, 6AW8A, 6AV6,
>6BG6GA, 6BH6, 6BJ8, 6BK7, 6BN6, 6BQ6GA/6CJ6, 6BV11, 6BW4,
>6BX6/EF80, 6CB6A, 6CB6A/6CF6, 6CG8A, 6CH8, 6CL8A, 6CM6, 6CM7,
>6CM8, 6CN7, 6CY7, 6DK6, 6DQ6A, 6DZ4, 6EN4, 6FG7, 6FQ7, 6GB5,
>6GC5, 6GF7, 6GH8, 6GM6, 6GU7, 6GY6, 6H6, 6HZ6, 6J6, 6JU8,
>6KA8, 6KZ8, 6LU8, 6MD8, 6S4A, 6SF5, 6U8, 6W4, 6X4, 6Y6GT,
>8B10, 8FQ7, 8JV8, 8KA8, 10JT8, 10LZ8, 11BQ11, 12A6, 12AE10,
>12AL11, 12BF6, 12BN6, 12BQ6GTB, 12BV11, 12EQ7, 12H6, 12MD8,
>12R-K9, 12SG7, 12SJ7, 12T10, 14BR11, 15BD11, 15KY8, 17AY3,
>17CU5, 17JZ8, 19CL8, 19EA8, 21HB5A, 21LU8, 23Z9, 25Z5GT/G,
>33GY7, 34CE3, 42KN6, 5654, 5696, 5725, 5726, 5727, 5735,
>5799, 5844, 5933, 5963, 5965, 6135, 6186, 6203, 6211, 6350,
>6485, 6661, 6682, 7316.
>

>Ballast tubes: 3-14, 9-7, 12-4.

[snip]

To reply to this message, you MUST IGNORE my shown address.
It is there to fool those annoying unsolicited e-mail advertising idiots!
Send replies ONLY to: bry AT mnsinc 'DOT' com
VISIT: http://www.mnsinc"DOT"com/bry/

4799. Make Money With Your Computer!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: inet97@ameritech.net
Message-ID: <5l2sbjipl10160@nntp0.cleveland.oh.ameritech.net>
Source record: 94277

E-Mail Your Way To Riches!

Dear Friend,

We all know E-mail is here to stay. It's fun, easy and exciting! Would you be interested if we could show you a way to make well over $1,000 per week doing it?

This is not a joke. You may have seen many people trying to tell you that you can make money by joining this or that scheme! Guess what, you decide to go for it and then you get nothing but frustration and disappointment! We are here to take your frustration and disappointment into an Electrifying Adventure!

We have been marketing on-line for almost 2 years now! We have never spent one red penny on advertising and made nothing but profits. We can show you how to make money every day of the year. Many people may think this is untrue or it just can't be done. We are here to tell you that it is absolutely not true. The biggest mistake people make about marketing on-line is that they sit and wait for people to contact them. You will never make it if this is your approach and we'll tell you why. There are over 60 MILLION people on-line right now, and seven new people logging on every minute of the day world-wide and everyone is offering something. So how do you get a potential client or a new customer before your competition does? The answer is simply " Creative E-mailing" and it WORKS! I'll tell you why. You're taking your product, service or idea directly to the market instead of waiting for the market to come to you!

Here are a few testimonials we'd like to share with you (They're all 100% TRUE!):

Internet Communications, my wife and I owe you so much. We ordered your Creative E-mail System and within the first week we received over $1,150 in orders for my Internet Consulting business!
--Charles -- California

I have bought two so-called E-mail programs that cost me over $600.00 when I received them. They were extremely difficult to operate and it took me about two weeks to figure them out. Once I did, they were so time consuming it just wasn't worth my time. When I received your course it took me about four minutes to install and I was in business! Within the first 24 hours of my first E-mailing I received over $580.00 in sales over the phone. That first week I grossed over $2,000.00! I really can't believe how easy you made this, anyone can do it! Thanks!
--Dennis -- Illinios

Hello, I'm a divorced mother of two children. I wanted to thank you for helping me out. This was my first time buying anything on the Internet. I was skeptical at first but I figured I'd take a chance. This was the best chance I've ever took! My part-time business is now a full-time home-business, thanks to your

Creative E-mail System. I had to hire my two family members to help me out!
This is GREAT, thanks so much! I'd recommend this for anyone!
--Ellen -- Florida

You may have seen other people offering products "E-mail Programs, E-mail Addresses, Extractors, Etc." The vast majority of these products are very over-priced and very difficult to even use. None of them even supply you with current, up-to-date, FRESH & RESPONSIVE E-mail addresses! Our Creative E-mail System puts everything into one package to make your profits soar immediately! Even if you do not have a product or service to offer, we are going to give you over 500 how-to reports that you will have full reprint rights to! What makes our course different from anything else being offered anywhere is that we're dedicated to your success! We do not succeed unless you succeed! All of our E-mail Address Databases are created in house. We do not trade our databases with anyone because people are selling extremely bad lists on the Internet. Many of other people's databases are filled with duplicate addresses and many of them are undeliverable. We keep our own database so we know exactly what we have and we keep nothing but the best. There's no other way. We believe in producing high quality products that should be priced reasonably for your success! Read on to see the special bonuses you will receive.

******** SPECIAL 10 DAY BONUS ********

If you order within the next 10 days we will include:

1) 500 How-To Reports (You may resell these at any price)

2) Your Personal Complete Guide To The Internet -- This 175 page e-book covers every single aspect of the internet. You will never have to buy another internet book! When you complete this book, you will know more about the internet than 90% of the people online right now.

3) When you purchase our 8 MILLION SUPER responsive E-mail list we will include Mega-Mailer. It sends 250,000 E-mails per hour! All other orders will receive Pegasus Mail. It mails about 30,000 per hour.

Here's how to get the Creative E-Mail System:

All orders are delivered on CD-ROM or 100mb Zip Disk (Iomega).

============> E-Mail Databases <================

2 Million FRESH E-mail Addresses only $ 99.95
4 Million FRESH E-mail Addresses only $179.95
6 Million FRESH E-mail Addresses only $249.95
8 Million FRESH E-mail Addresses only $299.95

You will be sending your Marketing Letter to 2, 4, 6 or 8 MILLION People! To mail to 2 MILLION People by U.S. Mail at $.32 per stamp would cost $640,000.00, not including envelopes or paper! The price of 2 MILLION E-mail Addresses isn't even a fraction of the cost. And the great thing is that if you have 10 products, you can E-mail to your list as many times as you want to! Your profits will never stop soaring! Don't pay someone else to send your

advertisement out, do it yourself and save big money! The average cost right now to send your ad one time to ONE MILLION people is $1,400.00. You can send it 100 times to EIGHT MILLION people for only $299.95 and that includes Mega-Mailer that sends 250,000 per hour!

==========> Order Form <==========

Yes, Internet Communications Inc., I wish to take you up on your SPECIAL 10 DAY OFFER FOR YOUR CREATIVE E-MAIL SYSTEM, INCLUDING THE TWO SPECIAL BONUSES: "Complete Internet Guide Book" and "500 How-To-Reports". I understand I have to completely fill out the order form so you can fulfill my order.

Name:_____

Address:_____

City:_____

State:_____

Zip Code:_____

Country:_____

E-mail Address:_____

Phone Number:_____

I wish to pay by: (Check One)

Check:____ Money Order:_____

(Check One)

2 Million_____ 4 Million_____ 6 Million_____ 8 Million_____
*Remember the 8 MILLION Includes Mega-Mailer!

Zip Disk:_____ CD-ROM:_____Total:_____

Pegasus Mail (WIN 3.1) (WIN 95) (MAC) (Circle One)

==========

We Accept Checks By Fax Simply Tape Your Check Here With
The Above Order Form And Fax It To: 1-216-895-1930

If you have any questions please call customer service at: 1-216-895-1919

Fax: 1-216-895-1930 Phone: 1-216-895-1919

==========

Make check or money order payable to: Internet Communications

Mail check or Money Order to:

Internet Communications
30628 Detroit Ave. Suite 295
Westlake, Ohio 44145

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4800. ATLANTA RADIO CLUB'S HAMFESTIVAL JUNE 21-22 1997

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: rychard@atl.mindspring.com
Message-ID: <5kjda9$i9@camel4.mindspring.com>
Source record: 94348

THE 69TH ANNUAL ATLANTA RADIO CLUB'S HAMFESTIVAL

The Atlanta Radio Club's Hamfestival on June 21-22,1997 is
the Southeast's premier hamfest.This hamfest is brought to you
by the Atlanta radio club,with the help of many of the local
radio clubs here in the metro atlanta area.This is our club's
69th annual hamfest,and with your attendance we hope it will be
our biggest and best to date.
This years event on June 21-22,1997 will be held at the
Atlanta City Hall East-Exhibition Center,675 Ponce de Leon Ave.This is
the same great site as last year's hamfest,which is near the downtown
area,and very easy to get to,and plenty of free parking.
On the days of the hamfest,we will be usings our clubs repeater
(W4DOC 146.82 Mhz minus 600Khz offset) on top of the Nations Bank for
talk-in.This repeater is used every Sunday night 8:00 pm for the
Atlanta Radio Club's net.If you are in the area your presence on the
net is welcomed.
For much more information about our Club and Hamfest plese check
out our web page at http://www.saf.com/arc.The club's BBS at
770-850-0546 has a lot of info also, or send email to dickb@akorn.net
our regular address is ATLANTA HAMFESTIVAL
P.O. BOX 942150,Atlanta Ga. 31141-2150
No matter what your interest in the radio hobbies are,you will find
you came to the right place.Amateur Radio,Shortwave radio,Scanners,
Satellite radio,Emergency radio,Marine radio,Military surplus
radios,etc.AM,FM,SSB,CW,PACKET,RTTY,SLOWSCAN,FAX,DX,ATV,AMTOR,EME,whatever
your interest this is the place to be.If your into building or
homebrewig equipment,radio or computer this is the place to find those
hard to find parts and gizmos.
The computer hobbies are doing better than ever and these interest
will be well covered at the Hamfest.
Buying,Selling,Trading,Swapping,Dealing,Bartering,Giving will all
be happening at the hamfest,probably some begging also.Whether your
coming with money to buy,a load of goods to sell,or just looking
around this is going to be a great hamfest.

The Atlanta Radio club has our regular meetings the first Thursday
of each month.These meetings are at 7:30 PM,located at the Georgia
Power Fedral Credit Union, 4900 Ashford-Dunwoody Rd.this is near the
I-285 loop on the north side of the city.
The Atlanta Radio Club is a non-profit organization wishing to
promote Amateur radio to all interested.
Our club president is Bill Bass W4LFC ph# 770-493-8438,his email
address is BillW4LFC@juno.com ,our vice-president is John Talipsky,Jr
KA4VQH ph#770-925-7110 his email address is johnka4vqh@juno.com ,our

club Secretary is Penn McClatchey K4PE ph#404-605-0742 his email is pmm@saf.com our Treasurer is Charles Golsen N4TZM ph#404-252-3303 his email address is cgolsen@atlanta.com ,our clubs activities manager is myself Richard Dean Young KR4IU ph#404-622-8433 my email address is rychard@atl.mindspring.com ,the opinions expressed are my own and are probably bias due to my love of the radio hobbies.
Hope to see you at the hamfest soon.
Richard Dean Young KR4IU
rychard@atl.mindspring.com

4801. F/S: NEW 13-line telephone KTU w/access.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5kji3c$1s9s@newssvr01-int.news.prodigy.com>
Source record: 94349

All items are located in Philadelphia, PA. area.
Packing, shipping, etc., are included in price.
(Lower 48) Prices are in $US.

All reasonable offers will be considered.

TELEPHONE EQUIPMENT AND SUPPLIES

GTE 10A2 13-Line Key Telephone system (KTU)

Consists of: 1- GTE H-886501-95 wall cabinet
26.25" W X 17.75" H X 9.5" D
1- GTE S-418034 power supply (w/30 Hz)
1- GTE D-543840-A power cable
1- GTE H-886584-7 13-line panel w/GTE
FD-1058-BF interrupter
6- GTE WA-1400-E line card
(has music-on-hold capability)
1- GTE WA-1467-A
Music-on-hold interface card
1- GTE WA-1401-A intercom card
1- GTE S-550763 3-plug, 50 foot cable
for interconnecting H-886584-7
panel to lines and telephones
1- GTE 10A2 13-line KTS manual

General:

Compatible with touch-tone and rotary systems. Contains
6 line cards with capability for music-on-hold, music-on-hold
interface card, intercom card, full-size power supply, wall
cabinet, with interconnect cables and manual. Designed to
support up to 20 multi-line key telephones. Everything is
NEW, but has been unpacked. Never connected. Will accept
Western Electric 400-* line cards. Original cost well over
$1000.
Everything....$375.00. If you pick it up, $300.00.

4802. F/S: TUBES!! (5/4/97)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5kji1i$r20@newssvr01-int.news.prodigy.com>
Source record: 94350

UPDATED 5/1/97

Lab collection of used tubes. All are guaranteed to be within
normal test limits when shipped. All are either American made
or made by Amperex, Mullard, Siemens, or Telefunken. TUBES
ARE NOT SORTED BY MANUFACTURER, AND SORTING BY MANUFACTURER
IS NOT AVAILABLE. (Please don't ask!) All items subject to
prior sale. When they are sold, they are gone forever; there
will be no restocking. Quantities are limited.

****
* *
* PLEASE DO NOT REPOST THIS ARTICLE IN YOUR REPLY *
* *
****

* * * * * ALL TUBES $1.00 each * * * * *

0B2, 0G3/85A2, 1BC2, 1G3GT/1B3GT, 1J3, 1K3, 1V2, 1X2A, 1X2B,
2BN4, 2D21, 2E26, 3A3C, 3BN6, 3BZ6, 3CB6, 3GK5, 3HQ5, 4BZ6,
4CB6, 4DK6, 4JC6, 4JD6, 5AQ5, 5CG8, 5EW6, 5JB8, 6AC7, 6AF4,
6AG5, 6AG7, 6AH6, 6AN5, 6AQ7GT, 6AR6, 6AS6, 6AU8, 6AW8A, 6AV6,
6BG6GA, 6BH6, 6BJ8, 6BK7, 6BN6, 6BQ6GA/6CJ6, 6BV11, 6BW4,
6BX6/EF80, 6CB6A, 6CB6A/6CF6, 6CG8A, 6CH8, 6CL8A, 6CM6, 6CM7,
6CM8, 6CN7, 6CY7, 6DK6, 6DQ6A, 6DZ4, 6EN4, 6FG7, 6FQ7, 6GB5,
6GC5, 6GF7, 6GH8, 6GM6, 6GU7, 6GY6, 6H6, 6HZ6, 6J6, 6JU8,
6KA8, 6KZ8, 6LU8, 6MD8, 6S4A, 6SF5, 6U8, 6W4, 6X4, 6Y6GT,
8B10, 8FQ7, 8JV8, 8KA8, 10JT8, 10LZ8, 11BQ11, 12A6, 12AE10,
12AL11, 12BF6, 12BN6, 12BQ6GTB, 12BV11, 12EQ7, 12H6, 12MD8,
12R-K9, 12SG7, 12SJ7, 12T10, 14BR11, 15BD11, 15KY8, 17AY3,
17CU5, 17JZ8, 19CL8, 19EA8, 21HB5A, 21LU8, 23Z9, 25Z5GT/G,
33GY7, 34CE3, 42KN6, 5654, 5696, 5725, 5726, 5727, 5735,
5799, 5844, 5933, 5963, 5965, 6135, 6186, 6203, 6211, 6350,
6485, 6661, 6682, 7316.

Ballast tubes: 3-14, 9-7, 12-4.

***** QUANTITIES ARE LIMITED! *****

PRICES SHOWN DO NOT INCLUDE SHIPPING

SHIPPING CHARGES (USA ONLY; elsewhere, ask for quote)
Up to 10 tubes: $4.00.
Up to 20 tubes: $5.00
Up to 30 tubes: $6.00
Up to 50 tubes: $8.50
Up to 100 tubes: $9.95

Over 100 tubes: FREE
COD AVAILABLE (CASH ONLY!!) add $5.00

TERMS: Payment with order. Checks will be held 5 business days. Money orders clear in 1 day. COD: $5 additional. All items subject to prior sale. E-mail for information.

ORDERING: Please order by e-mail so that we can confirm your order and hold the tubes for you!

PLEASE DO NOT REPOST THIS ARTICLE IN YOUR REPLY.

4803. F/s: Linear Hall-effect sensors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5kji4l$2lm6@newssvr01-int.news.prodigy.com>
Source record: 94351

Texas Instruments TL173C. Linear output magnetic field sensor.
Range: +/- 500 Gauss. Usable to 0.1 Gauss. 12 - 15VDC operation.
TO-92 package. With data; price includes shipping. $5.00 each;
3 for $13.00. (Inquire about larger quantities.) Send check
or M/O to Don Klipstein, PO Box 518, Ambler, PA 19002-0518.

4804. F/S: Cathode ray tubes (5/4/97)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-05 00:00:00 UTC
From: DQCB48A@prodigy.com
Message-ID: <5kji6l$1pmu@newssvr01-int.news.prodigy.com>
Source record: 94352

FOR SALE: cathode ray tubes

Electrostatic instrument types, 1 gun

1 ea 2BP1 used $16.00 2" round
1 ea 3RP1A new flat face $41.00 3" round
1 ea 3RP11A new " " $41.00 3" round
1 ea 5ABP/DP7 used " " $26.00 5" round
1 ea 5ADP/BP7 used " " $26.00 5" round
1 ea 5AQP1A used " " $26.00 5" round
2 ea 75ARB31 new " " $41.00 75 mm/3" round
2 ea 130BEB31 new " " $51.00 130 mm/5" round

Electrostatic instrument types, 2 gun

1 ea 7MBP20 new flat face $56.00 4" X 6" rectangular

Electrostatic binary direct-view storage CRT
(w/socket & complete set of data sheets)

1 ea H1051P31 new flat face $56.00 5" diam

Magnetic deflection types (70 deg, 12.6 V heater)

1 ea 5ST6111P39A new $26.00 5" rectangular
1 ea 10ST6105P39C new $43.00 10" rectangular

P1: green, medium persistence
P7: blue, short persistence/yellow long persistence
P11: blue, short persistence
P20: green, medium-short persistence
P31: green, medium-short persistence
P39: green, long persistence

Prices include shipping and insurance in lower 48 states.

E-mail for info: DQCB48A@prodigy.com

4805. Re: motor synchronization problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5kn93i$gk9@news1.zippo.com>
Source record: 94203

mikegem@aol.com (Michael Pinneo) wrote:

>I need to run two motors such that their rotation is synchronous, i.e.,
>same rotational speed and angular alignment. They must maintain the same
>angular alignment when they are accelerating up to speed and while they
>are running, but can spin down independently when they are switched off.
>Mechanical coupling between the two motors is not possible. I need to
>achieve at least 600 rpm, would like higher if practical. The shafts can
>be realigned before powerup. The mechanical load is small, probably less
>than 5 in-oz of torque at full speed, so small motors will do the job.
>Acceleration time to full speed is not important. Braking of the
>unpowered shaft is not required. Service is continuous.

>Is there a simple and cheap motor/control setup which will do what I
>need? Thanks for your assistance.

>Regards,

I would think that stepper motors driven from the same source would
work pretty well. You can either use two drivers driven with the same
timing or try wiring the motors in parallel and use one driver.

>JMP

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

4806. Gratification at bargain prices!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: Angel <Angel@TripleXtra.com>
Message-ID: <5knpdj$33m@sequoia.idir.net>
Source record: 94204

Want the hottest sex on the web but don't want to spend a fortune for it? Cum on over and check out our thousands of
hot women, nude celebrities, bondage, asians, interracial couples, orgies, STAR TREK STARS NUDE, Big Beautiful Women, spanking, masturbation, shemales,
movies (avi's, quicktimes, mpegs and vivo!) and more with the lowest access fee going!
Head on over to http://www.triplextra.com and get some right now!

This message is being brought to you by Dynamic Mail software - the powerful
online marketing tool to explode your business easier and faster. For more
information please visit our web site at :
http://www.australia.net.au/~apexpi/dynamail.htm

4807. very small mics and speakers for sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: Gary Wood <docky@mail.earthlink.net>
Message-ID: <336FF29E.10CD@mail.earthlink.net>
Source record: 94205

I have many very small mics (one forth the size of a pencil eraser) and speakers or receivers...These are parts of hearing aids, all parts working including the amp....Mic receiver(speaker) and amp..$20 post paid..Great for very small projects , It will all fit in-your-ear...Gary K0IMJ

4808. Re: Apartment HF Antenna Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: Dale Martin <kg5u@hal-pc.org>
Message-ID: <01bc59d1$3c93fe20$3a1d10d1@dale>
Source record: 94278

There's no such thing as 'decent coverage' with an indoor
antenna. At best, it's a compromise close to waving a white flag.

How about a tuner and open-wire feeder to a 40m half-wave dipole.

Just string/hang/drape the antenna through the apartment. I used
to have a dipole for 40m running from the far corner of the bedroom
half way down the wall, up to and across the ceiling, into a short
hallway, across the living room ceiling, then halfway down the far
corner. I worked QRP on 40m and worked many states. It was
fun. I expect if you are running a 100w radio, you might have better
luck. Don't forget that we are still close to the sunspot minimum
(supposedly on the rising side), so conditions on 10 and 15 will
not be expected to be very good. You should have fun with 20 and
40, though.

Of course, you have done the licensing 'thing', right?

If you don't know where you are going, you should have all the
docs on your equipment to prove ownership. You might check
with the ARRL and see what their latest words are regarding
amateur radio operations in any of the countries you might be
entering. Some may require the impounding of the equipment
until you show a valid license for that country.

Good luck and have a good time....

--
Dale Martin
kg5u@hal-pc.org
http://www.hal-pc.org/~kg5u

Robert Wiley <wiley@acc-net.com> wrote in article
<5km5e5$25h@usenet85.supernews.com>...
>
> I am planning on possibly leaving the country soon, and am looking for
> any HF antenna designs which might be usable in an apartment. The
> details of what country I'll be in are still uncertain, but I'm
> looking for a design which might provide decent coverage of the 10, 20
> & 40 meter bands (given the size constraints).
>
> I'm not sure what would be best. One person I talked to mentioned
> something about a hairpin' antenna. I have no idea what that design
> is. So far, I've been lucky... I've been able to use dipoles and Yagi
> antennas. If I go into this apartment situation, I won't be so lucky.
> So, any ideas, suggestions, pictures or designs anyone might have

> would be appreciated.
>
> Thanks and 73 de Bob, N8MMR
>
>
>
>
>
>

4809. Re: Apartment HF Antenna Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: psam@giraffe.ru.ac.za
Message-ID: <psam.149.336ED598@giraffe.ru.ac.za>
Source record: 94279

In article <5km5e5$25h@usenet85.supernews.com> wiley@acc-net.com (Robert Wiley) writes:
>From: wiley@acc-net.com (Robert Wiley)
>Subject: Apartment HF Antenna Question
>Date: Tue, 06 May 1997 02:25:41 GMT

>I am planning on possibly leaving the country soon, and am looking for
>any HF antenna designs which might be usable in an apartment. The
>details of what country I'll be in are still uncertain, but I'm
>looking for a design which might provide decent coverage of the 10, 20
>& 40 meter bands (given the size constraints).

>I'm not sure what would be best. One person I talked to mentioned
>something about a hairpin' antenna. I have no idea what that design
>is. So far, I've been lucky... I've been able to use dipoles and Yagi
>antennas. If I go into this apartment situation, I won't be so lucky.
>So, any ideas, suggestions, pictures or designs anyone might have
>would be appreciated.

> Thanks and 73 de Bob, N8MMR

Why not go for a end fed long wire, might not be as efficient as other types
but it works and can be set up and taken down with ease, only problem it
needs to be long around 39 meters should be be fine for what you require.

ou will have to find a ATU that can be used with it. It is just a long
lenght of wire strung up between two points so it can be `hidden' in an
apartment set up quite easly.

73's
Andre'

4810. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: spam@spam.spam.spam
Message-ID: <5kmmflabm1@nyheter.chalmers.se>
Source record: 94280

In article <33699898.4764@concentric.net>
"Steve J. Quest" <Squest@concentric.net> writes:

> > I think low pressure hydrogen can switch in nanoseconds. I wonder why they
> > don't use that in those transient suppressors? Maybe too big of an
> > explosion hazard for the manufacturing plants.
> >
> > Rob.
>
> Actually, hydrogen is not all that dangerous, especially if it
> is produced "as needed" for the process by electrolysis of water. Many
> industries, two of which are the production of vegetable oil, and the
> basement "dope lab" production of methamphetamine, use hydrogen gas in
> their process. However, a dope lab can substitute lithium anhydride for
> hydrogen/catalyst/parr apparatus methods. Lithium anhydride is the guts
> from a lithium battery, fyi.
>
> However, hydrogen isn't used in thyratrons. However, if you
> ionize hydrogen, you get a nifty glow. Hydrogen is only explosive when
> mixed in the proper ratio, 2 hydrogen to 1 oxygen, and ignited by
> discharge, heat, or flame. Hydrogen can be used in ionizing laser tubes
> as a moderator gas, subject to intense ionization and plasmazation....sq

(rec.radio.shortwave removed, since this is turning into a homebrew
thread!!)

Well, not meaning to nit-pick ;-) but H2 _is_ used in thyratrons. We
are using an EEV FX 2530 to gate a nanosecond flashlamp. I believ H2
gives a much shorter pulse than anything else. Then I actually have to
question the existence of "lithium anhydride"... Lithium Aluminum
Hydride, yes. Not that you'd want to get _that_ stuff into contact with
water!
Regards,
/hcb

P.S. I might of course be wrong on anything I say, but I'd never admit
it.

Hans-Christian Becker
hcb at phc dot chalmers dot se -- no spamming wanted!
Dept. of Physical Chemistry
Chalmers University of Technology

Physical Chemist, Ham Radio Operator (SM6TLH) & Macintosh Geek

If I only knew how to get this #$! signature feature working!

4811. HIGH POWER TRANSMITTING TUBES FOR SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5kmj1n$d7m@cletus.bright.net>
Source record: 94281

Eimac type YC156. This is the same basic tube as a 4CX5000. It is a high mu triode with beam forming cathode and grid that provides the gain of a tetrode. Power gain is 15 db. It was designed for the medical industry and has a rating of 6500 volts at 4 amps (67 amps peak in pulse mode !) This tube will operate with full output to 110 Mc. No socket is necessary for this tube, it will mount in a 3 1/2 inch diameter clear hole, and the grid ring will bolt to the chassis. Height overall is 8".I have all data sheets. Tubes are used but emission is guaranteed for full output. $325 each.
Norman N8RGR
norsan@bright.net

4812. Re: Jennings: real co. name? URL? address? email?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: anthonys@ix.netcom.com
Message-ID: <5kmvud$23n@dfw-ixnews12.ix.netcom.com>
Source record: 94282

In <5kkukf$1t8@drn.zippo.com> pmarkham@mortimer.com writes:
>
>
> I wish to locate information about "Jennings" vacuum variable
capacitors.
>I have so far failed to locate the "Jennings" company. Any information
>relative to the full company name, address, URL, E mail address, phone
#,
>etc., would be appreciated.
>
> Pete/wa4hei

Last I heard, it is ITT-Jennings. HQ in San Jose, CA. Electronic
Engineer's Masters lists their local reps. Nothing more, as I recall.
Good luck.

-=T=-

4813. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5kn0e0psm1@news.uni-c.dk>
Source record: 94283

>:I agree. I recall a variation of the Electret microphone, called the
>:"PZM" (Pressure Zone Microphone), that was popular several years ago.
It
>:was mounted in/on a square plate, about 5" X 5". For best low
frequency
>:response, it was recommended that it be mounted on a larger surface.
>:
>:Perhaps the PZM technology would have a frequency response low enough
to
>:meet Anders' needs.
>:
>
>I think Radio Shack still sells one of those

I imagine the PZM microphones utilize a sheet of
poly-vinylidene-difluoride?
And have a relatively low sensitivity?

Presumably the problems with preamplifier input impedance would be
similar to those of more normal electret microphones, and the noise
problems would be greater?

I couldnt find a radio shack in the telephone book. How would one contact
a radio shack office? Do they perhaps have an Email address or FAX
number?

Regards, Anders

4814. Are you there Joe, G3LLV?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: p.day@virgin.net
Message-ID: <336f0c04.7841114@news.virgin.net>
Source record: 94284

Looking for (any news appreciated) Joe McElvenney, G3LLV, ex 7Q7JO
and lately in the Persian Gulf. Maybe he reads this ng or someone
knows his whereabouts.
Thanks
73 from Peter, G3PHO

****
Ex: ZL2BDA 1966-68, ZL2LA 1975-80
Editor: RSGB Microwave Newsletter
Microwave Homepage: http://freespace.virgin.net/p.day/ghz.htm
(mirror site at: http:www.geocities.com/SiliconValley/Vista/7012

****

4815. Apartment HF Antenna Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: wiley@acc-net.com
Message-ID: <5km5e5$25h@usenet85.supernews.com>
Source record: 94285

I am planning on possibly leaving the country soon, and am looking for any HF antenna designs which might be usable in an apartment. The details of what country I'll be in are still uncertain, but I'm looking for a design which might provide decent coverage of the 10, 20 & 40 meter bands (given the size constraints).

I'm not sure what would be best. One person I talked to mentioned something about a hairpin' antenna. I have no idea what that design is. So far, I've been lucky... I've been able to use dipoles and Yagi antennas. If I go into this apartment situation, I won't be so lucky. So, any ideas, suggestions, pictures or designs anyone might have would be appreciated.

Thanks and 73 de Bob, N8MMR

4816. Re: Jennings: real co. name? URL? address? email?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <F52360F37DDF3F82.C6287FF02548A2F2.DEE08A20C66275B2@library-proxy.airnews.net>
Source record: 94286

On 5 May 1997 08:33:35 -0700, pmarkham@mortimer.com wrote:
>I wish to locate information about "Jennings" vacuum variable capacitors.

Joslyn Jennings Corp
970 McLaughlin Ave.
San Jose, CA 95122
Phone: 408-292-4025 FAX: 916-286-1789

Fred, W8OY
JFRILEY@AIRMAIL.NET

4817. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5knchb$4b9@camel2.mindspring.com>
Source record: 94287
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

marty@trucom.com (Marty Albert) wrote:

>On 20 Apr 1997 02:37:05 GMT, kc5egg@ix.netcom.com(Gerald Schmitt)
>wrote:
>>This is actually a good thing.

>True.

>>First semantics, in a physics sense there is no such thing as a "gain
>>antenna" the best an antenna can do for you is to reshape the pattern
>>putting more of the energy radiated into a smaller cone.

>Again, true Details, details... :)

>>A very high "gain" antenna directs most of the radiated energy towards
>>the intended receiver lessening the chance for inadvertant
>>interference.

>Unless you are in the beam of one the antennas.

>>The long and the short of it is this order is to the hams
>>benefit.

>Most likely.

>>We will also benefit from the research and engineering that go
>>into these systems.

>Sad part is that Hams _should_ have been doing for many years now
>instead of waiting for someone else to do it.

>> Jerry

>Take Care & 73

>Marty Albert - marty@trucom.com
>Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM

>Heartland Internet Services

>**
>Interested in Amateur Radio?
>http://www.trucom.com/ppages/marty
>**

The SAD part is that hams not only DO NOT carry the ball in that part
of the reasons for the AMATEUR RADIO SERVICE (not hobby) to

even exist, that is to carry forward an ever-advancing state of the art, (Which does not mean supporting Japanese electronics firms).

SADDER STILL is the fact that if someone DOES try to start a discussion of radio qua radio, he/she is likely to be derided, and/or buried in trivia.

I've seen it several times.

WB0NRU Lou

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

4818. Building of a highly stable XTAL reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: elendir@quasimodo.enst.fr
Message-ID: <5kn8gq$hom@enst.enst.fr>
Source record: 94288
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics

Hi there,
I'd like to know if somebody out there ever tried to lock a TCXO on an atomic broadcasted frequency reference such as (US) WWV, (D) DCF 77 or (F) France-Inter.
More specifically, I'd like to know about the lock filter : cut-off, step size, etc...
The goal is to realize a highly stable reference oscillator for a linear 1291/1297 MHz repeater. I'd like something like a 10^-10 precision (long-term, but I am also interested in reducing short-term noise)

Since I don't receive the "rec.radio" groups, I'd greatly appreciate an email answer ! :)

Thanks a lot

73 de F5RCS
Vincent
--

4819. Re: Build or Buy BS-8 / PanAdapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: Mark Mansfield <mmans@aeneas.net>
Message-ID: <336F4AAA.6B28@aeneas.net>
Source record: 94289
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

Try your local library. They can obtain it through interlibrary loan
if they do not have it there. There should be plenty of information
for them to get the article.
Mark

> Great, now if I only had a copy of that magazine. Any ideas where I could
> get a copy? Thanks again, 73, Mike...
[snip]
> In article <336DD7B3.3612@aeneas.net>, mmans@aeneas.net wrote:
> >There are plans in Ham Radio Magizane, Feb. 1983; pages 26 thru 38.
>

4820. Info re MM5314 digital clock chip?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: raateland@vyh.fi
Message-ID: <1997May6.183335@vyh.fi>
Source record: 94290

I'm waiting for a Whiterook Digital clock type CK-1 to arrive and I know I will need to modify it for 50 Hz operation instead of 60 Hz.

The clock uses an MM5314 chip, or so I'm told. National's Web pages have nothing on this chip and I've only got a pin-out. That may be enough, but if anybody happens to have a data sheet or other design information on the MM5314, I'd be interested to have a copy.

The clock has a backup circuit for when the line power is disconnected or failing. This works with a crystal oscillator and a divider circuit to produce 60 Hz replacing the US line frequency. The clock IC itself can be switched from 60 to 50 Hz operation by pulling a pin on the IC to ground or Vcc.

What I would like to find out is, whether switching the clock IC from 50 Hz back to 60 Hz operation disturbs the operation of the clock chip? I plan to switch the chip mode during a power failure at the same moment that the Xtal backup circuit kicks in.

If my plan flies, I would not need to replace the original 3,759 MHz Xtal with a specially made one, just add a little circuitry to do the mode switching.

Thanks for reading this.
73, Arjen OH2ZAZ

--... ...-- -.. . --- .... ..--- --.. .- --..
Arjen Raateland, SAS Support
Finnish Environment Institute
Helsinki, Finland
.-.-. -.-

Email: Arjen.Raateland@vyh.fi

4821. Re: MFJ-1228 Interface - HACKERS!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: Chris Arguin <cpa@hopper.unh.edu>
Message-ID: <Pine.LNX.3.96.970506114854.466A-100000@hrs1-1.unh.edu>
Source record: 94291

On Mon, 5 May 1997, Mike Rettig wrote:

> SOMEBODY must have converted theirs to interface to an IBM compatable!
> How did you do it? Bought one for $2 at a ham fest and don't know the
> pinouts. Will settle for pinouts of C64 user port if you have that (I
> think I threw my user guide away a couple of years ago)

Check out ftp://ftp.funet.fi/pub/CBM/manuals/
They have a gzipped copy of the C64 programmers reference guide.
I believe that covers the User port in it.

If you don't have ftp or web access, I can post you a copy.

--
Chris Arguin | "...All we had were Zeros and Ones -- And
cpa@hopper.unh.edu | sometimes we didn't even have Ones."
+--------------+ - Dilbert, by Scott Adams
http://leonardo.sr.unh.edu/arguin/home.html |

4822. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: markv@pixar.com
Message-ID: <5knuad$3nr@pixar.com>
Source record: 94292

In article <5k7f33$eqf@camel3.mindspring.com>,
Lou or Annette Hinshaw <aruder@pipeline.com> wrote:

>>The bottom line, however, is that basic rules of information theory
>>still apply. TANSTAAFL.

>The REAL bottom line is that nobody KNOWS the basic rules.

Umm. well. no.

Perhaps _you_ don't know the basic rules, but that doesn't mean that
there aren't basic rules. It also doesn't mean that there aren't others
who know what the basic rules are.

>LH.
>Prolific inventor,
>Lousy Salesman,
>Incompetent businessman.
>(Typical)
>

--
Mark T. VandeWettering Telescope Information (and more)
Email: <markv@pixar.com> http://www.idle.com/~markv/

4823. Thanks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: tom@tfaloon.demon.co.uk
Message-ID: <862946090.4471.0@tfaloon.demon.co.uk>
Source record: 94293

Thanks you all very much. You have helped clear up something which puzzled me for a week or two.

Best wishes,

Tom Faloon

4824. Re: Info re MM5314 digital clock chip?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-0605971427360001@k4dii.ksc.nasa.gov>
Source record: 94294

In article <1997May6.183335@vyh.fi>, raateland@vyh.fi (Arjen Raateland) wrote:
> I'm waiting for a Whiterook Digital clock type CK-1 to arrive and I
> know I will need to modify it for 50 Hz operation instead of 60 Hz.
> The clock uses an MM5314 chip, or so I'm told. National's Web pages
> have nothing on this chip and I've only got a pin-out. That may be
> enough, but if anybody happens to have a data sheet or other design
> information on the MM5314, I'd be interested to have a copy.
> The clock has a backup circuit for when the line power is disconnected
> or failing. This works with a crystal oscillator and a divider circuit
> to produce 60 Hz replacing the US line frequency. The clock IC itself
> can be switched from 60 to 50 Hz operation by pulling a pin on the IC
> to ground or Vcc.

Arjen-

It has been about 20 years since I built a clock from parts obtained at the local Radio Shack store. The plans were provided with the clock chip.

My clock still works, but I don't think I have any of the documentation. I don't recall if it has the MM5314 chip, but your comments ring a bell. For one thing, mine has a pin that changes from 60 to 50 Hz. It happens that the same pin also changes from 12 hour to 24 hour format, which is what I wanted. In order to use it with the local 60 Hz power, I found a scheme that used a TTL counter to ignore every 6th cycle. (I think it was a decade counter where the output from the divide-by-5 was connected to reset, or something like that.)

I also employed a scheme to use a color burst crystal (3.579545) retuned to 3.579540, to produce 60 Hz, and used a 9 volt diode-isolated battery to backup the power. When power fails, it doesn't miss a beat. However, it always is being driven by the crystal oscillator, so doesn't keep time as accurately as if it were always on the commercial 60 Hz power.

73, Fred, K4DII

4825. W7ZOI GDM w. MFJ259

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <336FA441.1484@online.no>
Source record: 94295

See QST May 86, W7ZOI: "Beyond the dipper". My opinion is that this article
was not presented in the most effective way and it did not receive the interest
which it deserves. I have only found it mentioned in one other Ham-radio
magazine, the former YU-Amater magazine, where I could only understand the
circuits....hi (but they also had some translations of my articles...)

```
|----------|
RF-----------| | loop1 -----this part is not used with
MFJ259---
| |----gnd |
| |-------->|------|------DC to sensitive
| |---gnd | | DC amplifier
-------gnd---| | loop 2 10nF
|----------| |
---gnd
```

A few month ago I discovered the notes written by W7ZOI and made some
experiments with two probes. tests were carried out in the frequency range:
2-500MHz. It is obvious that it is a distinct advantage to use a continiously
variable signal generator, a digitital thumb wheel generator like Wavetek
model 3001 is not easy to use
Tom, LB8X reports that the W7ZOI circuit works for MFJ259 (see note*), the RF detector and amplifier is not
needed. This may even work much better than the optional GDM function for
the MFJ259.
It consists of very few parts, a pcb laminate (say 30x30mm) - used only to
mount and ground connections for RF input connection and a simple 1:1:1
ferrite transformer (10+10+10 turns on almost any small core may work)
Noe the phase relations on the output side.
With a hacksaw - cut of the copper foil in a 5mm broad segment from the end
cut this into three halves, and use them to support/solder the coils.
The two loops as connected in series will load the RF port very heavy and
RF signal drops, but as one coil is in tune with an LC circuit the balance is
disturbed and RF output reading increases.

*) MFJ has such frequency ranges: 1,4-8, 4-10, 10-26, 26-62, 62-113, ...MHz

Please excuse me for me not can speak English, please (Thank You!) - so please read W7ZOI's notes before requesting further technical explanation!

73 de Jan-Martin

LA8AK (now Kristiansand, was: Mandal, Sandnes, Bergen, B&#65533;rum, Arendal)
(Ex-G5BFV/GW5BFV: Cardiff, Stratford on Avon, Leamiangton-Spa)

4826. Re: Apartment HF Antenna Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <336f8c01.0@cheese.pcug.org.au>
Source record: 94296

"Dale Martin" <kg5u@hal-pc.org> wrote:
>There's no such thing as 'decent coverage' with an indoor
>antenna. At best, it's a compromise close to waving a white flag.
>
>How about a tuner and open-wire feeder to a 40m half-wave dipole.
>
>Just string/hang/drape the antenna through the apartment. I used
>to have a dipole for 40m running from the far corner of the bedroom
>half way down the wall, up to and across the ceiling, into a short
>hallway, across the living room ceiling, then halfway down the far
>corner. I worked QRP on 40m and worked many states. It was
>fun. I expect if you are running a 100w radio, you might have better
>luck. Don't forget that we are still close to the sunspot minimum
>(supposedly on the rising side), so conditions on 10 and 15 will
>not be expected to be very good. You should have fun with 20 and
>40, though.
>

I agree. I use a dipole for 10 MHz and get good results on 40, 20 and 15.
It has tuned feeders and I use an ATU. Best DX has been to work the USA
with 2w (SSB & CW), but such contacts are rare. However contacts up to
1000 km or more are very easy and often solid with QRP.

73,

--

____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
____

4827. data transmitter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: Alex Sanz <alex18@pop.inch.com>
Message-ID: <336FD26B.1A3D@pop.inch.com>
Source record: 94297

hi is there any way to make or buy a data transmitter to hook up like a tnc to send serout commonds from a stamp. i will be useing a kenwood ts-790 and reviece with a ht. thanks!

Alex Sanz KB2YLA

4828. Re: WTB: 10 meter amp - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <336F3E62.6197@taxes.net>
Source record: 94298

unit77 wrote:
>
> WHY do you NEED an amp on 10 mtr?

If you've ever worked a DX pile-up on 10, you know why.

It's nice to work VKs on QRP phone -- I've done it from Texas -- but it doesn't happen very often and sometimes the "minimum power required to establish and maintain communications" is a kilowatt, even with a decent beam antenna.

If you're using an HTX-100 or a CB conversion, sometimes it's nice to get up to "normal" ham power levels, especially if you're mobile. That's when it would be nice to have a 10 M amp. Too bad it's so hard to get them for legitimate use in this country.

I bet you'd be surprised at the number of hams who've removed ILLEGAL CB "leen-yars" such as the Texas Star amps from CB service, and made them marginally legal by putting them on 10 or 15. You get to do this once a year.

4829. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: walt@dial.pipex.com
Message-ID: <walt.227.01C37959@dial.pipex.com>
Source record: 94299
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

In article <336edb33.2131084@news.dial.pipex.com> walt@dial.pipex.com.nospam (Walt Davidson) writes:
>From: walt@dial.pipex.com.nospam (Walt Davidson)
>Subject: Re: WTB:Motorola Programming Software/Hardware
>Date: Tue, 06 May 1997 07:45:17 GMT

>On Mon, 05 May 1997 12:00:32 -0400, "Justin H. Blackstock"
><jblackst@utk.edu> wrote:

>>Check out the title of the NG - rec.radio.swap not rec.radio.dx

>Right. Then check out how many other newsgroups it's cross-posted to!

>:-(

>73 de G3NYY

>--
>Walt Davidson Email: walt@dial.pipex.com

4830. Groundfloor Apartment Antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000605972055320001@news.europa.com>
Source record: 94300
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Saw other messages about apartment antennas, thought I would share this:

I worked my first BY (China) station back in the mid 80's on an apartment antenna.

It comprised of a hardware cloth (galv steel mesh) that covered the entire area underneath my futon, which was right against the floor. I surmise that the floor had a pad underneath the carpet which was on the concrete.

The hardware cloth had some copper wires soldered to it so that they radiated from the center of one side out to the circumference equally spaced.

That made up the rf ground. I had a seperate safety ground.

An MFJ tuner was mounted directly on the hardware cloth and directly attached to the meeting point of the copper wires. Do not use any length of ground wire from the tuner to the cloth. Even one foot has too much loss.

I then attached a heavy teflon insulated 12ga wire (they are all silver plated) from the antenna input of the tuner to the ceiling.

On the ceiling was a 3ftx3ft piece of hardware cloth similarly soldered with copper wires.

The ceiling part was tacked into the plaster.

The antenna worked on all bands except 160m where the extra coil burn up :)

I suppose its possible to build a dipole like this with the giant capacitive hats tacked to the opposing walls of your apartment; but I have never done this.

Remember, that radiation of rf depends only on the current flowing through a conductor (Maxwell's law). More than likely, a homebrew tuner optimized for extreme current would be much better than MFJ- but then it worked OK for me with only Drake TR-7.

Have fun, and be careful with that deadly emf :)

Rob.

ps. that capacitive hardware cloth ground was killer on all bands incl 160m with a wire up 100ft into a tall pine tree at my last QTH. At the legal limit, no induced rf on ground with just one safety ground and no ground

radials or stakes.

4831. Tubes vs. Transistors: Better Performance in Rcvrs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000605972131530001@news.europa.com>
Source record: 94301
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Saw this thread in boatanchors and couldn't resist when I saw Mr. Newkirk slamming tube technology in receivers.

The real question that should be asked is:

Given the performance of designs published in the latest two ARRL Handbooks and even in the 1977 Solid State Design for Amateur Radio book; how can the ARRL with a straight face give favorable reviews to the latest Japanese transcievers with such mediocre basic receiver performance? I would be embarrassed.

When you look at IMD with preamp on, these $5000 units are years behind the state-of-the-art in basic receiver performance. I would bet any amount of money that in many multi-multi contest situations, Wes Hayward's 1977 DC receiver designs could receive signals that the so-called modern transceivers could not.

But back to tubes- Ulrich Rohde publised an article in QEX (April 1993, p. 11) where a tube receiver sported a +30dbm intercept. Clearly, there is great potential for high performance tube receivers, where uP/computer based features are not an issue; or for tube front-ends in some hybrid receiver. Who cares about memories and DSP in a contest situation where your front-end is being crushed??

One of my future projects is to implement an H-Mode mixer with nuvistors; and install it in my R4-C. I currently have an SD5000 module that plugs in to the first mixer, but the impedence conversion from tube to solid state adds too much loss.

Rob.

4832. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-06 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000605972058550001@news.europa.com>
Source record: 94302

In article <5kn0e0psm1@news.uni-c.dk>, i3683@csc.dk (Anders Heerfordt) wrote:

:
:
:I couldnt find a radio shack in the telephone book. How would one contact
:a radio shack office? Do they perhaps have an Email address or FAX
:number?
:
:Regards, Anders

Their parent corporation is the Tandy Corp. I've never seen a web site,
but I bet they have one.

Rob.

4833. Michigan Mighty Mite and You!

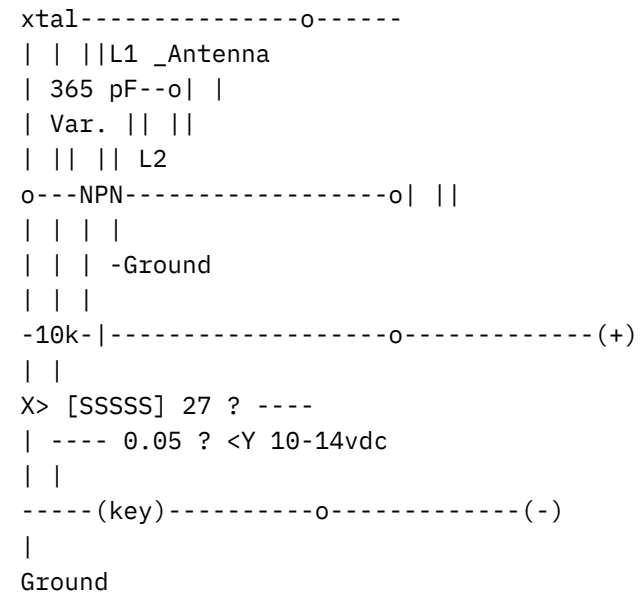
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: Jim Dallas <jim_dallas@hotmail.com>
Message-ID: <5koksh$74h@atlantis.utmb.edu>
Source record: 94206

I found the plans to a 500mW transmitter on the "Homebrew QRP
is Gud 4 U" Page (http://brink.com/brink/QRP/) and, for the
life of me, I can't interpret a few symbols on the schematic. I
havent built anything yet, but I'd like to get into building
QRP stuff because it is a.) cheaper b.) gives me more experience
with electronics.

Anyhow the schematic reads, from positive power,

10-14 vdc power
10k ohm resistor
xtal (by the way, where can I get a 40 meter crystal?)
365 pF variable capacitor
loops (needs explaining)
antenna, grounded
?????? (unknown, two parallel lines, looks similar to capacitor, labeled "0.05") please
refer to as "Y"
ground
NPN transistor
?????? (unknown, rectangle w/ "s"s in it, labeled "27") <---please refer to as "X"
key
negative power

looks like:



ANY Help would be appreciated. THX for your time, sorry about crude
drawing/ explanation. Bear with me: Im new at this.

4834. Re: MFJ-1228 Interface - HACKERS!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: bfayette@aol.com
Message-ID: <19970507013601.VAA23905@ladder01.news.aol.com>
Source record: 94207

I had one of these. HAMCOMM works better. I think I still have the schematic around here somewhere. Basically, there is a TTL serial out line which you could probably connect to a line on your printer port. You would then have to cook up software that implements a UART, and is capable of decoding baudot, FEC, etc, whatever you want. This interface uses one of those EXAR modem chips (2211?) and is very sucepable to noise. I think you are better off with one of those op-amp demodulators and HAMCOMM. If you do that, then you can use JVFAX and get fax and a whole slew of other modes. It was worth $2 for the case, so I would start there and build something better.

Brad

4835. TM-V7A Software Coming from Kenwood

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-0605972106550001@wd1v.mv.com>
Source record: 94208
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

I spoke with Kenwood's Technical Representative today and he related that within a week or so - perhaps in time for the Dayton Hamfest, Kenwood will have a Windows 95 program that will allow file uploads and downloads from the TM-V7A. It will enable alpha numerics for and load the memories with frequency and PL tones. No other remote programmability is planned. The program is supposed to sell for $39.95 and use the data port & PG5A connector.

This will certainly take the pain out of loading memories - especially after a CPU reset!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

4836. Re: TM-V7A Software Coming from Kenwood

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: Rick Bates <rbates@wco.com>
Message-ID: <336FFA5C.12F5@wco.com>
Source record: 94209
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

John D. Seney wrote:
>
>
> I spoke with Kenwood's Technical Representative today and he related that
> within a week or so - perhaps in time for the Dayton Hamfest, Kenwood will
> have a Windows 95 program that will allow file uploads and downloads from
> the TM-V7A. It will enable alpha numerics for and load the memories with
> frequency and PL tones. No other remote programmability is planned. The
> program is supposed to sell for $39.95 and use the data port & PG5A connector.
>
> This will certainly take the pain out of loading memories - especially after
> a CPU reset!

I had email to/from the company that is actually doing the work on this project. I put a bug in their ear that since they had the interface to communicate with the V7, gee, wouldn't it be a great way to make a cheap remote base? A single card computer talking to the V7 and all you would have to do is plug in a control receiver... simple and cute.

Major hint. The control head is just that, a control head. Four wires (ground, power, data in and data out) are all that will be used. Someone want to figure out how to interface it? Or make new software other than the cloning software?

Rick

4837. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: plains.parson@NOSPAMworldnet.att.net
Message-ID: <336ffa03.19999136@netnews.worldnet.att.net>
Source record: 94210
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

On Sun, 04 May 1997 14:38:19 -0700, Bob Sull <wa8imo@kellnet.com>
posted:

>Peter Gottlieb wrote:
>>
>> Bob Sull <wa8imo@kellnet.com> wrote in article
>> <336CC241.400C@kellnet.com>...
-------------------[cut]-------------------
>This is a small ng but why does that mean it can't be "pure".

...simple: humans, by design, are not "pure"...being imperfect has
its pros and cons, to be sure, but personally, imperfection ain't so
bad: you don't have to (or need to, for that matter) worry about
crossing your Ts or dotting your Is all the time...

>That was one of the things that was discussed when this ng was born.
>Postings that are not "on topic"

...such as this one?...don't forget, a lot of stuff gets cross-posted,
by design, as has already been said...

> are a waste of bandwidth and space in my
>computer and on the server. How much is wasted when the sender posts
>the article across the entire spectrum? A lot.
>
>What it boils down to is that this ng was dedicated to DX. Not FS, not
>WTB, not Help my toaster is burning when I'm on 15 cw, etc etc etc.....
>
>73, Bob
>--
> <> Bob Sull WA8IMO <>
> "73, CUL, es keep the FUN in Ham radio."
>>Life Member-ARRL QCWA< >Member-NODXA NCDXF<
> >DXCC WAS RCC < >8P9BC<
> >QSL Mgr for 8P6JG<
> >WA8IMO@W8IZ.#NEOH.OH.USA<
> >WA8IMO@KELLNET.COM<

4838. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: deadmen@stairnot.com
Message-ID: <33731602.4163379@news.azstarnet.com>
Source record: 94211
Cross-posted to: rec.antiques.radio+phono,sci.electronics.design,rec.radio.amateur.homebrew

On 27 Apr 1997 20:07:41 GMT, John in Roseville <r2d2@cqnet.net> wrote:

>
>I'm making solid state versions of the tubes used in a AC-DC
>AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
>
>See:
>http://home.cwnet.com/rtwodtwo/tubemod.htm
>
>I'm working on the 12BE6 now.
>Let me know what you think!
>
>John
>
Looks good but I've never seen a real tube that got dimmer when you
tuned in a strong station!

Seriously, the only problem I see on a quick look is the heater
circuit of the 35W4. A real 35W4 (or 35Z5) has the tap far off center
to keep the pilot lamp voltage low. And why are there diodes
connected to all the heater pins? Was the B+ too low with only the
plate connected? If so, fixing the heater resistors may fix it.

>
>--
>The stated return address is incorrect to reduce the amount
>of junk e-mail I receive. To get the valid return address,
>replace the both "2"s with "two"s and "cqnet" with "cwnet".
>(: are tee double-you oh dee tee double-you oh at
>sea double-you net dot com :)
>John in Roseville CA.
>
>

Jim Mueller
deadmen@stairnot.com

The stated return address is incorrect to reduce the amount of junk e-mail I
receive. To get the valid return address, replace "deadmen" with "dadoman"
and "stairnot" with "azstarnet".

4839. help with mocom 70 uhf

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: drleffert@csupomona.edu
Message-ID: <1997May7.005954@clstac>
Source record: 94212

our club has a stockpile of motorola MOCOM 70 radios on UHF. we are trying to get these up on the air for local repeaters. i am aware that they dont duplex and we are prepared to use two. our problem is in two parts. we are in need of someone who is willing to show us how to tune if necessary the radios down to the 440's from the low 450's and also show us the necessary connections to the connector on the front. we are willing to hand over a few of these guys to who ever can help us out.
we are in the los angeles area and willing to drive to you if you are local
thanks
doug

--
-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-_-~-
Doug Leffert
KC6WZU Vice-President, Cal Poly Amateur Radio Club, WA6GYI, KE6VBI
Cal Poly United Amateur Radio Club, N6CP / / / / /
Club Phone (909) 869-4855 Club Home Page: /--/--/--/--/
http://vms4.sci.csupomona.edu/~rcsyms/cparc.html / / /| / /
e-mail drleffert@csupomona.edu |

4840. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <337f12b0.3167840093@news.sci.fi>
Source record: 94213

frederick.mckenzie-1@kmail.ksc.nasa.gov (Fred McKenzie) wrote:

>In article <jupiter-ya023580000105971815530001@news.europa.com>,
>jupiter@europa.com wrote:
>> I believe that the low freq response of those mics is a function of their
>> physical size and has nothing to do with the FET. I've taken some apart,
>> and no coupling caps.
>
>Rob.l-
>
>I agree. I recall a variation of the Electret microphone, called the
>"PZM" (Pressure Zone Microphone), that was popular several years ago. It
>was mounted in/on a square plate, about 5" X 5". For best low frequency
>response, it was recommended that it be mounted on a larger surface.
>

So this is the equivalence of mounting an loudspeaker element on a small baffle. When the cone moves outwards, some air slips around the edge of the baffle to the opposite side of the baffle to the opposite side of the cone. This is known as an acoustics short circuit. At frequencies below and wavelengths above, where the total round trip distance is less than half a wavelength the frequency response drops rapidly. At such a small baffle, the frequency response starts to drop at several hundred Hertz, remembering that the wavelength at 100 Hz is 3.4 m. This applies to a loudspeaker element installed on a baffle and I do not see any reason why this would not apply to microphones as well.

To prevent the acoustic short circuit, loudspeakers are usually mounted in closed boxes. When a microphone is installed on a closed box, it actually measures the instantaneous pressure difference between the static pressure within the closed box and the instantaneous pressure in the sound field. To prevent blowing the membrane when the external static pressure varies (due to change of weather or change of altitude) some means to bleed off the static pressure difference must exist. This "leakage" will have a cut off frequency at some low frequency.

Before going too deeply into the electronic circuit of the electret microphone, the acoustic behavior should be checked.

Paul OH3LWR

4841. Installing new amplifier tube

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: pma@doc.ic.ac.uk
Message-ID: <5kpqjv$t0j@oak42.doc.ic.ac.uk>
Source record: 94214

Hello all.

I have a new 4-400A tube to install in my amplifier(Heathkit SB1000). However, the amplifier (and manuals!) are in Cyprus. I intend to try the new tube on a Heatherlite Explorer amplifier. I am not sure though of the procedure to follow. Do you just plug the tube and fire up? Or do you leave it on HV for some time and/or drive it initially with low power?

Any input appreciated.

Greetings,
Paris Andreou 5b4XF / G0WUT

4842. Looking for Crystals - 6M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <33707092.40FA@ix.netcom.com>
Source record: 94215
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Just acquired (5) Gonset 6M Communicators, (1) 6M Amp, (1) 2M Communicator. All Civil Defense Surplus. Only 3 Crystals for all the units.

Where can I purchase, beg, borrow, trade or steal more crystals? Is there much 6M AM activity?

Any help would be appreciated.

4843. Re: Tubes vs. Transistors: Better Performance in Rcvrs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: David Newkirk <dnewkirk@bellatlantic.net>
Message-ID: <01bc5ae1$204a1a40$0d79c697@namn>
Source record: 94216
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

"Rob," jupiter@europa.com, wrote in article
<jupiter-ya023580000605972131530001@news.europa.com>...

> Saw this thread in boatanchors and couldn't resist when I saw Mr. Newkirk
> slamming tube technology in receivers.

Come, come. I was comparing the two and pointing out that solid-state technology is the appropriate technology for all but a very few mission-critical modern radio applications.

> The real question that should be asked is:
>
> Given the performance of designs published in the latest two ARRL Handbooks
> and even in the 1977 Solid State Design for Amateur Radio book; how can the
> ARRL with a straight face give favorable reviews to the latest Japanese
> transcievers with such mediocre basic receiver performance? I would be
> embarrassed.

The way I see it, the real question that should be asked is:

Why do observers continue to mistake the performance of particular implementations of a technology with the performance possible with the technology?

(A second question is why an adherents to a particular technology becomes sufficiently emotional to ascribe the verb "slamming" to the act of comparing another technology to a pet technology when the pet technology happens to finish second best. ;-D)

Of *course* particular implementations of solid-state technology, especially those designed to cost for consumers, may not exemplify the best that can be done for mission-critical work. The receiver mentioned next--

> But back to tubes- Ulrich Rohde publised an article in QEX (April 1993, p.
> 11) where a tube receiver sported a +30dbm intercept. Clearly, there is
> great potential for high performance tube receivers, where uP/computer
> based features are not an issue; or for tube front-ends in some hybrid
> receiver. Who cares about memories and DSP in a contest situation where
> your front-end is being crushed??

--is an example of this.

But take a closer look, please. I've listened to the BBC and amateur signals on one of those receivers--a Rohde and Schwarz EK-07D. Yes, it had an excellent front end. It was also so heavy that I had to have two neighbors help me lift it up our stairs. Its heterodyne detection ability was poor compared to our modern "product detector" radios--there was a lot of distortion--and the appropriate selectivity choice in that particular implementation was a bit too round for SSB. (Apparently an optional SSB adapter was available that processed signal from the radio's second IF output [300 kHz] with better selectivity and good "product" detection. And revised IF-amp modules were apparently available later in the EK-07D's life to improve on the inboard selectivity.) *And* it drew something like 140 W from the ac mains. But, as a superb work of industrial art, an EK-07D is a privilege to use.

Of course, I've been describing only one particular implementation of tube technology. But I reiterate what I said in the boatanchors group: In all but a very few applications, thermionic technology is not the appropriate technology when you need the best modern radio performance possible. I can't think of a single consumer-oriented radio-reception application, including amateur radio contesting, in which solid-state technology is not the appropriate technology. (That manufacturers designing to cost--especially manufacturers who market incremental modifications of existing implementations in differently shaped enclosures, with different user interfaces, as "new" to get consumers to re-buy--might produce widgets that don't achieve what's possible with the technology isn't surprising or unusual. Most vacuum-tube gear produced for radio-amateur use represented what was possible in tube technology just as poorly.)

Yes, it's possible that you can make a better vacuum-tube front end than the solid-state front end in a consumer-intended radio. But not if the solid-state front end to which you compare it represents the best that's being achieved for military and professional communication in 1997.

Regards,

David Newkirk, W9VES

4844. Re: Jennings: real co. name? URL? address? email?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <33700FB8.2199@cam.org>
Source record: 94217

pmarkham@mortimer.com wrote:
>
> I wish to locate information about "Jennings" vacuum variable capacitors.
> I have so far failed to locate the "Jennings" company. Any information
> relative to the full company name, address, URL, E mail address, phone #,
> etc., would be appreciated.
>
> Pete/wa4hei

I think it is
Jennings Technology Corp.
970 McLaughlin Ave.
San Jose, CA 95122
USA
Phone: (408)292-4025
Fax: (408)286-1789

High voltage vacuum & gas capacitors and relays, vacuum contactors,
vacuum coaxial relays, vacuum interrupters, and test equipment.

But you can try their resellers like richardson electronics

http://ux1005.rell.com/edg/vac_caps.html

there are others that you can find by searching in
my ham links under "Tech info".

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

4845. Virtual Photos

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: texeyes@aol.com
Message-ID: <5kqd85$mp6@central.server.swt.edu>
Source record: 94218

http://members.aol.com/PicOfu4u/pic.html

Hello Fellow AOLers,

-------> Everyone you chat with wants your picture? Mailing
takes sooo long, and you only have one or two photos....

I'm your solution! Mail me any photo and I'll scan it and
turn it into a JPG file and email it to you!

Now when anyone wants to see you, your photo is just a
click away! You can send it to whoever you want as many times as you
want! All I want is only 3 bucks per scanned picture !!!!

Just drop it in the mail to me and include your $3 to:

B.Smith
119 Crest Dr.
San Marcos, Texas 78666

Photos are absolutely confidential. Be sure to give me your
email address & write it on the back of your photo. If you want your
original returned include a stamped envelope with your return address.

If u are worried about quality, or just need more information
before u decide to take this offer....e-mail me !!!!! I am making a
reference list, of HAPPY Customers!!

Hope To Hear From U Soon,

-- Brady :)
Eyes@theoffice.net

http://members.aol.com/PicOfu4u/pic.html

4846. F/S cathode ray tubes 1EP1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: ACHILES <achiles@kom.forthnet.gr>
Message-ID: <01bc5b0c$3a8a2b40$e76adbc2@achiles>
Source record: 94219

Hi everybody

New boxed RCA , SYLVANIA cathode ray tubes 1EP1 flat face 10,3mm round
100 mm total long for 80.00 $ ea + ship
e mail :achiles@kom.forthnet.gr
thank's

4847. Re: Tubes vs. Transistors: Better Performance in Rcvrs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000705971139530001@news.europa.com>
Source record: 94220
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

:The way I see it, the real question that should be asked is:
:
:Why do observers continue to mistake the performance of particular
:implementations of a technology with the performance possible with the
:technology?

They are not "mistaking" they are "lamenting", since they are paying $3000 to $5000 for it! Duh. If I can build a homebrew radio for a couple hundred bucks that outperforms those with stratospheric prices, I'd say thats reason enough for concern.

I was going to buy an new Icom 775 a year ago, but I just couldn't do it, knowing I was supporting mediocrity in receiver design. If I was going on DXpeditions, I would surely buy a new compact transceiver, but in my case it made absolutely no sense.

:
:(A second question is why an adherents to a particular technology becomes
:sufficiently emotional to ascribe the verb "slamming" to the act of
:comparing another technology to a pet technology when the pet technology
:happens to finish second best. ;-D)

Actually, I am an adherent to a particlular level of quality- one that I haven't seen in a long time. Here all my receiver design is done with solid state. I really need to go out and get those nuvistors though. I do have a tube audio amp that I built from scratch, and my old Drake gear, that I am continually trying to improve by adding DMOS and other crap, and then putting it back into its original state.

:
:Of course, I've been describing only one particular implementation of tube
:technology. But I reiterate what I said in the boatanchors group: In all
:but a very few applications, thermionic technology is not the appropriate
:technology when you need the best modern radio performance possible.

An opinion. But since no-one except linear amp manufacturers do much with tubes anymore, its an opinion likely to stand forever in the minds of most.

:can't think of a single consumer-oriented radio-reception application,
:including amateur radio contesting, in which solid-state technology is not
:the appropriate technology. (That manufacturers designing to
:cost--especially manufacturers who market incremental modifications of
:existing implementations in differently shaped enclosures, with different
:user interfaces, as "new" to get consumers to re-buy--might produce widgets
:that don't achieve what's possible with the technology isn't surprising or

:unusual. Most vacuum-tube gear produced for radio-amateur use represented
:what was possible in tube technology just as poorly.)
:
:Yes, it's possible that you can make a better vacuum-tube front end than
:the solid-state front end in a consumer-intended radio. But not if the
:solid-state front end to which you compare it represents the best that's
:being achieved for military and professional communication in 1997.

I can concur with alot of this. However, what worries me about the state of commercial ham equipment today, is that it is so co-dependent (one of those psychobable words implying pathology) with the "dumbing-down" of the amateur population. Nowadays there is little reason for alot of people to really learn much of anything about electronics, and I'm not talking about memorization.

Finally, thermionic technology may indeed end up the RF technology of the future. I read an article where an IC manufacturer was working on integrated circuits using microscopic vacuum tubes with field emission cathodes. (because the geometries are so small, electric fields are high enough to strip electrons off the cathode at room temp). Because there are worried about secondary carriers, and electron transit time is so fast, these may indeed end up the fastest IC active devices ever produced.

This is fun. My account may expire at the end of the week, as I am considering going to ISP where articles don't have a 24hr lag time to cache, so please don't email responses.

Thanks, Rob.

:
:Regards,
:
:David Newkirk, W9VES

4848. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580000705971148530001@news.europa.com>
Source record: 94221

```
:> However, hydrogen isn't used in thyratrons. However, if you
:> ionize hydrogen, you get a nifty glow. Hydrogen is only explosive when
:> mixed in the proper ratio, 2 hydrogen to 1 oxygen, and ignited by
:> discharge, heat, or flame. Hydrogen can be used in ionizing laser tubes
:> as a moderator gas, subject to intense ionization and plasmazation....sq
:
:(rec.radio.shortwave removed, since this is turning into a homebrew
:thread!!)
:
:Well, not meaning to nit-pick ;-) but H2 _is_ used in thyratrons. We
:are using an EEV FX 2530 to gate a nanosecond flashlamp. I believ H2
:gives a much shorter pulse than anything else. Then I actually have to
:question the existence of "lithium anhydride"... Lithium Aluminum
:Hydride, yes. Not that you'd want to get _that_ stuff into contact with
:water!
:Regards,
:/hcb
:

Absolutely. Do you remember pictures of the gizmos that the US found and
attributed to Iraq's attempt at aquiring nuclear weapons? Some of those
were hydrogen thyratrons.

Rob.
```

4849. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: Michael Ruther <Ruther@alliedsignal.com>
Message-ID: <3370D1C5.1AB2@alliedsignal.com>
Source record: 94222
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Lou or Annette Hinshaw wrote:
>
> marty@trucom.com (Marty Albert) wrote:
>
> >On 20 Apr 1997 02:37:05 GMT, kc5egg@ix.netcom.com(Gerald Schmitt)
> >wrote:
> >>This is actually a good thing.
>
> >True.
>
> >>First semantics, in a physics sense there is no such thing as a "gain
> >>antenna" the best an antenna can do for you is to reshape the pattern
> >>putting more of the energy radiated into a smaller cone.
>
> >Again, true Details, details... :)
>
> >>A very high "gain" antenna directs most of the radiated energy towards
> >>the intended receiver lessening the chance for inadvertant
> >>interference.
>
> >Unless you are in the beam of one the antennas.
>
> >>The long and the short of it is this order is to the hams
> >>benefit.
>
> >Most likely.
>
> >>We will also benefit from the research and engineering that go
> >>into these systems.
>
> >Sad part is that Hams _should_ have been doing for many years now
> >instead of waiting for someone else to do it.
>
> >> Jerry
>
> >Take Care & 73
>
> >Marty Albert - marty@trucom.com
> >Amateur Radio: KC6UFM@KC6UFM.#SEMO.MO.USA.NOAM
>
> >Heartland Internet Services
>

> >**
> >Interested in Amateur Radio?
> >http://www.trucom.com/ppages/marty
> >**
>
> The SAD part is that hams not only DO NOT carry the ball in that part
> of the reasons for the AMATEUR RADIO SERVICE (not hobby) to
> even exist, that is to carry forward an ever-advancing state of the
> art, (Which does not mean supporting Japanese electronics firms).
>
> SADDER STILL is the fact that if someone DOES try to start a
> discussion of radio qua radio, he/she is likely to be derided, and/or
> buried in trivia.
>
> I've seen it several times.
>
> WB0NRU Lou
>
> Prolific inventor,
> Lousy Salesman,
> Incompetent businessman.
> (Typical)

Hi
I made a similar comment on the local repeater here in phoenix.
the topic was no-code vs. know-code.
except adding to the "number" what have they done to promote
ham radio. even the novice 20 years ago did his part.
built kits , learned electronics,and code.
now the newbies want it all for free.
aa7qa

4850. earn FREE digital display

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <3370F4FF.37C5@aade.com>
Source record: 94223

Many customers have requested a version of my Digital Frequency Display
(see May QST or web site below) for use to upgrade older equipment with
analog dials to digital dials.

The type of equipment which would use this consist of a crystal
controlled band switched converter (first LO) in front of a tunable IF.

Noteable examples (which I already know how to do) are the Collins
S line, the FT101 and TS-520.

I have developed a version that can measure up to three frequencies
and compute and display the RF frequency. The maximum limit on
any of the three frequencies is 50MHz.

The unit measures the crystal frequency, the tunable VFO frequency and,
optionally, the BFO frequency. IT then computes the RF frequency.
If the BFO frequency is available it will compute the actual carrier
frequency of SSB signals or the zero beat carrier frequency of CW
signals. As a function of the BFO frequency it will display the mode
USB/LSB/CW or AM.

What I need is people with older equipment that falls into the above
catagory who are willing to supply some initial information necessary
to design the electrical interface and then engineer the modifications
necessary to the unit to bring out the signals.

The initial information consists of:
1) the schematic and hopefully block diagram of their unit
2) the p-p voltage levels of the crystal, VFO and BFO signals
3) the main IF frequency
4) the frequencies of the crystals, VFO and BFO.

Togather we would plan and execute the modifications necessary to
bring out the signals to connectors. For example the FT101 signals
are tapped at PCB connectors and routed to spare pins on the auxillary
socket on the rear of the unit thru RG174 cable. The Collins S line
has these signals on the rear panel at RCA jacks.

If possible, power between 8 and 18volts at 20ma. or less should
also be brought out of the unit. In some cases it may be possible
to bring out a filament AC voltage which I can rectify.

You would then have to write the modification instructions and if
possible photograph them. I can use photographic prints or video
tape from your camcorder. (I have a flat bed scanner and a snappy
video capture unit).

In return for your effort you will receive one of the display modules
and credit for the modification instructions.

If your interested give me a call or e-mail me as shown below.

Thanks

--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.
253-351-9316

4851. FS: UTC filter chokes, new in the box

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: ralph@prodistributors.com
Message-ID: <5kquuapdg3@news.nts-online.net>
Source record: 94224

I have two UTC filter chokes, 8 hy@ 550 ma-60 ohms, 6,000 volt rating. Part #S-37. These are new in the box. Price is $30 each plus UPS

4852. Re: Looking for Crystals - 6M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: DrPepper@iwvisp.com
Message-ID: <3372be9a.2478930@news.iwvisp.com>
Source record: 94225
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Try G&G Communications at:

www.iinc.com/ggcomm/

They have a complete list on rocks on line.
==========

On Wed, 07 May 1997 08:07:46 -0400, "Ronald D. Lucier"
<optics3d@ix.netcom.com> wrote:

>Just acquired (5) Gonset 6M Communicators, (1) 6M Amp, (1) 2M
>Communicator. All Civil Defense Surplus. Only 3 Crystals for all the
>units.
>
>Where can I purchase, beg, borrow, trade or steal more crystals? Is
>there much 6M AM activity?
>
>Any help would be appreciated.

Dr Pepper
Good ALL the time
(Well, , , SOME of the time, anyway :)

4853. Re: Staple gun for telephone wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc5b3e$2ca14e00$e30f2399@peter->
Source record: 94226

RA <robbarge@telis.org> wrote in article
<336e186b.7071476@news.telis.org>...
> Looking to buy a staple gun that shoots those "U": shaped staples like
> are used to tack down four conductor telephone wire, both indoors and

Try Jensen Tools 1-800-426-1194

or Techni-Tool (don't have their # handy, try 800 info)

4854. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5kqqcq$d4m@hpcvsnz.cv.hp.com>
Source record: 94227
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

Steve J. Quest (Squest@concentric.net) wrote:

: That's not exactly true. I can buy zeners in the range of 1.2
: volts all the way up to 1000 volts. if you stuff two 1.2 volt zeners
: in series so that one is forward while the other is reverse biased, it
: will clamp at 1.9 volts. That would be excellent for the task.......sq

I'd like to comment on this and some other things I've seen in this thread...

First, low voltage Zeners have very gradual turnon. You are literally better off with a stack of forward-biased silicon diodes than a zener, up to about 6 volts. For really low-voltage zeners, below 3 volts, the effect is extreme. You might want to think of them as "nonlinear resistors". Of course, this is not at all the case with integrated-circuit shunt references. You can get "programmable zeners" which have very sharp turnons, though at the expense of some microamps of standing current below the turnon.

Next: in a clamp circuit that protected a line on which I did not want intermodulation effects, I'd for sure use low capacitance diodes. In fact, look for ones which have relatively stable capacitance with reverse voltage. I believe some of the PIN diodes are quite good in this respect.

I have to provide for ESD protection in the circuits I design, which must also be extremely low distortion for signals from the microvolt region up to in excess of 10 volts. What I've found to work very well is a signal diode from the signal line to a positive clamp voltage and another to a symmetrical negative clamp voltage. Generally I use dual diodes in an SMT package, which about guarantees them to be well matched. As the input voltage changes, the capacitance of one goes up and of the other goes down. The result, to a first order, is a very tiny capacitance change, probably in the less-than-0.01pF/volt range. I use +/-24 volts as clamp voltages for my circuits, but for a mosfet input would instead use something like +/-5 volts. You can get that from zener diodes, or even from a resistive voltage divider! If you put enough bypass capacitance from that node to ground, ESD events would cause insignificant voltage change on those nodes. Negative voltage a problem?? Well, you only need microamps to bias that node.

I hope my experience in this area are useful to others.

--
Cheers,
Tom
tomb@lsid.hp.com

4855. Re: TM-V7A Software Coming from Kenwood

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: Jan Marius Evang <jane@ifi.uio.no>
Message-ID: <xmlwwpb3srf.fsf@hridil.ifi.uio.no>
Source record: 94228
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

```
>> Rick Bates writes:

RB> Major hint. The control head is just that, a control head. Four
RB> wires (ground, power, data in and data out) are all that will be
RB> used. Someone want to figure out how to interface it? Or make
RB> new software other than the cloning software?

This has been discussed for the TM733 as well, but nobody has done
it... It seems like all restrictions as to out-of-band operation,
xband repeater, 1750Hz tone etc. Is only present in the "control head"

MArius (LC1MAT/LB4PE/9H3WF)
```

--
<nickj> marius: du sogner til den ny-naivistiske retning innen
livsbeskuelse. ganske vanlig blant s�kalte "studenter", statsst�ttede
livsnytere og intellektuelle sjarlataner som de er

4856. Header plugs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: Doug Wetzel <dwetzel@earthlink.net>
Message-ID: <33716879.3AB5@earthlink.net>
Source record: 94229

I am looking for header plugs to fit a 9 pin miniature tube socket.
These plugs mate with accessory jacks on old Icom IC-22 and IC-230 2
meter fm rigs from the 70s.

If you have source info, please email direct:

Doug Wetzel
K7IP
dwetzel@earthlink.net

Thanks!

4857. Re: motor synchronization problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc5b3d$c33e3d60$e30f2399@peter->
Source record: 94230

Just be done with it and get a couple of 50/60 Hz Selsyns.

4858. NEED H.P. Sweeper

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: viny Coppola <76103.723@CompuServe.COM>
Message-ID: <5kpu64$3o9$1@mhafc.production.compuserve.com>
Source record: 94231

I am looking for an H.P. 8601 sweeper, ham budget priced. Please reply email

or phone Days 860-945-4051 Eves 860-583-1191

de N1VC Vin

4859. Best way to xmit data from Micromint Domino microcontroller

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: ccoupland@pei.sympatico.ca
Message-ID: <33708f8c.1355757@news1.pei.sympatico.ca>
Source record: 94232
Cross-posted to: comp.arch.embedded,sci.electronics,sci.electronics.design,rec.radio.amateur.homebrew

I'm looking for suggestions as to the best method of sending data from
an embedded controller to a remote terminal. I have considered using a
packet modem and DTMF.
The main concern is ease of construction and programming. Size and
cost are others.
The controller I am using is the Micromint Domino and the language is
BASIC-52.
I'd appreciate any assisstance. Thanks,

Chris Coupland
ccoupland@pei.sympatico.ca

4860. US Chassis Co's ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-07 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <18XSiCAuPMczEwxy@two-way.demon.co.uk>
Source record: 94233

I'm interested in contact addresses/fax/e-mail information of any QRO RF deck chassis or cabinet manufacturers, I already have several from the current ARRL Handbook but would like info from all companies prior to making a purchase.
Can anyone recommend one in particular, ideally want a chassis kit for 3CX/4CX.... tube range?
Please e-mail direct to: phil@two-way.demon.co.uk

Thanks in advance.

73 Phil G4ZOW/M

4861. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: Jim Devenport <jd_port@concentric.net>
Message-ID: <33721085.516A@concentric.net>
Source record: 94156

hynde@flash.net.no-spam wrote:
>
> While trying to understand what is REALLY happening with AM I of course
> refered to the handbook. All the examples I've found show a modulated AM
> carrier with what appears to be a sine wave changing in amplitude with
> audio. I have a problem with this, if it's true when you hit 100%
> modulation YOUR OFF THE AIR.
>
> What are they looking at that shows the carrier changing with audio?
>
> When I look at a local radio station by using the front end of a crystal
> set and coupling it to a scope I see an nice sine wave at 760KHz and it
> AINT MOVIN!!
>
> I thought the carrier did not change but the amplitude of the sidebands
> changed, can someone shed some light?
>
> 73, Tim, ka8ddz

Well, you're right about the 100% modulation putting you "off the air",
in that there are swings in carrier (RF output) from ZERO to MAXIMUM
power, but without the swings TO zero power and back again to whatever
max power level there would be no power to pull/push your SPEAKER cone
from zero excitation or travel to maximum stroke to pump modulated air
pulsations out toward you (i.e., audio).
If you are looking at a 760 KHZ sine wave without modulation on it you
may be sampling too narrow a width to see the modulation or the
transmitter is not broadcasting any audio at the point you're viewing on
the waveform.
When I use a spectrum analyser (a swept receiver with output to scope
instead of speaker) to view RF signals, an AM station produces a
waveform dancing up and down on the screen in relation to the
modulation, and the FM stations really look funny, with a FIXED height
or amplitude display that slides back and forth SIDEWAYS (i.e., in
frequency) as the audio modulates the carrier.
Viewed on a scope with the proper response, the AM carrier is indeed, in
your instance, a 760 KHZ sine wave with all sorts of "squiggles" ON the
sine wave, complicating (modulating) it, and the higher the AM
modulation percentage, the more the 760 KHZ "sine wave" is disrupted
(modulated) by the lower frequency audio.
Viewing an FM carrier is also interesting, the modulation appears only
in the effect of the sine wave "springing" back and forth in width
(frequency) on the screen, very much like a slinky toy spring expanding
and compressing at an audio rate.

Sorry for the non-engineering response.
--
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |
|Anti-Spam: Remove the "_" from address to respond |
http://www.concentric.net/~jdport/

4862. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5ksfjk$c0b$2@news.uni-c.dk>
Source record: 94157

>Has anyone ever tried using a speaker with whizzer cone as a mike? You
>should get great low freq response.
>

Loudspeakers and earphones are sometimes used as makeshift microphones.
A 10 inch speaker (with a baffle) gives a similar output at 70 Hz as
a normal microphone. But the frequency response of the loudspeaker is
very unflat, and quickly drops off at lower frequencies.

It is very easy to interface to loudspeakers because of the low
impedance.

Possibly some earphones are better suited than a 10 inch loudspekaer.

Regards, Anders

4863. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5ksf7q$c0b$1@news.uni-c.dk>
Source record: 94158

> When a microphone is installed on a closed
>box, it actually measures the instantaneous pressure difference
>between the static pressure within the closed box and the
>instantaneous pressure in the sound field. To prevent blowing the
>membrane when the external static pressure varies (due to change of
>weather or change of altitude) some means to bleed off the static
>pressure difference must exist. This "leakage" will have a cut off
>frequency at some low frequency.
>

True. In the case of cheap electret microphones, the closed box
is the small aluminium tube housing the internals.

The venting seems to be around the edge of the small circular pertinax at
the bottom of the tube.

This presumably can be sealed with an application of Loctite Multibond.

Alternatively, the microphone can be mounted inside a metal tube which
can be sealed behind the microphone. Still some venting is necessary
for safety reasons. Perhaps a small stopcock, in the form of a screw in
a hole?

Regards, Anders

4864. QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: Douglas Wielfaert <marcy@vic.com>
Message-ID: <33728973.6FE8@vic.com>
Source record: 94159

Built the VXO controlled CW xmtr in ARRL QRP classics p 59 (1990 ARRL handbook c30 p.43). (30 meter version) I get a clean signal when I first turn the rig on (testing into a dummy load) I do hear a background oscillation in a nearby receiver even when the key is up though. The sig soungs good for a minute then gets very "Clicky" until it dies. The grounded base amplifier transistor (a 2N2222A) gets very warm to the touch. I have carefully checked the component tolerances including the transistors and everything looks O.K. Prety sure the bifilar toroids are wound in correct phase, but you never know. The specs call for a ground plane on the component side of the board. I did not do that. The crystal is 32pf from Peterson Radio. Oh... I am using 2SC2092s amplifiers instead of MRF 472s or MRF476s as called for.

Anyone have any ideas?

Doug Wielfaert
WB8PAD

4865. **HUGE** Collection of Radio Mods on WWW

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <33728E79.67AE@primenet.com>
Source record: 94160

HUGE Collection of Radio Mods on WWW
Just installed a huge collection of equipment
modifications on my web site:
http://www.qsl.net/k7on/radmods.htm

Or, from the main page: www.qsl.net/k7on

Mods for all brands equipment below:
AEA Alinco AOR Argosy Bearcat GE Grundig
Heathkit Icom Kantronics Kenwood MFJ Misc
Motorola Paccom Ramsey Ranger Regency Sangean
Sony Standard Tandy TAPR Uniden Yaesu

Brian k7on@qsl.net >or< http://www.qsl.net/k7on

4866. Need: IC-471 schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33726088.0@lightning.ica.net>
Source record: 94161

Looking for a schematic and block diagram for an ICOM IC-471A all-mode
UHF transceiver.
Anyone ?

Please e-mail: hduff@ica.net

4867. Panel Engraving

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <33720D64.601@atl.org>
Source record: 94162
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Saw a CNC engraver at a local surplus spot and got to thinking about
all those BA panels that need lettering. It has 20 fonts so probably
can't match perfectly without buying more or coding them (WORK!).

If there is enough interest in engraving BA and homebrew panels
I'll see if I can pick the thing up (as in acquire, it weighs 500lb)

-bob
wb4mnf

4868. TECHNICAL CONFERENCE ANNOUNCEMENT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: jward@fletch.fix.net
Message-ID: <5ktcv6$2ef$1@zinger.callamer.com>
Source record: 94163
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.homebrew,rec.radio.amateur.misc

The Audio Engineering Society will hold its 14th International Conference entitled "internetaudio.aes.org" in Seattle, June 13 - 15, 1997. This conference will examine the technology shift toward computer-based, networked environments and its impact on the audio and
multimedia industries. This technical conference will feature presentations and demonstrations,
discussion and interaction to chart the future of the internet audio industry.

The 14th International Conference is chaired by three internet audio authorities: David Johnson
(New Media Designs, Inc.), Aurika Hays (Progressive Networks) and Ken Pohlmann (University of
Miami). The full three-day program will include ten technical Symposia and nine Discovery sessions, featuring more than 50 invited presenters, each an industry expert. Scheduled topics
include: open platform audio standards, audio policy and delivery, music and radio distribution
over packet networks, server push technology, point-to-point audio, workstations and editing
systems, online content development, perceptual coding for computer environments, binaural and
multichannel listening environments, virtual 3D audio, simultaneous multi-location recording,
internet copyright and the economics of internet commerce.

Nonmembers: $475
Full AES members: $395
Student AES members: $295

The conference venue is the Bell Harbor International Conference Center, 101 Stewart Street,
Seattle, WA 98101. This newly-opened waterfront facility offers a prime location near downtown
Seattle.

Please consult "http://internetaudio.aes.org" for complete conference information, and to complete
your online registration.

Audio Engineering Society, 60 E 42nd St Room 2520, New York, NY, 10165-2520, Phone: 212-661-8528
Fax: 212-682-0477

4869. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5ktbdm$6el@news2.zippo.com>
Source record: 94164

AM modulation is just that, Amplitude Modulation. The amplitude of
the carrier is changed in proportion to the applied audio. At 100%
modulation the carrier power does approach zero, but only on the
negative peaks of the siganl. The reason you were not seeing this or
the AM radio, is that you did not have your scope synced to the
envelope. Try the same experiment again, this time sync your scope to
the detected audio and observe the carrier.

hynde@flash.net.no-spam wrote:

>While trying to understand what is REALLY happening with AM I of course
>refered to the handbook. All the examples I've found show a modulated AM
>carrier with what appears to be a sine wave changing in amplitude with
>audio. I have a problem with this, if it's true when you hit 100%
>modulation YOUR OFF THE AIR.

>What are they looking at that shows the carrier changing with audio?

>When I look at a local radio station by using the front end of a crystal
>set and coupling it to a scope I see an nice sine wave at 760KHz and it
>AINT MOVIN!!

>I thought the carrier did not change but the amplitude of the sidebands
>changed, can someone shed some light?

>73, Tim, ka8ddz

George Carlson KC5RCC
Geotek Design Services, Houston,TX
geotek@comwerx.net

4870. Re: SoundCard=WEFAX-FAX-SSTV-RTTY

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: gerhard@ats.xs4all.nl
Message-ID: <5kst9q$i5c@ats.xs4all.nl>
Source record: 94165
Cross-posted to: alt.radio.scanner,alt.radio.scanner.uk,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk.sci.weather

mbv@flash.net (Ken Durham) writes:

>DOS programs are OK, but since there are Win95 programs
>available to perform the same functions (and auto-install too)
>I'll stick with them.

Don't depend on M$, use Linux for your HAM software AMATEURS FOR AMATEURS !

4871. PHILIPS PM 6669 counter upgrade?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: nc-bolchpe@netcologne.de
Message-ID: <5ksbvc$qn4@news.netcologne.de>
Source record: 94166

I've bought an used PM 6669 counter without the HF input option (fmax 1,1 GHz) installed (and without the manual and the schematic).

I'd like to add an internal prescaler but don't know where to connect it to the counter circuit.

Any ideas?

Peter

4872. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: <>
Message-ID: <5kra3p$9l6@camel3.mindspring.com>
Source record: 94234

tomb@lsid.hp.com (Tom Bruhns) wrote:

>Lou or Annette Hinshaw (aruder@pipeline.com) wrote:
>: SHOW ME HOW TO PROTECT IT FROM THIEVES AND YOU GOT A DEAL.
>: That was the original intent of my posting. I need to find a way to
>: assure that I will not be told (AGAIN!) that "we don't need you."
>: after the details are revealed.

>Patent it. Or for that matter, just file a patent disclosure
>before showing the details to anybody. Be careful about it till
>the patent is actually issued. Get people to sign non-disclosure
>agreements.

Tell that to the family of Philo T Farnsworth, the inventor of TV.

>This is not to say I have any confidence in your claims.

I don't need confidence in my claims, I need advice how to protect.

>--
>Cheers,
>Tom
>tomb@lsid.hp.com

Cheers.
Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

4873. Wanted: BIGG AMP....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: CVNQ57A@prodigy.com
Message-ID: <5krfte$1778@newssvr02-int.news.prodigy.com>
Source record: 94235

Hello i'd like to find a AMP, monobander is ok, single or three phase ok.

what do you have
thx, 73 joe

4874. INFO WANTED: GRID SHORTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: Gerald Cluff <j142@doitnow.com>
Message-ID: <01bc5050$78d59400$222bd3cf@cluffg>
Source record: 94236

had four tubes tested by ECONCO as good, but low on emission. sold them to
a fellow and he got grid to filament shorts when test in his homebrew amp.
any ideas way?? these are oxide coated filament tubes.
--
W7CKW
GERALD CLUFF
7946 W. OREGON AVE
GLENDALE, AZ 85303
H: (602)872-8888 W: (602)436-6276
see http://www.sisna.com/users/cluffg/ham.htm for equip.
email: w7ckw@doitnow.com

4875. Re: INFO WANTED: GRID SHORTS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: anthonys@ix.netcom.com
Message-ID: <5krpu9$8b6@dfw-ixnews8.ix.netcom.com>
Source record: 94237

In <01bc5050$78d59400$222bd3cf@cluffg> "Gerald Cluff"
<j142@doitnow.com> writes:
>
>had four tubes tested by ECONCO as good, but low on emission. sold
them to
>a fellow and he got grid to filament shorts when test in his homebrew
amp.
>any ideas way?? these are oxide coated filament tubes.
>--
> W7CKW
> GERALD CLUFF
>7946 W. OREGON AVE
>GLENDALE, AZ 85303
>H: (602)872-8888 W: (602)436-6276
>see http://www.sisna.com/users/cluffg/ham.htm for equip.
>email: w7ckw@doitnow.com
>

Geez! What/which tube types??? Were they all shorted in the
same way? ....highly improbable unless there is unusual shipping
damage due to non-OEM packaging. This is a vital factor with
safe transport of power tubes.

-=T=- W6ANV, broadcast engr.

4876. Re: WTB: Staple gun for telephone wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: marc_k@walrus.com
Message-ID: <5ks6qi$e32@alice.walrus.com>
Source record: 94238

RA (robbarge@telis.org) wrote:
: Looking to buy a staple gun that shoots those "U": shaped staples like
: are used to tack down four conductor telephone wire, both indoors and
: out. I know Arrow makes one, and there may be others. The staples
: may come in different widths too.

: If anyone can suggest a better place to post this msg, I'd appreciate
: knowing. Also, suggestions as to a good source for new would be
: welcome.
: Robert Arge
: Covelo
: California

: Email in "From:" is wrong. It should only have one "b" in it.
: Correct email address is robarge@telis.org

Any good hardware store should have these.
the model for phone wire is the Arrow T-18
the model for thin coax(rg58/59) is the Arrow T-25
they make other models for thicker cables-the T-75 comes to mind

Any of the above will run around $25.00 or so(less in a GOOD store).
They are constructed very well, and will last almost forever.

4877. Re: Staple gun for telephone wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <3371c78b.1285680@news.cmc.net>
Source record: 94239

On 7 May 1997 23:30:15 GMT, "Peter Gottlieb" <peter_gottlieb@msn.com>
wrote:

>RA <robbarge@telis.org> wrote in article
><336e186b.7071476@news.telis.org>...
>> Looking to buy a staple gun that shoots those "U": shaped staples like
>> are used to tack down four conductor telephone wire, both indoors and
>
>
>Try Jensen Tools 1-800-426-1194
>
>or Techni-Tool (don't have their # handy, try 800 info)
>
Arrow " Attacker " does both the telephone wire staples and standard
flat staples.

Check out page 32 of the May 1007 issue of Family Handyman Magazine

Arrow Fastener Co.
201-843-6900

Gary
THIS REPLY DOES NOT REPRESENT ANY OFFICAL POSITION of
MY EMPLOYER. It represents only my personal opinion

4878. Gonset Communicators - Manuals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <3371F529.1B8F@ix.netcom.com>
Source record: 94240
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

I have several Gonset Communicators 2M, 6M, one 6M amp. I would like to find copies of manuals for these beasts. Anyone out there that can help? I am willing to pay copying & postage, etc. If no manuals, any clues on tuning, operating, tweaking, pricing?

73 Ron, WA1UWZ

Information on the highest quality single objective stereoscopic cameras in the world is at:

http://www.3doptics.com

4879. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <3371935D.15F6@atl.org>
Source record: 94241

Lou or Annette Hinshaw wrote:

> I don't need confidence in my claims, I need advice how to protect.

No inventor or investor is going to make a dime without taking on
some risk and extending some trust. If the inventor or investor
can not figure out how to do this, then they hire someone who can
or they find another line of work.

You may not need confidence in your claims but finding someone, fool
enough,
to put up money based on your confidence is a waste of time and effort.

-bob

4880. AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: hynde@flash.net.no-spam
Message-ID: <33722027.5E75@flash.net.no-spam>
Source record: 94242

While trying to understand what is REALLY happening with AM I of course refered to the handbook. All the examples I've found show a modulated AM carrier with what appears to be a sine wave changing in amplitude with audio. I have a problem with this, if it's true when you hit 100% modulation YOUR OFF THE AIR.

What are they looking at that shows the carrier changing with audio?

When I look at a local radio station by using the front end of a crystal set and coupling it to a scope I see an nice sine wave at 760KHz and it AINT MOVIN!!

I thought the carrier did not change but the amplitude of the sidebands changed, can someone shed some light?

73, Tim, ka8ddz

4881. Re: GaAsFET or MOSFET (was) Re: BEST Active antenna design in the world!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: jpd@isoroku.mit.edu
Message-ID: <5ksi7k$qe0@senator-bedfellow.MIT.EDU>
Source record: 94243
Cross-posted to: rec.radio.shortwave,rec.radio.amateur.homebrew

In article <5kqqcq$d4m@hpcvsnz.cv.hp.com> tomb@lsid.hp.com (Tom Bruhns) writes:
> I have to provide for ESD protection in the circuits I design, which
> must also be extremely low distortion for signals from the microvolt
> region up to in excess of 10 volts. What I've found to work very well
> is a signal diode from the signal line to a positive clamp voltage and
> another to a symmetrical negative clamp voltage. Generally I use
> dual diodes in an SMT package, which about guarantees them to be well
> matched.

The solid-state focal planes for NASA's billion dollar Advanced X-ray Astrophysics Facility are protected by this scheme. The diodes are ordinary BAV99's, but they have gone through a fancy R&QA process to get the price up to NASA standard.

--
John Doty "You can't confuse me, that's my job."
jpd@space.mit.edu

4882. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: jfriley@airmail.net
Message-ID: <69DE2DD76F1CC263.3712E99BE9B73147.22D17DEBF238BB8A@library-proxy.airnews.net>
Source record: 94244

hynde@flash.net.no-spam wrote:

>What are they looking at that shows the carrier changing with audio?

The total output voltage of the modulated stage

>I thought the carrier did not change

It doesn't; that why you see a constant amplitude when you use a tight filter on the carrier. The carrier is on one frequency, one sideband is on a different, lower frequency, and the other sideband is on a different, higher frequency. The difference in frequency between the carrier and the sidebands is equal to the modulating frequency.

> but the amplitude of the sidebands changed

Right. When the amplitude of the two sideband voltages are exactly equal to the carrier voltage and also exactly out of phase with the carrier voltage the total voltage is zero. You'll recall that each sideband voltage (at 100% modulation) is half of the carrier voltage. That means the power in each sideband is 1/4 the carrier power. A station transmitting 1000 Watts carrier that is being modulated 100% has two 250 Watt sidebands also. All the information is being carried in a single one of the two sidebands. The other sideband doesn't add anything but a signal-to-noise improvement. All the carrier does is allow the use of simple diode demodulators. Which is why operating on AM is stupid for communicators: it takes twice the bandwidth to deliver a signal to noise ratio that's 5 db worse.

With amplitude modulation the carrier power level stays the same all the time--at least in theory--while total system power varies from zero (at 100% negative modulation) to four times the carrier power (at 100% positive modulation). But with FM the carrier level is always changing and at certain combinations of modulating frequency and frequency deviation the carrier is completely suppressed even though the total output power of the carrier and all the sidebands never changes.

Lots of people can't get a grasp on what's happening because they see the total voltage go to zero. But your experiment with the crystal filter has given you the ability to confirm the consistent level of the carrier.

Fred, W8OY
JFRILEY@AIRMAIL.NET

4883. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: rkarlqu@scd.hp.com
Message-ID: <5kt697$due@hpscit.sc.hp.com>
Source record: 94245

In article <33722027.5E75@flash.net.no-spam>, <hynde@flash.net.no-spam> wrote:
>While trying to understand what is REALLY happening with AM I of course
>refered to the handbook. All the examples I've found show a modulated AM
>carrier with what appears to be a sine wave changing in amplitude with
>audio. I have a problem with this, if it's true when you hit 100%
>modulation YOUR OFF THE AIR.
>
>What are they looking at that shows the carrier changing with audio?

Dave Newkirk and I wrotZZ

>
>When I look at a local radio station by using the front end of a crystal
>set and coupling it to a scope I see an nice sine wave at 760KHz and it
>AINT MOVIN!!
>
>I thought the carrier did not change but the amplitude of the sidebands
>changed, can someone shed some light?
>
>73, Tim, ka8ddz

4884. Re: WTB: Staple gun for telephone wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: Jim Devenport <jd_port@concentric.net>
Message-ID: <33720BEC.BC@concentric.net>
Source record: 94246

RA wrote:
>
> Looking to buy a staple gun that shoots those "U": shaped staples like
> are used to tack down four conductor telephone wire, both indoors and
> out.

I saw these (I already own one) in our local Wal-Mart hardware section a
couple days ago. They're not as hard to find as in "days of yore".

--
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |
|Anti-Spam: Remove the "_" from address to respond |
http://www.concentric.net/~jdport/

4885. Re: Looking for Crystals - 6M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: Jim Devenport <jd_port@concentric.net>
Message-ID: <3372019B.2B59@concentric.net>
Source record: 94247
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Ronald D. Lucier wrote:
>
> Just acquired (5) Gonset 6M Communicators, (1) 6M Amp, (1) 2M
> Communicator. All Civil Defense Surplus. Only 3 Crystals for all the
> units.
>
> Where can I purchase, beg, borrow, trade or steal more crystals? Is
> there much 6M AM activity?
>
> Any help would be appreciated.
I don't know the details of the Gonset, but you might post the basic frequency of the crystals (8 mhz, 6 mhz, whatever) so we can peruse our junkboxes for you.
6 Meter AM activity was abysmally low back in the mid to late 1970's when I became a 6 meter enthusiast, and 6 was the lowest DX frequency for Technician licensees back then, and they constituted the majority of the contacts I conversed with. 10 Meter SSB is now the DX band of choice for many if not most Techs and I think this has impacted 6 meter activity.
SSB had become the dominant mode by the mid- 70's and I eventually succumbed to 6 Meter SSB by building a transverter for my HF rig and eventually converted an old SSB CB rig directly to 6 meters.
There are probably a few 6M AM nets still in existence, especially in the Midwest, and when the band gets really hot there are occasionally some AM'ers that come out of the woodwork. But I think you'll find they are quite few and far between.
--
|---|
|Jim Devenport W5AOX |
|All Standard Disclaimers Disclaimed |
|Anti-Spam: Remove the "_" from address to respond |
http://www.concentric.net/~jdport/

4886. Mailing List

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <3372302A.768A@primenet.com>
Source record: 94248

BitBucket is a mailing list (reflector) devoted to
specialized amateur radio communication techniques.

-SSTV, ATV, FAX, APT, DSP, QRP
-Packet, Pactor, GTOR, Clover, RTTY
-R/C, Telemetry, Balloons, Rockets, Robotics
-homebrew, modifications, interfacing, widgets, etc

To subscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: SUBSCRIBE bitbucket

To unsubscribe:
TO: majordomo@qsl.net
SUBJECT:
BODY: UNSUBSCRIBE bitbucket

As we encourage the free exchange of ideas, if you pay for
email service by the byte you may want to consider carefully
before subscribing.

To submit materials:
TO: bitbucket@primenet.com

---

bit bucket /n./

1. The universal data sink (originally, the mythical receptacle
used to catch bits when they fall off the end of a register
during a shift instruction). Discarded, lost, or destroyed data
is said to have `gone to the bit bucket'. On Unix, often used
for /dev/null. Sometimes amplified as `the Great Bit Bucket in
the Sky'.

2. The place where all lost mail and news messages eventually go.
The selection is performed according to Finagle's Law;
important mail is much more likely to end up in the bit bucket
than junk mail, which has an almost 100% probability of getting
delivered. Routing to the bit bucket is automatically performed
by mail-transfer agents, news systems, and the lower layers of
the network.

3. The ideal location for all unwanted mail responses: "Flames
about this article to the bit bucket." Such a request is
guaranteed to overflow one's mailbox with flames.

4. Excuse for all mail that has not been sent. "I mailed you those figures last week; they must have landed in the bit bucket." Compare black hole.

This term is used purely in jest. It is based on the fanciful notion that bits are objects that are not destroyed but only misplaced. This appears to have been a mutation of an earlier term `bit box', about which the same legend was current; old-time hackers also report that trainees used to be told that when the CPU stored bits into memory it was actually pulling them `out of the bit box'. See also chad box.

Another variant of this legend has it that, as a consequence of the `parity preservation law', the number of 1 bits that go to the bit bucket must equal the number of 0 bits. Any imbalance results in bits filling up the bit bucket. A qualified computer technician can empty a full bit bucket as part of scheduled maintenance.

If you have any questions or problems, please contact:
k7on@qsl.net
http://www.qsl.net/k7on

4887. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: anthonys@ix.netcom.com
Message-ID: <5ktd04$6ka@dfw-ixnews11.ix.netcom.com>
Source record: 94249

In <5kt697$due@hpscit.sc.hp.com> rkarlqu@scd.hp.com (Richard Karlquist) writes:
>
>In article <33722027.5E75@flash.net.no-spam>, <hynde@flash.net.no-spam> wrote:
>>While trying to understand what is REALLY happening with AM I of course
>>refered to the handbook. All the examples I've found show a modulated AM
>>carrier with what appears to be a sine wave changing in amplitude with
>>audio. I have a problem with this, if it's true when you hit 100%
>>modulation YOUR OFF THE AIR.
>>
>>What are they looking at that shows the carrier changing with audio?
>
>Dave Newkirk and I wrotZZ
>
>>
>>When I look at a local radio station by using the front end of a crystal
>>set and coupling it to a scope I see an nice sine wave at 760KHz and it
>>AINT MOVIN!!
>>
>>I thought the carrier did not change but the amplitude of the sidebands
>>changed, can someone shed some light?
>>
>>73, Tim, ka8ddz
>
>

Response:

1. The carrier level is very much changing because it is sum and difference of the carrier + modulation. A typical scope will _not_ show this as it does not do a _spectrum_ analysis. At 100% modulation, the carrier goes to zero and all the power exists in the sidebands.

2. Above 100% _negative_ peak modulation, the carrier is indeed cut-off. This is what causes splatter because cut-off is a form of "rectangular" wave with many harmonics ...extending beyond normal voice frequencies. (Note: it is quite possible to achieve >100% positive

peak modulation for more punch; much depends on the RF amplifier, modulator and audio negative peak pre-processing).

3. To really understand what is happening, it takes understanding of Fourier transforms and analyses. There are many written sources of such theory. ARRL could do better by showing some typical scope spectrum analyses beyond the very simplistic representations. This would better illustrate the matter for "inquiring minds".

-=T=- W6ANV

4888. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5ksg05$c0b$3@news.uni-c.dk>
Source record: 94250

>Does anyone here know a source on electret microphone capsules with
>no internal FET. Alternatively a low noise low frequency electret
>capsule?

Sennheisers industrial electret capsules have connections so that
you can use them without the internal FET, or you can couple the
internal FET into your circuit in a variety of ways, which gives many
options.

You can use your own FET, if you find a lower noise one, than the
internal.

Can anyone recommend a low noise N-channel JFET?
I cannot find noise data on FETs..

Regards, Anders

4889. Low noise FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5ksg6k$c0b$4@news.uni-c.dk>
Source record: 94251

I cannot find noise data on commonly available FETs.

Can anyone recommend a commonly available N-channel JFET as lownoise?

The signal is in the microVolt range, the FET is used as a source-follower, the current can be selected between 0.1 and 2 mA, whatever suits the transistor best. The source-drain voltage is expected to be around 4.5 V. The frequency range is audio, or subaudio. DC-160 Hz. (not kiloHertz)

Regards, Anders

4890. Oscillator question...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-08 00:00:00 UTC
From: raghavan@psych.nyu.edu
Message-ID: <raghavan-0805971211060001@mcsv45-p11.med.nyu.edu>
Source record: 94252

Does anyone know of any oscillator circuit in the HF range that will will auto-regulate the amount of feedback to maintain itself JUST SHORT OF the critical amount of feedback necessary to actually go into oscillation?

Any sugesstions are welcome...

-manoj raghavan

4891. 2SK369

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970510021300.WAA04638@ladder02.news.aol.com>
Source record: 94106

Anyone out there that can give me the basing of this very low noise Jap FET?

Mni Tnx

W4ZCB

4892. Solid State HF filters...WHERE?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Message-ID: <3373B05E.EBA1EAB@juts.ccc.amdahl.com>
Source record: 94107

Some time ago on here there was an article giving details of a site for
the vendor of these kits. I have since had a hard disk wiped by a faulty
motherboard, so would appreciate details.
.....73.....G3VBV
--
... Sid Boyce...Amdahl(UK)...44-121 422 0375

Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

4893. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5ktsmo$eu9@hpcvsnz.cv.hp.com>
Source record: 94167

Anders Heerfordt (i3683@csc.dk) wrote:

: The venting seems to be around the edge of the small circular pertinax at
: the bottom of the tube.

: This presumably can be sealed with an application of Loctite Multibond.

: Alternatively, the microphone can be mounted inside a metal tube which
: can be sealed behind the microphone. Still some venting is necessary
: for safety reasons. Perhaps a small stopcock, in the form of a screw in
: a hole?

Perhaps a (relatively long) capillary tube? You can draw extremely fine
capillary tubes from glass tubing. Just how low a frequency do you
need to get to, anyway? Also, it would be good to consider that
the noise of the amplifier will be going up at low frequencies
because the source impedance of the capacitor will be getting quite
high...a big advantage to using larger diameter microphones. Perhaps
a 2.5cm diameter?? We had some B&K 'one-inch' capacitor mic capsules
around here for a while.

--
Cheers,
Tom
tomb@lsid.hp.com

4894. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5ktqnd$4qn@apple.telalink.net>
Source record: 94168

hynde@flash.net.no-spam wrote:
> All the examples I've found show a modulated AM
>carrier with what appears to be a sine wave changing in amplitude with
>audio. I have a problem with this, if it's true when you hit 100%
>modulation YOUR OFF THE AIR.

This is exactly what happens. But you're only "off the air" at the
negative peaks of the modulating waveform. (at the positive peaks,
you're actually transmitting *twice* the power you'd have with no
modulation at all)

>What are they looking at that shows the carrier changing with audio?

What you see in the Handbook should be what you'd see if you hooked an
oscilloscope across your coax. (if you actually try this, hook some
kind of antenna to the 'scope's input instead; hooking it directly to
the coax is likely to burn something out)

Set your scope's horizontal sweep to a rate appropriate for *audio*
(not RF). You might first hook the scope to an audio generator set to
about 1KHz, and set up the scope to show that sinewave properly.
Then, hook up an antenna near your transmitting antenna. Don't adjust
the sweep controls on the scope. (you probably will have to adjust
the *vertical* attenuator.)

>When I look at a local radio station by using the front end of a crystal
>set and coupling it to a scope I see an nice sine wave at 760KHz and it
>AINT MOVIN!!

This is probably because you've got the horizontal sweep rate on the
scope set too high. Set it to a slower sweep rate (as I described
above) and I think you'll see something closer to what's in the book.

>I thought the carrier did not change but the amplitude of the sidebands
>changed, can someone shed some light?

Not really true. The whole idea is to use the audio to change the
strength of the carrier. On *average* the carrier stays put, but
during one cycle of the audio its strength goes up and down.

The result of this process are the sidebands, which do change in
amplitude and frequency with the audio.

73 Doug

4895. 13.5V 15 Amp Power Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: aco@almworks.com
Message-ID: <3372bbf0.38333385@news.erols.com>
Source record: 94169

Hello Everyone,

I am very poor so I would like to use my Mobile 2 Meter Rig in my house, rather than buy a "real" base rig.

I am very poor (remember?) so I would like to build my own power supply for the affore mentioned rig, a Kenwood TM-241A.

The Specifications page of the manual says that it operates 13.8V nominal +- 15% (11.7 - 15.8V) at has a current draw of "Less than 11 A" during "Transient Mode" which I assume means "when transmitting".

So the question I have is... Is it feasable to build a 120VAC -> 13.8V, 15A DC power supply? I have seen plans for 1A, 3A, 5A, and such in the ARRL handbook, QST, and a couple other places. But nobody makes high amperage supplies.

Does the cost of the transformers make it not worth building one? Is there some other reason? Does anyone have or have a source for plans for a medium-high current power supply?

I think that's enough questions for today. Thanks in advance.

DE N30CQ

=-=Andrew
Andrew Ohnstad,
Operations Manager, ALM AudioWorks
aco@almworks.com / http://www.almworks.com
Personal Home Page (Info on my car!) / http://andysaudio.base.org
IASCA - RF Team America

"Satan forced him to do it. Beelzebub. Alcohol ... in every bottle of liquor, the devil lurks.
-Carol Teeter

4896. Re: WTB: Staple gun for telephone wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: "James.B.Harvey" <wb8nbs@ameritech.net>
Message-ID: <3373E0B2.513F@ameritech.net>
Source record: 94170

RA wrote:
>
> Looking to buy a staple gun that shoots those "U": shaped staples like
> are used to tack down four conductor telephone wire, both indoors and
> out. I know Arrow makes one, and there may be others. The staples
> may come in different widths too.
>

Go to www.sandman.com & browse. It's full of telecom parts and tools. Also
good articles on phone topics. I snarfed an article on telephone RFI suppression
for my club newsletter. Sign up for their catalog too.

4897. Re: Staple gun for telephone wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: gfiber@news.cmc.net
Message-ID: <3372a95d.2837018@news.cmc.net>
Source record: 94171

On Thu, 08 May 1997 12:37:11 GMT, gfiber@news.cmc.net (Gary Fiber)
wrote:

>Arrow " Attacker " does both the telephone wire staples and standard
>flat staples.
>
>Check out page 32 of the May 1007 issue of Family Handyman Magazine
>
>Arrow Fastener Co.
>201-843-6900

Well I sure blew the year away in that post.
I saw the add for the stapler in the May 1997 issue of Family Handyman
magazine.

Gary
THIS REPLY DOES NOT REPRESENT ANY OFFICAL POSITION of
MY EMPLOYER. It represents only my personal opinion

4898. Re: Oscillator question...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: Andy Borsa <moose@meese.com>
Message-ID: <3372A58A.1C44EF99@meese.com>
Source record: 94172

Manoj Raghavan wrote:
>
> Does anyone know of any oscillator circuit in the HF range that will will
> auto-regulate the amount of feedback to maintain itself JUST SHORT OF the
> critical amount of feedback necessary to actually go into oscillation?

Sounds like an automagically controlled regenerative detector.

But the problem here is detecting an oscillator that isn't actually oscillating, unless a very small amount of oscillation is acceptable. In that case, you need a sensitive RF detector coupled with some form of an AGC controlled LC oscillator. Correction - make that loop gain controlled.

Andy Borsa RF/Wireless Design Consultant
Real Address: andy@moose.mv.com

4899. Re: Tubes vs. Transistors: Better Performance in Rcvrs??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <3372d743.1873423@news.atl.bellsouth.net>
Source record: 94173
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

On Wed, 07 May 1997 11:39:53 -0800, jupiter@europa.com wrote:
>Finally, thermionic technology may indeed end up the RF technology of the
>future. I read an article where an IC manufacturer was working on
>integrated circuits using microscopic vacuum tubes with field emission
>cathodes. (because the geometries are so small, electric fields are high
>enough to strip electrons off the cathode at room temp). Because there are
>worried about secondary carriers, and electron transit time is so fast,
>these may indeed end up the fastest IC active devices ever produced.

GE did this way back in the early 60s. They called the units TIMs, Thermally Integrated Modules. Tiny tiny vacuum tubes combined in a single package to form the equivalent of a SSI IC. The intended market was space applications and highly radioactive environments where solid state couldn't survive. But solid state development so outstripped TIMs that they quickly disappeared.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4900. Help TEN TEC Active antenna kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: Zamphir <Look@bottom.com>
Message-ID: <3373DBB8.250F@bottom.com>
Source record: 94174
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

I just got through building one of these little kit boards.
I had no problems with the construction. I housed it in a metal
case and use a 9 volt battery for the power source. The problem
is I can't figure out if it's working or not. I've hooked it to
my Sony Pro-80 and it doesn't show any improvement over the stock
telescopic antenna. The gain control doesn't seem to have any
effect at all (The manual says it should have a very noticable
effect) I checked the voltage on the drain of the dual gate =

MOSFET and it varies with the gain control from 8.5 volts to
9.7 volts. This drain feeds into a .01 ceramic capacitor then
directly to the receiver hook-up point on the circuit board.
Has anyone else out there tried this kit? If so, what are your
results with it. Maybe I'm expecting too much from it, but would
like to see it make some difference.

Ricky

-- =

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=AB =BB
=AB Attention: The e-mail address in the header is bogus =BB
=AB to help prevent SPAM in my mailbox. If you want to =BB
=AB reply send email to: kc4kin*geocities.com =BB
=AB putting the @ where the * is. Take that you SPAM-BOTS!=BB
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\\
Nothing's more Dangerous than a Liberal against violence.
-A personal observation 1994

4901. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5kuksq$4k5$1@news.uni-c.dk>
Source record: 94175

>Perhaps a (relatively long) capillary tube? You can draw extremely fine
>capillary tubes from glass tubing. Just how low a frequency do you
>need to get to, anyway?
I aim at 2 Hz.

>Also, it would be good to consider that
>the noise of the amplifier will be going up at low frequencies
>because the source impedance of the capacitor will be getting quite
>high...a big advantage to using larger diameter microphones. Perhaps
>a 2.5cm diameter??

At the moment I intend to use 1.5 cm diameter electret capsules. I havent
seen larger electret capsules.

I intend to use a Burr Brown OPA121KP DIFET opamp. With an input
resistance better than 1 TeraOhm, and a noise around 6 nanoVolt per
squareroot Hz, it is difficult to beat.

Regards, Anders

4902. help-GR sexless connector adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: gsargent@gil.COM.AU
Message-ID: <199705091024.UAA06164@iccu6.ipswich.gil.com.au>
Source record: 94176

Help ! I need adapters to enable connection to the General Radio
Sexless connectors. Can anyone advise where I can obtain adapters,
preferably to type "N" , but BNC, SMA, TNC are all acceptable.
If anyone can "sell" a few GR connectors, new or used, with or
without short coax tails, that can be used to make up adapters with short
lengths of coax, this would be appreciated. Thanks in anticipation, Gerald
VK4ZSG.

4903. Re: Staple gun for telephone wire

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: codyspc@aol.com
Message-ID: <19970509103200.GAA10598@ladder02.news.aol.com>
Source record: 94177

In article <3372a95d.2837018@news.cmc.net>, gfiber@news.cmc.net (Gary Fiber) writes:

>>Check out page 32 of the May 1007 issue of Family Handyman Magazine
>>
>>Arrow Fastener Co.
>>201-843-6900
>
>Well I sure blew the year away in that post.
>I saw the add for the stapler in the May 1997 issue of Family Handyman
>magazine.

Maybe they had the technology back then, only they didn't have a way to apply it. ;-)

~~~One final note from the Litter Box:~~~
ATTENTION COMMERCIAL E-MAILERS!:

Do you really think I read the stuff you stuff?

- Thank You.
~~~

4904. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33730708.89527310@news.erols.com>
Source record: 94178

On Thu, 08 May 1997 22:18:28 -0400, Douglas Wielfaert <marcy@vic.com>
wrote:

>Built the VXO controlled CW xmtr in ARRL QRP classics p 59 (1990 ARRL
>handbook c30 p.43). (30 meter version) I get a clean signal when I first
>turn the rig on (testing into a dummy load) I do hear a background
>oscillation in a nearby receiver even when the key is up though. The
>sig soungs good for a minute then gets very "Clicky" until it dies. The
>grounded base amplifier transistor (a 2N2222A) gets very warm to the
>touch. I have carefully checked the component tolerances including the
>transistors and everything looks O.K. Prety sure the bifilar toroids are
>wound in correct phase, but you never know. The specs call for a ground
>plane on the component side of the board. I did not do that. The
>crystal is 32pf from Peterson Radio. Oh... I am using 2SC2092s
>amplifiers instead of MRF 472s or MRF476s as called for.
>
>Anyone have any ideas?
>
>Doug Wielfaert
>WB8PAD

Doug: Amazin! A couple of years ago I built two of these rigs, one
for 20 and one for 30. Both worked great from the very first try.
Today I was going to post a question about the history of this
circuit. (See my other posting).

A couple of observations:

-- You are supposed to hear the oscillator during key up. this design
keeps it running all the time to prevent unwanted frequency shifting.

-- As I recall the driver transistor does get hot, but it should not
get too hot to touch.

-- Make sure your power supply is adequate. It may be that even with
this little rig, you are pulling more amps than your supply can
provide. If you are using a battery, try getting a bigger one, or
putting a few smaller ones in parrallell.

-- Also, make sure your antenna is providing a proper load. Try
running the rig (briefly) into a 2 Watt 51 ohm resistor. See if you
notice a big increase in monitored signal strength when you key down.

-- I wouldn't worry about not having done the ground-plane thing. I
used this technique with mine but I'm not sure it was absolutely
necessary.

Keep us posted. I had great luck with this rig. My first CQ was answered by a statio in Poland! Didn't even have the rig in the box yet!

73 Bill N2CQR

4905. FS: Power Transformer 8500/6000 VDC at 650 mills

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: w5kft@nts-online.net
Message-ID: <5ku0np$9gn$2@news.nts-online.net>
Source record: 94179

FOR SALE: I have a dual 110/230 primary Reeve power transformer
that has a 8500/6000 volt secondary rataaed ata 650 ma. This is a
HEAVY transformer. Will sell for $65 plus UPS.

Bryan W5KFT

4906. Re: See my Solid State Tubes.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: a313@Lehigh.EDU
Message-ID: <5kv3th$1ba8@ns3-1.CC.Lehigh.EDU>
Source record: 94180

In article <rohrwerk-0105971204170001@tsc-p18.pconline.com>, rohrwerk@pconline.c
om (John Seboldt) writes:
>In article <jupiter-ya023580003004971326030001@news.europa.com>,
>jupiter@europa.com wrote:
>
>> In article <5k7kb1$5lr@chaos.dac.neu.edu>, Don Wall <d.wall@nunet.neu.edu>
>> wrote:
>>
>> :>I'm making solid state versions of the tubes used in a AC-DC
>> :>AM radio (50C5, 35W4, 12AV6, 12BA6 and 12BE6).
>> :>
>> :Why would you want to do that?
>> :
>> :Don Wall
>
>Why not? :-)... It doesn't trip my trigger to apply this to the
>All-American 5, but it's fun to try.
>
>I remember some folks in the 70's were selling direct plug-in replacements
>that would even work with the full tube plate voltages. I have no idea
>how well they worked.
>
>I also remember various articles in QST in the 70's about solid-stating
>your tube rigs, usually with plug-in approaches. There were suggested
>approaches for various kinds of stages (usually using the hot new product,
>FETs, so your tuned circuit impedances were still in the ballpark) -- I
>think they expected you to change the voltage on these stages. One I
>remember is for the Super Pro SP-600 receiver.
>
>I myself have solid-stated an old T-368 exciter, and it's a nice
>VFO/multiplier for 1.5-24 MHz. I went much further than plug-in modules,
>though, with new circuitry/wiring for everything but the bandswitches and
>tuned circuits. For anything more complex than that, I'd feel a little
>odd about total solid-stating like this, though -- I think I'd want the
>warm glow of the firebottles on a cold winter night while chatting on 75
>meters...
Back in the 70's QST ran an article about solid state tube replacements.
Howard Sartori W5DI(?) made replacements for the Drake line. He marketed them
under "Sartori Communications" business. I put his units in my R4C and to this
day the rig still outperforms my TS830S receiver section. I run the Drake's
for serious weak signal DXing. My T4X has several of his units in it. Except
for the driver and tubes in the antenna relay change over filiment string I
have the replacements. His replacement for the change over relay never could
get working right. It always locked up the rig in transmit. Since I couldn't

get this end working, I couldn't run his repalcements in the rest of the tubes in the filament >chain. However I do get full output and great stability with the replacements.
73's Dick K8WHA
>John Seboldt K0JD
>

4907. Re: Gonset Communicators - Manuals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: Michael Pendley <Michael.Pendley@sematech.org>
Message-ID: <33732DAC.693E@sematech.org>
Source record: 94181
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

Ronald D. Lucier wrote:
>
> I have several Gonset Communicators 2M, 6M, one 6M amp. I would like to
> find copies of manuals for these beasts. Anyone out there that can help?
> I am willing to pay copying & postage, etc. If no manuals, any clues on
> tuning, operating, tweaking, pricing?
>
> 73 Ron, WA1UWZ
>
> Information on the highest quality single objective stereoscopic cameras
> in the world is at:
>
> http://www.3doptics.com

Ron,
There are several Gonsets. Which ones do you need manuals for ?

73
Michael
WA5VTV

4908. History of W1VD 6W VXO QRP RIG?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33730908.90039760@news.erols.com>
Source record: 94182

"QRP Classics" contains a 6 W VXO QRP circuit. FB rig. Doug DeMaw referred to it as a "W1VD transmitter" when he used the circuit in his "8P6" Special Rig (November 82 QRP rig). I've also seen reerences to this rig having been developed for some sort of "help overseas hams in-need" project.

Does anyone have any background info on this rig? Where did it come from, when, who designed it etc.

BTW: I'm getting ready to build the "Bare-bones Superhet" that DeMaw used alongside this transmitter. Any workds of wisdom on the receiver would be appreciated.

Thanks, 73, Bill N2CQR

4909. help-GR sexless connector adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: gsargent@gil.COM.AU
Message-ID: <199705091041.UAA22794@iccu6.ipswich.gil.com.au>
Source record: 94183

Help ! I need adapters to enable connection to the General Radio
Sexless connectors. Can anyone advise where I can obtain adapters,
preferably to type "N" , but BNC, SMA, TNC are all acceptable.
If anyone can "sell" a few GR connectors, new or used, with or
without short coax tails, that can be used to make up adapters with short
lengths of coax, this would be appreciated. Thanks in anticipation, Gerald
VK4ZSG.

4910. Re: Looking for Crystals - 6M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <3373194C.4372@ix.netcom.com>
Source record: 94184
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Jim Devenport wrote:
>
> Ronald D. Lucier wrote:
> >
> > Just acquired (5) Gonset 6M Communicators, (1) 6M Amp, (1) 2M
> > Communicator. All Civil Defense Surplus. Only 3 Crystals for all the
> > units.
> >
> > Where can I purchase, beg, borrow, trade or steal more crystals? Is
> > there much 6M AM activity?
> >
> > Any help would be appreciated.
> I don't know the details of the Gonset, but you might post the basic
> frequency of the crystals (8 mhz, 6 mhz, whatever) so we can peruse our
> junkboxes for you.

The few crystals I have here are 8 mhz range. Gonset apparently used a 6X multiplier, at least for the 6M rigs. At 50.4 this would mean 8400 Khz crystals would do. These are FT-243 packages.

I have quite a few responses regarding these crystals. Apparently there is a good supply available. Anyone needing any can contact me and I'll provide the reference I have as to where to buy them.

Thanks to all who have responded.

73 de Ron, WA1UWZ

4911. Re: WTB: 10 meter amp - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: jarad@nbnet.nb.ca
Message-ID: <jarad.212.0127DCB3@nbnet.nb.ca>
Source record: 94185

In article <336D1D6C.4445@ix.netcom.com> Bubba <"<bigjon1"@ix.netcom.com> writes:
>From: Bubba <"<bigjon1"@ix.netcom.com>
>Subject: Re: WTB: 10 meter amp - HELP
>Date: Sun, 04 May 1997 17:36:12 -0700

>unit77 wrote:
>>
>> johnsi wrote:
>> >
>> > People are so paranoid about CB'ers getting a hold of 10 meter amps that they
>> > are as rare as chicken's teeth.
>> > Where does a legitimate ham get a 10 meter amp?
>> > Please email me directly if you know where I should look for one.
>> > Thanks,
>> > John N7MTB
>> WHY do you NEED an amp on 10 mtr?

>DONT WORRY BOUT IT!!!! JUST ANSWER HIS QUESTION! IF NOT, DON'T POST!!!

HAHAHAHAHAHA

4912. Re: 13.5V 15 Amp Power Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: buzzer@postoffice.worldnet.att.net
Message-ID: <3373491c.4331234@netnews.worldnet.att.net>
Source record: 94186

On Fri, 09 May 1997 05:54:16 GMT, aco@almworks.com (Andrew C. Ohnstad)
wrote:

Andrew,
Well when ur poor u have to think of alternatives. U are correct abt
the xfmr es also the regulator componets. I use a 12V auto battery
with a 2 amp charger floating on it for my TS-450. Go down to ur local
pick-n-pull and see if u can find a battery, then try a thrift store
for the charger.
73's Buzz

>Hello Everyone,
>
>I am very poor so I would like to use my Mobile 2 Meter Rig in my house,
>rather than buy a "real" base rig.
>
>I am very poor (remember?) so I would like to build my own power supply for
>the affore mentioned rig, a Kenwood TM-241A.
>
>The Specifications page of the manual says that it operates 13.8V nominal
>+- 15% (11.7 - 15.8V) at has a current draw of "Less than 11 A" during
>"Transient Mode" which I assume means "when transmitting".
>
>So the question I have is... Is it feasable to build a 120VAC -> 13.8V, 15A
>DC power supply? I have seen plans for 1A, 3A, 5A, and such in the ARRL
>handbook, QST, and a couple other places. But nobody makes high amperage
>supplies.
>
>Does the cost of the transformers make it not worth building one? Is there
>some other reason? Does anyone have or have a source for plans for a
>medium-high current power supply?
>
>I think that's enough questions for today. Thanks in advance.
>
>DE N30CQ
>
>=-=Andrew
>Andrew Ohnstad,
>Operations Manager, ALM AudioWorks
>aco@almworks.com / http://www.almworks.com
>Personal Home Page (Info on my car!) / http://andysaudio.base.org
>IASCA - RF Team America
>
>"Satan forced him to do it. Beelzebub. Alcohol ... in every bottle of liquor, the devil
lurks.

> -Carol Teeter

4913. Re: Electret microphone without FET transistor?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <338657fb.3382187919@news.sci.fi>
Source record: 94187

i3683@csc.dk (Anders Heerfordt) wrote:

>>Perhaps a (relatively long) capillary tube? You can draw extremely fine
>>capillary tubes from glass tubing. Just how low a frequency do you
>>need to get to, anyway?
>I aim at 2 Hz.

I did not realize that you needed to go down that far, what is the
required upper frequency range ?

Long time ago there were condenser microphones in which the variable
capacitance of the microphone capsule formed part of an oscillator
tank circuit. The output was a frequency modulated carrier and the
audio was recovered with a frequency discriminator.

The early radiosondes (at least those made by Vaisala) used capacitive
pressure and humidity sensors that directly modulated the transmitter
frequency.

I have not heard if anybody has tried this with an electret capsule,
but if it works, the electric (but not acoustic) frequency range would
extend down to zero.

Have you looked at different kind of pressure sensors, if you must go
this low ?

Paul OH3LWR

<posted and mailed>

4914. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33731f7e.305006@news.atl.bellsouth.net>
Source record: 94188

On 8 May 1997 20:27:48 GMT, anthonys@ix.netcom.com(-=Tony=-) wrote:
>In <5kt697$due@hpscit.sc.hp.com> rkarlqu@scd.hp.com (Richard Karlquist)
>writes:
>>In article <33722027.5E75@flash.net.no-spam>,
><hynde@flash.net.no-spam> wrote:
>>>While trying to understand what is REALLY happening with AM I of
>course
>>>refered to the handbook. All the examples I've found show a modulated
>AM
>>>carrier with what appears to be a sine wave changing in amplitude
>with
>>>audio. I have a problem with this, if it's true when you hit 100%
>>>modulation YOUR OFF THE AIR.
>>>
>>>What are they looking at that shows the carrier changing with audio?
>>>
>>>When I look at a local radio station by using the front end of a
>crystal
>>>set and coupling it to a scope I see an nice sine wave at 760KHz and
>it
>>>AINT MOVIN!!
>>>
>>>I thought the carrier did not change but the amplitude of the
>sidebands
>>>changed, can someone shed some light?
>>>
>>>73, Tim, ka8ddz
>
>Response:
>
> 1. The carrier level is very much changing because it is sum
>and difference of the carrier + modulation. A typical scope
>will _not_ show this as it does not do a _spectrum_ analysis.
>At 100% modulation, the carrier goes to zero and all the power
>exists in the sidebands.

Negative. The carrier amplitude does not vary.

What you see on an oscilloscope display is the time domain vector sum of the carrier and the sidebands. *That* can vary with modulation, but the carrier does not. If you observe the signal on a spectrum analyzer, you see that the carrier remains constant while the sidebands vary with modulation.

To see the display shown in the Handbook, you have to slow the oscilloscope sweep down to an audio rate. The vector sum of the carrier and sidebands does vary at an

audio rate. That's

y = A*cos(wt) + (a/2) *cos((w+p)+phi) + (a/2)*cos(w-p)-phi)

The first term is the carrier, the second is the upper sideband, and the third is the lower sideband. 'A' is the carrier amplitude, and it is a fixed constant. 'a' is the modulation amplitude, and it varies with the audio applied. Note that half the available modulating energy goes into each sideband. The cosine terms are the vector phases of the various signal components.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4915. art to copper, what's best?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: Possum <fnjlh1@aurora.alaska.edu>
Message-ID: <Pine.OSF.3.95.970509085547.24307A-100000@aurora.alaska.edu>
Source record: 94189

Howdy,
I've been using the PNP Blue to get art into resist on the board,
but, even with the small, simple boards I make, I always need a little
touchup, both before and after etching.

My complaints about PNP:

1. the heat fusion to the board step seems pretty touchy, involving a
heat/cool/inspect repeat-as-needed dance.

2. the chronic touchup needed, caused by non uniform adhesion of film to
board, caused by 1 (above)?

3. I usually see some sort of parallel lines running thru all the
remaining copper... they're not deep enough to cause trouble,
but they're not pretty, either.

4. I think DIP spacing is about as small as is possible (ok so far,
but it might be nice to have a little more resolution ready).

I've tried photo transparencies and photo resist board, but the photo
stuff goes out of house, takes some time, costs some money.What are other
options for getting small boards from artwork to copper? Thanks.

j harris

4916. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <337365a5.18088409@news.atl.bellsouth.net>
Source record: 94190

On Fri, 09 May 1997 11:13:01 GMT, wmeara@erols.com (Bill Meara) wrote:
>Interesting thread. I have a follow-up question:
>
>My DX-60B is running "contolled carrier". As I understand it, in
>this system the strength of the carrier does vary with the modulation,
>but in a manner different from that in a "normal" AM transmission
>(i.e. its not just that the total envelope strength varies). Can
>someone shed some light on the controlled carrier thing?
>
>Thanks, 73 Bill N2CQR

Yeah. As noted by other posters, exceeding 100% negative modulation
causes huge amounts of distortion. But 100% peaks are relatively rare
in the complex voice envelope. So most of the time you can run less carrier
without having the sideband amplitudes exceed 100% modulation. This
saves electricity since you don't have to waste it on an excessively strong
carrier.

To do this, you modulate the RF drive to the PA as well as modulating the PA
in the conventional manner. You arrange phasing so that when regular modulation
would drive the carrier beyond 100% modulation, drive increases to prevent that,
and when there is little modulation, drive decreases so that there is also little
carrier.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4917. Re: Oscillator question...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: frussle@erols.com
Message-ID: <337864d7.3308812@news.erols.com>
Source record: 94191

On Thu, 08 May 1997 12:11:00 -0500, raghavan@psych.nyu.edu (Manoj Raghavan) wrote:

>Does anyone know of any oscillator circuit in the HF range that will will
>auto-regulate the amount of feedback to maintain itself JUST SHORT OF the
>critical amount of feedback necessary to actually go into oscillation?
>
>Any sugesstions are welcome...

Could it be that you are re-inventing the regenerative receiver?
That's just how they work. The Regeneration control does just that.
But it isn't automatic. Perhaps someone can help you more if you'd
tell us what you're trying to do here.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

4918. VERTICAL ANTENNAS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <337795ea.339286@noticias.mundivia.es>
Source record: 94192
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hello Friends !

My name is Francisco and first of all let me thank you for reading this message.
I have some questions and doubts about HF antennas, so if you can help please send me a message.
My antenna instalation nowdays is a windom antenna that I made myself with a 1:6 balum, which is 41 metres long and it works ok on 80,40,20,17,12 & 10 metres. It is at 4 metres over the roof of my 14 floors building. I also own a commercial vertical for WARC but I donnot know it's name. It has a first part of aluminium for 12m, after that a coil and another part of aluminum for 17m and then another coil and another part of aluminum for 30m. I would like to know which antenna is it, maybe it is not difficult to know as there has to be not many Warc vertical in the market. I have take the last vertical part of aluminum off, as i donnot expect to use the 30 metres band, and I have taken this off to make the antenna shorter. (I guess it will not modify it's caracteristics onthe 17 and 12 metres band). I took this last part off also because I had to repair the first coil (the one for 18 metres) because it was broken. I glued the plastic part with epoxy glue and I soldered the coil to the aluminum part, anyway I thought it has been not a good solution as I found that the aluminum did not soldered very good. Maybe there is another good solution to repair it in good conditions. Due to this repair I took the last part of aluminum off to make it shorter and maybe more resistent to wind effect. I have also put nylon cord to the antenna.
I have put the antenna just at 1.5 metres over the roof with two radials, one for 12 & one for 17metres band (1/4 wavelenght ground radials made of copper wire). They are parallel to the ground, I mean they are 90° to the vertical element. I do not know if I will notice much improvement if I put the antenna to 3 metres over the ground and if I put two or three radials for each band, also do not know the angle between the vertical radiator and the radials. One problem that I have is that I cannot put the antenna Ok in resonant for 17 metres. I obtain best SWR at 18.700, and I have SWR 2:1 in 18.140Mhz How can I tune the antenna for good SWR at 18.140??? I have tried to longer the radial with no effect.
By the way I thought that the vertical was going to work better than the windom, but serveral times I hear stations with the dipole that I can not hear with the vertical.
Please tell me also which vertical can you recommend if I live in a place affected with high winds in some months of the year and very close to the sea (I can see the beachside from my bedroom window. How

about the magnetic antennas, which first of all seem very expensive?
73 s

E mail to : jorgegc@mundivia.es
or by post to Francisco Garcia Apartado 123 E-46080 Valencia
SPAIN

/|\
@ @
-----oOO-(_)-OOo----------
Francisco Garcia
e-mail: jorgegc@mundivia.es

4919. Re: Gonset Communicators - Manuals?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <33736D02.447E@ix.netcom.com>
Source record: 94193
Cross-posted to: rec.radio.amateur.equipment,rec.radio.swap,rec.radio.amateur.homebrew

Michael Pendley wrote:
>
> Ronald D. Lucier wrote:
> >
> > I have several Gonset Communicators 2M, 6M, one 6M amp. I would like to
> > find copies of manuals for these beasts. Anyone out there that can help?
> > I am willing to pay copying & postage, etc. If no manuals, any clues on
> > tuning, operating, tweaking, pricing?
> >
> > 73 Ron, WA1UWZ
> >
> > Information on the highest quality single objective stereoscopic cameras
> > in the world is at:
> >
> > http://www.3doptics.com
> Ron,
> There are several Gonsets. Which ones do you need manuals for ?
>
> 73
> Michael
> WA5VTV

These are Civil Defense Surplus. The only marking I can find is inside
- CD-9385. 12 volt & 120 VAC supplies. Other than that...?

Thanks

4920. Very accurate 5 MHz OCXO (new) for your lab!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: Joakim Langlet <joakim@seaview.se>
Message-ID: <01bc5cc3$04c308c0$8d0264c3@farsan>
Source record: 94194

Fellow Hams!
A small quantity (9 pc.) of a extremely accurate OCXO:s at 5 MHz, ideal as a timebase for a frequency counter or similar project where you want to be exact in time or frequency. These SC-cut owen controlled crystal oscillators have the following characteristics:

Stability (delta f/f): <= 5 x 10E-11 (per day)
<= 1 x 10E-9 (per month)
<= 1 x 10E-8 (per year)
Allan variance: 2 x 10E-12 (1 sec) typical
Frequency adjust range: >= 2 x 10E-7 (total)
Harmonic attenuation: 40 dBc
Output: min 200 mV into 50 ohms (sinewave)
Supply voltage: 12 volts
Supply current: 130 mA (25 degress C) 700 mA (warmup)
Temperature range: -40 - +50 degrees Celsius

They come new in the box with datasheet at $290 excluding freight and handling:

If anyone is interested, please send email for futher details to: joakim@seaview.se

73 de SM0OET
Joakim.

4921. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <33730613.89282949@news.erols.com>
Source record: 94195

Interesting thread. I have a follow-up question:

My DX-60B is running "contolled carrier". As I understand it, in this system the strength of the carrier does vary with the modulation, but in a manner different from that in a "normal" AM transmission (i.e. its not just that the total envelope strength varies). Can someone shed some light on the controlled carrier thing?

Thanks, 73 Bill N2CQR

4922. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: cjdumar@westelcom.com
Message-ID: <5l01va$7ck@news.emi.com>
Source record: 94196

On 1997-05-09 wmeara@erols.com(BillMeara) said:
:Newsgroups: rec.radio.amateur.homebrew
:Interesting thread. I have a follow-up question:
:My DX-60B is running "controlled carrier". As I understand it, in
:this system the strength of the carrier does vary with the
:modulation, but in a manner different from that in a "normal" AM
:transmission (i.e. its not just that the total envelope strength
:varies). Can someone shed some light on the controlled carrier
:thing? Thanks, 73 Bill N2CQR

nope. the controlled carrier system was designed to keep the everyday idiot
from over modulating the rig.

Charlie, KA2VCS (cjdumar@westelcom.com)

Do ya really believe her when she says size don't matter?

Net-Tamer V 1.09 Beta - Registered

4923. LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: Michael <MichaelN@cycat.com>
Message-ID: <33738AB5.6D25@cycat.com>
Source record: 94197
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

> Don't depend on M$, use Linux for your HAM software AMATEURS FOR AMATEURS !

Can you give a pointer to a good distribution of Linux for hams?
Which distribution and where is it available.
I would really like something that is available on CD rom, has all the
ham and electronic goodies and doesn't require me to become a total
UNIX guru to get working.

Am I asking for too much?

michael N6CHV

4924. clipping capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: chrisl@netdoor.com
Message-ID: <5l034hgrm1@axe.netdoor.com>
Source record: 94198

What type of glue is best to seal the injury to a ceramic capacitor when you clip part of it off to lower it's capacitance? I saw it in an old issue of QST but can't find it.
Thanks,
Chris

4925. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: chris@jtan.com
Message-ID: <E9xov3.D6K@kd3bj.ampr.org>
Source record: 94199
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Michael <MichaelN@cycat.com> writes:

>...doesn't require me to become a total
>UNIX guru to get working...

You make that sound like a bad thing.

--
Chris Nadovich +1 215 257 8708 (voice)
http://www.jtan.com/chris +1 215 257 8154 (fax)
73 de KD3BJ SK ..

4926. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <33739F88.694A@ix.netcom.com>
Source record: 94200
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Michael wrote:
>
> > Don't depend on M$, use Linux for your HAM software AMATEURS FOR AMATEURS !
>
> Can you give a pointer to a good distribution of Linux for hams?
> Which distribution and where is it available.
> I would really like something that is available on CD rom, has all the
> ham and electronic goodies and doesn't require me to become a total
> UNIX guru to get working.
>
> Am I asking for too much?
>
> michael N6CHV

Michael -- not a Linux Guru here -- but maybe the following URL will
help:
http://sunsite.unc.edu:80/mdw/HOWTO/HAM-HOWTO.html
Linux HAM-HOW TO, Amateur Radio, Terry Dawson, VK2KTJ

This and 92 other software related links at the INDEX below:

73
Rod
--
AC6V's Ham & DX Reference Guide
With Over 1277 Links To DX And Ham Radio
MAIN PAGE: http://www.netcom.com/~ac6v/index.html
INDEX: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

4927. HF ON MOVIL...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <33739530.153436@noticias.mundivia.es>
Source record: 94201
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

>Dear friends I have one question and want you to help me. I
>own a Icom 706 rig and two sticks for 20 and 40 meters. The
>antennas are Valor Pro-am 3/8" conectors and they provide me
>very good performance when used with a single magnet mount
>on the roof of my 1990 Ford Fiesta car. The problem is that
>I can not use it when moving the car because of the poor
>catch of me magnet mount. I have tried several times to
>mount the aerials in a hatchback mount, but performance and
>SWR are very bad indeed. I donnot know how to improve it or
>how to use it on the move. The aerials are almost 2 meters
>long, half helicoidal half steel stick.
Tell me also if I can modify these or one that I have for 11 metres
band for use in the 17 or 12 metres band.
>Also will be wellcome any mods, commnets, improvements or
>anything about the ICOM 706 rig, how much power can it run,
>etc.
>Sorry for my English, thanks for your help.
/|\
@ @
-----oOO-(_)-OOo---
Francisco Garcia
e-mail: jorgegc@mundivia.es

4928. Re: History of W1VD 6W VXO QRP RIG?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-09 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <3373786D.7122@HP.com>
Source record: 94202

Bill Meara wrote:
>
> "QRP Classics" contains a 6 W VXO QRP circuit. FB rig. Doug
> DeMaw referred to it as a "W1VD transmitter" when he used the
> circuit in his "8P6" Special Rig (November 82 QRP rig). I've also
> seen reerences to this rig having been developed for some sort of
> "help overseas hams in-need" project.
>
> Does anyone have any background info on this rig? Where did it come
> from, when, who designed it etc.
>
> BTW: I'm getting ready to build the "Bare-bones Superhet" that DeMaw
> used alongside this transmitter. Any workds of wisdom on the
> receiver would be appreciated.
>
> Thanks, 73, Bill N2CQR

Hi Bill OM,

I have built superhet receivers here. Recently I built an 'R2' direct conversion phasing receiver, as described by Campbell in Jan 93 QST. This is an excellent receiver. (sideband suppression over 50 dB, great dynamic range, and easy to build since it is 90% audio circuitry), and with the right VFO, can cover any band you want. The bare PC board is available from Kanga U.S., and parts are readily available from mail order sources sich as Digi-Key.

GL and 73,
Don, W6JL

4929. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3373d2b6.22505411@netnews.worldnet.att.net>
Source record: 94108

On 9 May 1997 20:38:02 GMT, cjdumar@westelcom.com wrote:

>On 1997-05-09 wmeara@erols.com(BillMeara) said:
> :Newsgroups: rec.radio.amateur.homebrew
> :Interesting thread. I have a follow-up question:
> :My DX-60B is running "controlled carrier". As I understand it, in
> :this system the strength of the carrier does vary with the
> :modulation, but in a manner different from that in a "normal" AM
> :transmission (i.e. its not just that the total envelope strength
> :varies). Can someone shed some light on the controlled carrier
> :thing? Thanks, 73 Bill N2CQR
>
>nope. the controlled carrier system was designed to keep the everyday idiot
>from over modulating the rig.

Nope Charlie,

Controlled carrier, in the case of the DX60, was added to reduce power
during non-modulation periods.

The DX60 is screen modulated, and screen modulation reduces the
maximum efficiency available at the PA's anode. I believe the
theoretical maximum carrier efficiency is about 30% or so with screen
modulation, rising to full efficiency values only on modulation peaks.

That means the 6146 in the DX60 couldn't run much power on AM with
screen modulation. The cure was to reduce the carrier under
no-modulation conditions.

Controlled carrier modulation is the source of many design problems,
and it certainly does NOT prevent overmodulation.

73 Tom

4930. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: bboone@mindspring.com
Message-ID: <5l0usm$onj@camel1.mindspring.com>
Source record: 94109
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I hear that Redhat is easy to set up, I am running Slackware now. You
can get the distributions from www.cheapbytes.com. -- Bobby kr4bu

Michael (MichaelN@cycat.com) wrote:
: > Don't depend on M$, use Linux for your HAM software AMATEURS FOR AMATEURS !

: Can you give a pointer to a good distribution of Linux for hams?
: Which distribution and where is it available.
: I would really like something that is available on CD rom, has all the
: ham and electronic goodies and doesn't require me to become a total
: UNIX guru to get working.

: Am I asking for too much?

: michael N6CHV

4931. Re: History of W1VD 6W VXO QRP RIG?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33741c1b.0@cheese.pcug.org.au>
Source record: 94110

Don Huff <don_huff@HP.com> wrote:
>Bill Meara wrote:
>>
>> "QRP Classics" contains a 6 W VXO QRP circuit. FB rig. Doug
>> DeMaw referred to it as a "W1VD transmitter" when he used the
>> circuit in his "8P6" Special Rig (November 82 QRP rig). I've also
>> seen reerences to this rig having been developed for some sort of
>> "help overseas hams in-need" project.
>>
>> Does anyone have any background info on this rig? Where did it come
>> from, when, who designed it etc.
>>

I remember reading about a 20m VXO CW rig being described as the IARU transmitter. If my memory serves me correctly, the IARU or ARRL had it on show at the 1979 Warld Administrative Radio Conference in Geneva (WARC 1979) to demonstrate to third world governments that amateur radio is not just a rich man's hobby, and that simple and cheap equipment can provide communication.

I'd be inclined to have a look through QST around the late 1970s for info - sorry I can't be more specific.

73,

Peter
--

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

4932. Re: Low noise FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <33744BEB.109D@kfa-juelich.de>
Source record: 94111

Ross Archer wrote:
>
> On 8 May 1997 12:16:20 GMT, i3683@csc.dk (Anders Heerfordt) wrote:
>
> >I cannot find noise data on commonly available FETs.
> >
> >Can anyone recommend a commonly available N-channel JFET as lownoise?
> >
> >The signal is in the microVolt range, the FET is used as a source-
> >follower, the current can be selected between 0.1 and 2 mA, whatever
> >suits the transistor best. The source-drain voltage is expected to be
> >around 4.5 V. The frequency range is audio, or subaudio. DC-160 Hz. (not
> >kiloHertz)
> >
> >
> >Regards, Anders
> >
>
> You might want to look at the datasheet for the J310.
> It's N-channel JFET with exceptionally low noise and
> high transconductance. It's really an RF/VHF transistor,
> but I'd imagine it is even quieter down in the audio range.
>
> Try www.motorola.com : they have FAX-on-demand and you
> can get device data from them.
>
> Ross
There is a better one if you can get it;

2SK369 at 2 mA and 1 kHz noise voltage 0.8 nV/(rtHz)
Noise figure at 100 ohms and Drain Current=2 mA is about
4 dB typ. at 10 Hz.
gm is above 25 millisiemens at 5 mA (and the high gm is the
secret of the low noise, along with clean processing.)

2SK371, 2SK170 and 2SK 147 are as good, or nearly so.

4933. Re: clipping capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5l1k20nnq2@nadine.teleport.com>
Source record: 94112

In article <5l034hgrm1@axe.netdoor.com>,
chrisl@netdoor.com (Chris Lamousin) wrote:
>What type of glue is best to seal the injury to a ceramic capacitor
>when you clip part of it off to lower it's capacitance? I saw it in
>an old issue of QST but can't find it.
>Thanks,
>Chris

I'd use something with very low loss RF properties (assuming the
application is RF), like "Q-dope". You can make it yourself by dissolving
some polystyrene (e.g., styrofoam) in acetone. Be careful with the acetone
-- it's very highly flammable.

Roy Lewallen, W7EL

4934. Re: Low noise FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970510132601.JAA21566@ladder01.news.aol.com>
Source record: 94113

Yes as a matter of fact. The Jap 2SK369 is as low noise as you get. A pair of them in parallel yields a noise floor less than 0.7 nanovolts rising to only 1.5 nanovolts at 10 Hz.

What input impedance does the source look like? For low impedance drive, (mixer or phase detector) even a 2N4403 looks pretty good, like less than 1 nanovolt at 10 Hz.

W4ZCB

4935. Tubes, USA Made Sockets, Transformers and Chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: pbunn624@teleplex.net
Message-ID: <5l1uqk$2jp@news.teleplex.net>
Source record: 94114

I am now carrying the complete Hammond line of Chassis, Transformers,
Die Cast Boxes ect. at discount prices. Many items are in stock

Also have Sprague Atoms, Orange Drops, and more. Resistors Ect.

Just received a new stock of USA Made Connector Corporation tube
sockets. These are nice quality sockets that really make the Russian and
Chinese stuff look bad.

All Svetlana tubes are available at low prices as well as many NOS and
others. (10 NOS 6AG7 General Electric for $23 postpaid)

Pat Bunn
STF Electronics
864 573 6677 voicemail or fax line
Email a postal address for a free catalog

4936. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Roy Keeley <rkeeley@dibbs.net>
Message-ID: <337493C0.CB6@dibbs.net>
Source record: 94115
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Michael wrote:
>
> > Don't depend on M$, use Linux for your HAM software AMATEURS FOR AMATEURS !
>
> Can you give a pointer to a good distribution of Linux for hams?
> Which distribution and where is it available.
> I would really like something that is available on CD rom, has all the
> ham and electronic goodies and doesn't require me to become a total
> UNIX guru to get working.
>
> Am I asking for too much?
>
> michael N6CHV

Then Linux tain't for you. I do think Linux is the way to go, put it is
up to you to dig it out. You don't have to be a guru to learn it (it
helps tho', heh heh) but it definately isn't spoon fed to you.
--
73's

Roy KC4IMC

rkeeley@dibbs.net
rkeeley@acan.net
kc4imc@maf.wa4wbi.ampr.org
Snail Mail = 10675 Salt Aire Rd, E., Theodore, AL 36582, USA

4937. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19970510153100.LAA27406@ladder01.news.aol.com>
Source record: 94116

Doug is essentially correct. However, the sidebands do not have a distinctive different frequency from the carrier--they are inherently part of the carrier as the amplitude is varied (increased/decreased) to create what we call modulation. The RATE of change in the carrier amplitude (voltage/current) as a function in TIME is the actual audio frequency usually denoted in cycles change (rate) per second (time). It is this Rate of change which must be demodulated (detected) by the receiver for accurate reproduction of sound. And unfortunantely, in the real world, this Rate change is seldom a single frequency and is, therefore, said to be COMPLEX. 73 Bill N4MXF

4938. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <33744B59.6A2C@atl.org>
Source record: 94117

> Negative. The carrier amplitude does not vary.
>
> What you see on an oscilloscope display is the time domain vector sum of the carrier
> and the sidebands. *That* can vary with modulation, but the carrier does not. If you
> observe the signal on a spectrum analyzer, you see that the carrier remains constant
> while the sidebands vary with modulation.
>

Don't need a scope. A radio with BFO and you can hear a nice constant
amplitude carrier.

-bob

4939. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: n4mxf@aol.com
Message-ID: <19970510160500.MAA29098@ladder01.news.aol.com>
Source record: 94118

Hi;
No, control carrier was not designed to prevent over modulation. And, the mental process of thinking that carrier is changing with modulation is also a bit flawed. Control carrier was designed to be used with low level modulation where the RF amplifier must be operated as a linear. In low level modulation, the amplifier efficency with applied carrier is very low~~30-33%. The efficency actually improves with modulation ~~66%@100% mod. Since the efficency of the carrier with NO MODULATION is so poor and relatively painful for tube heat dissipation, a carrier reduction (from the required reference level) was thought to be an effective means for reducing the heat dissipation required by the tubes in the linear amp. Hence, we tend to think of the base carrier level fluctuating with modulation. In reality, a properly adjusted AM phone transmitter must maintain the correct carrier to peak output relationship. The carrier must be kept at about 1/4 th the PEP output of the amp. The problem with control carrier is the proper transmitter adjustment and receiver detection; many receivers of the day could not adequately detect the rapid fluctuations in the carrier. The CONTROL carrier fluctuations must be isolated from the normal carrier fluctuations which must be detected in the receiver to reproduce accurrately the desired audio or intellengence. I hope this helps--it can be confusing. 73 Bill N4MXF
PS: In modern day receivers, and with the advances in high speed electronic circuits, Is it possible that AM Control Carrier Modulation could have an unfounded niche in Ham Radio.???????????

4940. Re: Tubes, USA Made Sockets, Transformers and Chassis

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Bob Miller <bmiller@calweb.com>
Message-ID: <3374A43A.D91@calweb.com>
Source record: 94119

Pat Bunn wrote:
>
> I am now carrying the complete Hammond line of Chassis, Transformers,
> Die Cast Boxes ect. at discount prices. Many items are in stock
>
> Also have Sprague Atoms, Orange Drops, and more. Resistors Ect.
>
> Just received a new stock of USA Made Connector Corporation tube
> sockets. These are nice quality sockets that really make the Russian and
> Chinese stuff look bad.
>
> All Svetlana tubes are available at low prices as well as many NOS and
> others. (10 NOS 6AG7 General Electric for $23 postpaid)
>
> Pat Bunn
> STF Electronics
> 864 573 6677 voicemail or fax line
> Email a postal address for a free catalog

Hi Pat,

Send your catalog to:

Bob Miller, KE6F
9655 Appalachian Dr.
Sacramento, CA 95827

Tnx es 73

Bob

4941. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3374AD81.6628@crpl.cedar-rapids.lib.ia.us>
Source record: 94120

BOB DUCKWORTH wrote:
>
>
> Don't need a scope. A radio with BFO and you can hear a nice constant
> amplitude carrier.
>

Envelope = time domain (oscilloscope).

Carrier plus sidebands = frequency domain (spectrum analyzer).

The envelope amplitude varies with amplitude modulation.

The carrier is constant in amplitude.

The sidebands vary with modulation.

Bill W0IYH

4942. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bc5d5e$d6fdd680$e390f5ce@wa6vse.fast.net>
Source record: 94121
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Michael Ruther <Ruther@alliedsignal.com> wrote in article
<3370D1C5.1AB2@alliedsignal.com>...
>
> Hi
> I made a similar comment on the local repeater here in phoenix.
> the topic was no-code vs. know-code.
> except adding to the "number" what have they done to promote
> ham radio. even the novice 20 years ago did his part.
> built kits , learned electronics,and code.
> now the newbies want it all for free.
> aa7qa
>

The "newbies" and "would-be newbies" are NOT "wanting
it all for free" ... many are technical professionals that this
service desparately needs and all they want is the ability
to participate and contribute without having to waste large
amounts of their valuable time on developing "skill" in an
obsolete technique dating to 1847 when they're employed
at the leading edge of technology and want to experiment,
develop, and build systems using new technologies.

Ham radio would be FAR better off for welcoming these people
with open arms than by trying to keep them out with ridiculous
hazing rituals. The main problem is that most of the incumbents
are so technically inferior to the types of folks I'm talking about
that they can't begin to understand the benefits that they could
bring. And lack of understanding breeds fear, resentment, and
discrimination ... ham radio is in it's "dark ages" ... we need
major changes in licensing requirements/structure, technical
regulations, and ATTITUDES to create a rennisance ...

Carl - wa6vse
wa6vse@fast.net

(friends and cordial acquaintances, please note the change in
e-mail address ... everybody else, please continue to send your
flames and crude remarks to <carl@ais.net> ...)

4943. Need schematic for power supply 20-40 amps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: jarad@nbnet.nb.ca
Message-ID: <jarad.217.0059DC6B@nbnet.nb.ca>
Source record: 94122

I would like to build my own power supply, Does anyone have a schematic for
one or maybe there is a place on the net I can down load one.
I want to use 3055 transistors and maybe 723 regulator chip or UA 305.

Thanks jarad

4944. Re: 13.5V 15 Amp Power Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: KC5YWX <jboros@thighfiber.com>
Message-ID: <3374CA3D.A4CE7A83@thighfiber.com>
Source record: 94123
Body handling: HTML body converted to readable text

Jeep Meister wrote:

> On Fri, 09 May 1997 05:54:16 GMT, aco@almworks.com (Andrew C.
> Ohnstad)
> wrote:
>
> Andrew,
> Well when ur poor u have to think of alternatives. U are correct abt
>
> the xfmr es also the regulator componets. I use a 12V auto battery
> with a 2 amp charger floating on it for my TS-450. Go down to ur
> local
> pick-n-pull and see if u can find a battery, then try a thrift store
>
> for the charger.
> 73's Buzz
>
> >Hel

I am currently in the process of constructing a 14V 20A power supply.
Doing this because I had a Signal 56-4 xfmr and some filter caps already
and don't need another 25# shipping charges. Go to a local electronic
surplus
store and obtain this or a similar xfmr. Think it cost about $15. I
am using
two 20,000 uf 30V computer grade caps for filtering, and two stud mount
rectifiers. These should be at least 25A, 50PIV.

For the regulator, I am going to use three LM338 three terminal
regulators, available from DigiKey for about $9 each. The circuit is
shown in the app note LB-51app. Use your search engine and National
semiconductor for it. And of course you need a large heat sink since
the dissipation = (vin-vout) * Iout. This can be around 100w at
15-20A.

More power to you and your rig,
JimBoros
KC5YWX/AA

Jeep Meister wrote:

On Fri, 09 May 1997 05:54:16 GMT, aco@almworks.com
(Andrew C. Ohnstad)

wrote:

Andrew,

Well when ur poor u have to think of alternatives. U are correct abt

the xfmr es also the regulator componets. I use a 12V auto battery

with a 2 amp charger floating on it for my TS-450. Go down to ur local

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and don't need another 25# shipping charges. Go to a local
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two 20,000 uf 30V computer grade caps for filtering, and two stud mount

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available from DigiKey for about $9 each. The circuit is shown
in the app note LB-51app. Use your search engine and National
semiconductor for it. And of course you need a large heat sink since
the dissipation = (vin-vout) * Iout. This can be around 100w
at 15-20A.

More power to you and your rig,

JimBoros

KC5YWX/AA

4945. desin for simple solid state fm tourist info radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Nick Rogers <nrogers.edo.ndown@nics.gov.uk>
Message-ID: <3374CD07.96A@nics.gov.uk>
Source record: 94124

any one tell me where i might find a simple solid state fm radio with no
moving parts able to broadcast a 3 min message over distances of about
10-20 yards
we are looking a a simple fm based tourist guide system for places of
interest
many thanks
--
nick rogers, econ dev officer
north down borough council, bangor n. ireland
vox +44 (0)1247 278034 fax +44 (0)1247 271370
alt email 100126.1373@compuserve.com

4946. Re: Low noise FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: archer@netgate.net
Message-ID: <33743140.3096434@nntp.netgate.net>
Source record: 94125

On 8 May 1997 12:16:20 GMT, i3683@csc.dk (Anders Heerfordt) wrote:

>I cannot find noise data on commonly available FETs.
>
>Can anyone recommend a commonly available N-channel JFET as lownoise?
>
>The signal is in the microVolt range, the FET is used as a source-
>follower, the current can be selected between 0.1 and 2 mA, whatever
>suits the transistor best. The source-drain voltage is expected to be
>around 4.5 V. The frequency range is audio, or subaudio. DC-160 Hz. (not
>kiloHertz)
>
>
>Regards, Anders
>

You might want to look at the datasheet for the J310.
It's N-channel JFET with exceptionally low noise and
high transconductance. It's really an RF/VHF transistor,
but I'd imagine it is even quieter down in the audio range.

Try www.motorola.com : they have FAX-on-demand and you
can get device data from them.

Ross

4947. Re: Build or Buy BS-8 / PanAdapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Bill Fawns <wmfawns@tdl.com>
Message-ID: <3374BD05.18D8@tdl.com>
Source record: 94126
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

Mark Mansfield wrote:
>
> Try your local library. They can obtain it through interlibrary loan
> if they do not have it there. There should be plenty of information
> for them to get the article.
> Mark
>
> > Great, now if I only had a copy of that magazine. Any ideas where I could
> > get a copy? Thanks again, 73, Mike...
> [snip]
> > In article <336DD7B3.3612@aeneas.net>, mmans@aeneas.net wrote:
> > >There are plans in Ham Radio Magizane, Feb. 1983; pages 26 thru 38.
> >
Mark es Mike:

I have BS-8 adaptor in my SM-220 and could copy the schematic from the
service manual if you think it would help. If you can find a BS-5 and
don't want it, I would like to purchase it.

Thanks.

73 de KE6HEZ, Bill

4948. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <3374dab7.109143807@netnews.worldnet.att.net>
Source record: 94127

On 10 May 1997 16:05:30 GMT, n4mxf@aol.com (N4MXF) wrote:
> Is it possible that AM Control Carrier Modulation
>could have an unfounded niche in Ham Radio.?

No, primarily because AM has no place in ham radio except for those noxious, toxic few who insist on polluting the bands with it. But it does have a place of enormous significance in the shortwave broadcast arena where the overwhelming majority of receivers have simple detectors. Almost every transmitter manufacturer now offers some form of Controlled Carrier-Level Modulation. During quiet periods or during periods of low modulation, the carrier level is reduced by 6 db. You wouldn't think, given the high average modulation levels possible with modern audio processors, that much power would be saved. But measurements show about a 20% reduction in power consumption. If the broadcaster is programming with mostly voice, the power savings can be much higher. Most of the CCM circuits in use by the worlds major broadcasters pay no attention to positive peak modulation--it can be 200% if it wants to be. But negative modulation is controlled to -95% within the range of half carrier voltage to full carrier voltage.

The British have come up with their own slant on CCM. They set the PEP output and the carrier is reduced (to a maximum of 6 db) to keep the PEP output constant. This is called Amplitude Modulation Companding and saves power at the cost of signal-to-noise ratio during modulation. CCM saves power at the cost of signal-to-noise ratio during periods of no modulation. But CCM also keeps the modulation index high during low modulation periods.

Fred
jfriley@airmail.net

4949. Re: History of W1VD 6W VXO QRP RIG?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3374de1c.0@cheese.pcug.org.au>
Source record: 94128

wmeara@erols.com (Bill Meara) wrote:
>"QRP Classics" contains a 6 W VXO QRP circuit. FB rig. Doug
>DeMaw referred to it as a "W1VD transmitter" when he used the
>circuit in his "8P6" Special Rig (November 82 QRP rig). I've also
>seen reerences to this rig having been developed for some sort of
>"help overseas hams in-need" project.
>
>Does anyone have any background info on this rig? Where did it come
>from, when, who designed it etc.
>
>

Bill

Since I wrote the last message, I found a copy of W1VD's article when browsing through my three lever arch files full of photocopied articles. W1VD's original article is in QST December 1978, p11.

73,

Peter VK1PK
--

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

4950. Re: Build or Buy BS-8 / PanAdapter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <3374EDEF.3A9F@onramp.net>
Source record: 94129
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.equipment

A BS-5 can be converted to a BS-8 oBill Fawns wrote:
>
> Mark Mansfield wrote:
> >
> > Try your local library. They can obtain it through interlibrary loan
> > if they do not have it there. There should be plenty of information
> > for them to get the article.
> > Mark
> >
> > > Great, now if I only had a copy of that magazine. Any ideas where I could
> > > get a copy? Thanks again, 73, Mike...
> > [snip]
> > > In article <336DD7B3.3612@aeneas.net>, mmans@aeneas.net wrote:
> > > >There are plans in Ham Radio Magizane, Feb. 1983; pages 26 thru 38.
> > >
> Mark es Mike:
>
> I have BS-8 adaptor in my SM-220 and could copy the schematic from the
> service manual if you think it would help. If you can find a BS-5 and
> don't want it, I would like to purchase it.
>
> Thanks.
>
> 73 de KE6HEZ,

A BS-5 can be converted to a BS-8 or vice-versa.

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

4951. Re: Building of a highly stable XTAL reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Douglas Dwyer <ddwyer@ddwyer.demon.co.uk>
Message-ID: <TxpS8AANXEdzEw8n@ddwyer.demon.co.uk>
Source record: 94130
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics

In article <5kn8gq$hom@enst.enst.fr>, Elendir
<elendir@quasimodo.enst.fr> writes
>
>Hi there,
>I'd like to know if somebody out there ever tried to lock a TCXO on an
>atomic broadcasted frequency reference such as (US) WWV, (D) DCF 77 or
>(F) France-Inter.
>More specifically, I'd like to know about the lock filter : cut-off,
>step size, etc...
>The goal is to realize a highly stable reference oscillator for a linear
>1291/1297 MHz repeater. I'd like something like a 10^-10 precision (long-
>term, but I am also interested in reducing short-term noise)
>
>Since I don't receive the "rec.radio" groups, I'd greatly appreciate an
>email answer ! :)
>
>Thanks a lot

I have a quantity of surplus state of the art oven controlled crystal
references intended for cellular radio base stations. These have voltage
control and divide down to 1,2,4,or 8kHZ to be used as the reference for
a frequency synthesis loop. These PCB mounting OCXOs are stable to
0.1ppm/year and .001ppm day.
These are for sale @ 20% of the list price. Email me for full spec

There are many off air standards the one I use locks to Allious 162kHz
or Droitwich 198kHZ the propogation effects result in a second to second
variation of 0.01ppm though of course the long term stability is good to
.0001ppm.
If you want good second to second stability your loop time constant must
be very long the best off air standards Tracor? have 1 hour time
constant or longer.
With very long time constants your locked oscillator must have good
medium term stability. TCXOs can have different time constants for the
crystal and the compensating network this results in 0.1ppm changes due
to small temperature variation, better to use a good (proportionally
controlled) OCXO

Douglas Dwyer Frequency Precision Ltd. I design/advise on Xtal osc TCXO OCXO
SAWc etc Reply via demon or 101505.3427@compuserve.com phone/fax:
+44(0)1837810590 http://ourworld.compuserve.com/homepages/Frequency_Precision/

4952. audio isolation question???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Jack Reece <bigjr@sprynet.com>
Message-ID: <337508E5.7FE0@sprynet.com>
Source record: 94131

I'd appreciate some help in trying to hook up one speaker or headphones to multiple pieces of communications equipment without blowing the audio circuits in each. Can you just put a certain value of resistor in each line? This may be a simple question to a lot of you but I want to make sure before I blow something.
Thanks, Jack WA0VLT

4953. Manual BK Scope

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Koert Koelman <kkoelman@ix.netcom.com>
Message-ID: <337513E7.3723B0B5@ix.netcom.com>
Source record: 94132

```
This is a multi-part message in MIME format.
--------------E6857ED7A16C296F2BE2F9B2
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Today, I bought a used oscilloscope at a flea market. It is a BK
Precision Model 1479, 30MHz scope.

I need a manual for this scope. Does anyone have a manual which they
would be willing to copy for me? Of course, I would reimburse expenses.

Thanks for reading this. Drop me a note if you can help.

Koert (KC6WCI)

--------------E6857ED7A16C296F2BE2F9B2
Content-Type: text/x-vcard; charset=us-ascii; name="vcard.vcf"
Content-Transfer-Encoding: 7bit
Content-Description: Card for Koelman, Koert
Content-Disposition: attachment; filename="vcard.vcf"

begin:vcard

fn:Koelman, Koert

n:Koelman;Koert

org:http://www.netcom.com/~kkoelman/Homepage.html

adr:;;2140 Lyon Avenue;Belmont;CA;94002-1639;

email;internet:kkoelman@ix.netcom.com

tel;work:510-271-7587

tel;fax:415-591-5051

tel;home:415-593-5613

x-mozilla-cpt:;0

x-mozilla-html:FALSE

end:vcard

--------------E6857ED7A16C296F2BE2F9B2--
```

4954. know any homebrew sites on the www?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Neil Heckt <neil@aade.com>
Message-ID: <33755DC9.7563@aade.com>
Source record: 94133

I was suggested that I put a group of links to homebrew sites
on the web on my web page.
If you know of any please send me the URL.
Thanks
--
Neil
Homebrew Heaven at http://www.aade.com
Home of L/C Meter IIB and Digital Frequency Display
Links to sites of interest to Engineers, Amateurs and hobbyists
interested in Circuit Design and construction.

4955. Re: AC versus DC capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: n7tcf@primenet.com
Message-ID: <5l28u0$e12$1@nnrp01.primenet.com>
Source record: 94134

In <5jrqan$a8i$1@news3.microserve.net>, dcowey@cyberia.com (gudmundur) writes:
>In article <336014e5.10591242@news.zippo.com>, carlisle@capescott.net
>says...
>>
>>Would someone please explain the differance between the two types and
>>the applications for use. Can the AC type be used for DC power
>>supplys.
>> Steve Carlisle VE7AHL
>
>The AC types do not have their foils polarized and can accept voltage
>charge in either direction. They are physically bigger than the DC only
>versions of the same value.
>
> NEVER NEVER NEVER hook to DC caps together in series backwards to
>make an AC cap. It doesn't work, an it will blow up in your face
>if given even half a chance.
>
> Best wishes KD3SH
>

Never? This is how the caps are made. They are larger because two caps are
inside the can.
Like this (+cap1- -cap2+). You can cobble together such a cap, but I don't
recommend it either.

Jim N7TCF

4956. Re: Building of a highly stable XTAL reference

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: carlisle@capescott.net
Message-ID: <3374aaa9.729678@news.zippo.com>
Source record: 94135
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics

On 6 May 1997 12:34:34 GMT, elendir@quasimodo.enst.fr (Elendir) wrote:

>
>Hi there,
>I'd like to know if somebody out there ever tried to lock a TCXO on an
>atomic broadcasted frequency reference such as (US) WWV, (D) DCF 77 or
>(F) France-Inter.
>More specifically, I'd like to know about the lock filter : cut-off,
>step size, etc...
>The goal is to realize a highly stable reference oscillator for a linear
>1291/1297 MHz repeater. I'd like something like a 10^-10 precision (long-
>term, but I am also interested in reducing short-term noise)
>
>Since I don't receive the "rec.radio" groups, I'd greatly appreciate an
>email answer ! :)
>
>Thanks a lot
>
>73 de F5RCS
>Vincent
>--

Vincent , there is a good article in the Fall 1991
issue of COMMUNICATIONS QUARTERLY on a LORAN C frequency calibrator
that may be of interest to you. They claim this unit will calibrate to
better than 1 part in ten. Good luck on your project.

Steve Carlisle VE7AHL

4957. **OVER 2700 Ham Radio WWW Links**

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <337533AC.E26@primenet.com>
Source record: 94136

OVER 2700 Ham Radio WWW Links

Just added a collection of ~2740 amateur radio WWW links:
http://www.qsl.net/k7on/index24.htm

Or, "OTHER Internet Resources" from the main page:
http://www.qsl.net/k7on

Please copy them, use them, etc...

73, Brian

4958. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: gerhard@ats.xs4all.nl
Message-ID: <5l2cb7$qm0@ats.xs4all.nl>
Source record: 94137
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Michael <MichaelN@cycat.com> writes:

>> Don't depend on M$, use Linux for your HAM software AMATEURS FOR AMATEURS !
>Can you give a pointer to a good distribution of Linux for hams?
>Which distribution and where is it available.
>I would really like something that is available on CD rom, has all the
>ham and electronic goodies and doesn't require me to become a total
>UNIX guru to get working.

>Am I asking for too much?

Have you ever played with Unix or Linux ?

I'm rather new to HAM and packet radio and I have just bought my first set.
For 3 years I have run Linux now and it seems to me the ultimate OS for
packet radio (you have to discover this yourself, NO FLAMES).
I think Linux users/developers and radio amateurs both want to have the
POSSIBILITY to control and to know every little detail.

Unfortunaty using Linux is not common practice in packet radio land. Why ?
I don't know, maybee someone else can explain it to me.

But if you don't bother what's going on, run M$ products and call your
reseller if it's not working. However, I don't think you are a real radio
amateur in that case (perhaps my interpretation of radio amateur is wrong :)).

73,

Gerhard.

(PE1RLZ)

4959. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-10 00:00:00 UTC
From: Wild Bill Marcus <bill@carolinacommerce.com>
Message-ID: <337520F5.5FA1@carolinacommerce.com>
Source record: 94138
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Try Linux Unleased by Sam's. It walks you thru almost everything. Makes
installation a snap. Comes with Slakware 3.0 on included CD. Lists at
$50. It's the best I've seen!
--
****
From the Desk of Wild Bill Marcus, N3WNC
wildbill@carolinacommerce.com
Socastee High Amateur Radio Club, KF4RNJ
Grand Strand Amateur Radio Club, W4GS
http://www.users.sccoast.net/kc4knf/gsarc.htm
Phil. 4:19
****

4960. Re: help-GR sexless connector adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: Robert Ogburn <ogburn@standfast.com>
Message-ID: <33763D00.7489@standfast.com>
Source record: 94056

Gerald Sargent wrote:
>
> Help ! I need adapters to enable connection to the General Radio
> Sexless connectors. Can anyone advise where I can obtain adapters,
> preferably to type "N" , but BNC, SMA, TNC are all acceptable.
> If anyone can "sell" a few GR connectors, new or used, with or
> without short coax tails, that can be used to make up adapters with short
> lengths of coax, this would be appreciated. Thanks in anticipation, Gerald
> VK4ZSG.

The connector type you are speaking of is: GR-874

Adapters may be available from Test Labs, in Mountain View, California.

4961. new web site...address correction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: n9sbv@worldnet.att.net
Message-ID: <337d3f5b.256458030@praxcus>
Source record: 94057

> Check out the new web site on the net! N9SBV's Ham Radio Connection
> at
> Http://members.tripod.com/~n9sbv/status.htm
>
> This new system is oriented toward helping the new ham radio
> operator
> with resources he or she may need to get the most out of their
> hobby.
>
> Lots of shareware available for download from the FTP Site. With 2
>
> of the NEC 7 disk Changers online for starters, there is over 15 Gig
>
> online of all types of shareware software.
>
> The Web server is focused on Amateur Radio Related Areas.
> Home brewing,
> Weather, RACES, FCC Rules and Regs, general Ham Radio Aids, and the
> like. And if you would like to put up a home page at the
> site....well
> I may even be able to accommodate a few users for that purpose. The
> site will be maintaining a Ham Radio focus however.
>
> This site is located in South Bend, Indiana. It's my hope that it
> will become a major link for Operators in the Michiana Area to keep
> in
> touch locally and worldwide.
>
> See you on the site!
>
> 73 de N9SBV

4962. Re:Broken Quad Antenna System

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: "Roger W. Canning" <Lark-60@pacbell.net>
Message-ID: <3376460D.7C79@pacbell.net>
Source record: 94058

clifflp@juno.com wrote:

>

>

>

>

> >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>><<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<

> Due to several requests for this information via an S.A.S.E. I decided

> to see about putting it into circulation where it could be read and

> downloaded if need be. Rather than have you send me the S.A.S.E.

>

> The Broken Quad Antenna System

> (radial system and

> support)

> Designed by KJ7EZ

>

> Hello the name here is Cliff, KJ7EZ

> I have put together a radial design that seems to work well and has a

> low angle of radiation. I'm not sure what that angle is, but I'd say

> somewhere between 10-15 degrees and possibly less. It is simple to put

> together, and inexpensive depending on material costs in your area.

> The material you'll need is two 20 foot by 1 inch sections of PVC (or 28

> feet total length) or plastic pipe, one Tee and one 4-way cross-over,

> possibly called a 4-way union, and a short piece of schedule ? PVC (The

> same outside diameter only the walls are thinner) and a short piece of

> metal pipe or conduit. You'll also need enough wire to cover the bands

> you intend on using the vertical for, the wire is cut to 1/4 wave-length,

> you'll need four pieces of wire for each band you intend to use. That is
> if you're going to use a trap vertical. I used a commercial made vertical
> antenna, but you can use whatever you want to use.
> Just think of this design as a " folded radial system " or otherwise
> called by me as " The Broken Quad Radial System".
> It looks like you had a 10 meter quad antenna that the wind broke the
> boom. So now you have two elements of a quad antenna with a broken boom.
> Using the two 20 feet sections of PVC, cut four pieces of pipe, I
> recommend 1 inch schedule 40 pipe. It is strong enough to handle the
> vertical. Connect the 4-way crossover and the Tee together using a short
> (approximately three inches). You can glue these together if you'd like.
> Make sure that when you connect the 4-way crossover and Tee, the 4-way
> crossover is laying flat, and the Tee has the one opening at a
> right-angle from the 4-way crossover. What we are shooting for here is
> when all of this is connected, the four pieces of PVC 7 feet long are the
> legs, and coming up from those legs, is a short piece of PVC with an
> equally short piece of metal pipe inserted into the short piece of PVC.
> This is what is going to support your vertical.
> Now you can either glue or just insert the four 7 feet sections of PVC
> into the 4-way crossover and Tee, again you have an option to use glue
> depending on what you want to do. If you don't glue them, make sure the
> sections are connected far enough into the 4-way crossover that they can
> support the vertical. If you intend on transporting this system to a
> remote location, you wouldn't want to glue the sections into the 4-way
> crossover. And you can cut the 7 feet sections in half and use a coupling
> to put them together at the remote location. It will also allow you to
> have a smaller duffel bag for carrying the system in.
> We're ready to mount the vertical and run the wires for the radials. As
> mentioned earlier, you'll have four legs using the 7 feet sections, and
> the short piece of PVC with the metal pipe inside, is inserted into the
> opening for the Tee. Mount your vertical to the short piece of PVC, using

> the appropriate U-bolts (the short piece of PVC is 18-24 inches long).
> Now you should have a vertical in the upright position, as a vertical
> would be. With the four 7 feet sections of PVC acting as the legs or
> support for the vertical. Connect one of your quarter-wavelength wires to
> the vertical, then run the wire out to the end of one of the legs and
> secure it (I taped mine). Then run the wire over to the next leg, either
> one on either side, it makes no difference. Secure it to that leg, then
> run the remainder of the piece of wire (it shouldn't be but about a foot
> or two at most) back in toward the center or vertical. Now run the other
> three radials in the same fashion as just described. Make sure the
> radials don't touch each other, I recommend using insulated wire, but use
> what you have on hand.
> Note: if the wires touch each other the VSWR will be high. You'll want to
> run tuned radials for each band if using a trap vertical. The end result
> should look like a large CROSS or PLUS sign with the vertical mount in
> the center, slightly off center. I did not Earth Ground mine other than
> from the rig or coax, the insulated wire does touch the ground in some
> places, but no actual intentional grounding was done. So it might be
> considered a dipole design of some sort? Anywho it seems to work well,
> and that's what counts right?
>
> Comments:
> I have two of these systems in operation, only because I'm not using a
> trap vertical at the moment. I have had very good result with this
> design, mine is considered a ground mount vertical. With the feed-point
> on one being 4 inches off the ground, and the other being 8-10 inches off
> the ground. They are both broadbanded, almost one megahertz, never
> exceeding 1.5:1 at either end. And the feed-point impedance is 50 ohms.
> In the first three days of operation, I worked 8 new countries on 20
> meters. Running 100 watts into the vertical antenna at 4 inches off the
> ground, from a Kenwood TS850S. I got five out of the eight on no more

> than the third call. I hear things on this antenna that I've never heard
> before. For example, I have often heard stations in the states calling
> KC4AAA at the South Pole or Antarctica. For the first time I was able to
> hear him (KC4AAA). Barcelona Spain booms into my station almost every
> day.
> I have used this designed antenna radial system on 20-17-15-10 meters
> only. I have not experimented lower than 14 megahertz, so I can't report
> on results there. But on the bands that I have used it on I have almost
> no noise except for atmospheric noise (about 1 S unit or less). The
> closest high power-lines are almost 10 miles from my station.
> The antennas have survived winds in the range of 50-60 mph with no
> difficulties. I don't even have them fastened to the ground in any way!
> It makes it handy if you have to mow the yard! Fortunately I don't have
> grass!
> I would be interested to hear of your results to compare them with mine.
> I'm curious if it will work equally well in most places, considering
> large cities with lots of electrical noises and what not. You can email
> me at clifflp@juno.com I'd really like your feedback. Thanks for reading
> this message. Total cost's for me locally was about $8.00-$10.00
> (American).
>
> 73's and good DX!
> Cliff KJ7EZ

4963. WTB: 100pf/5KVDC Discs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: w1ksz@juno.com
Message-ID: <5l5lmg$g70@news-central.tiac.net>
Source record: 94059

Need a couple of 100 pf @ 5 KVDC Disc Caps to pad Plate Tuning
Capacitor on 80 Mtr's. Anyone have any or know of a source ??
Thanks, Dick, W1KSZ.

4964. Spectrum analyzer rental?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3376699E.105E@pop.removethistomailme.net>
Source record: 94060
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

Is there any place where an individual hobbyist (not associated with any large 3-letter corporations) can rent a fairly modern spectrum analyzer (Tek 492/494 or similar) for a short time (~1-2 wks), at a reasonable cost?

I need to tweak a homebrew hybrid DDS/PLL circuit for noise sideband performance, and would like to be able to see down to about 100 Hz/division or so between 700 MHz and 1.2 GHz, with an amplitude range of at least 90-100 dB. I could always sell my car and buy a 494, but would rather not. :-) I'm in the Austin, TX area, if anyone knows a good rental place that will take Visa/MC.

tnx -- jm

Note: My E-mail address has been altered to avoid spam

4965. Radio Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: Chatburn <chatburn@sympatico.ca>
Message-ID: <33767ED2.2C73@sympatico.ca>
Source record: 94061

Hi,
When I am my local mcdonalds drive-thru, if I set my car radio
to 92.5
fm I can hear what the employees are saying on the headsets or what the car behind me is ordering. I was wondering if there was some way I could inexpensively get hold of something so that I could chat along with these people. Or, a friend told me that you can make something which blocks out all radio signals and transmits something you say into a microphone on them. This would be good as I could then listen with my radio what people order then inform them not to because it is crap!

Thanks

DC

4966. Re: Source-follower?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580001105972139560001@news.europa.com>
Source record: 94062

In article <33759E35.3B64@online.no>, J M Noeding <la8ak@online.no> wrote:

:Hi
:while emitter follower have a voltage gain of 0.9-0.95, I have bad
:experience with source followers. JFET's seems to be best of the kind,
:the high conductance BF246 (yfs = 20mmho) is far better than any dual
:gate mosfets (with G1 and G2 tied together). All measurements I have
:done shows a negative gain of '-6dB' or worse.
:Any other experience? I have seen applications where somebody thought
:that the DG fet source follower was a good choice, but my experience on
:that particular circuit always fail.
:Any suggestions based practical experience??

You need to keep the source to ground resistor/impedence relatively high.
I use a dual gate mosfet with gate 1 as input for buffering the output of a
high speed DAC on a discrete DDS board. I also usually use a dual gate
mosfet for buffering VFO's with very good results. 1k ohm seems to work
well for the source ground resistor.

If you want to drive 50ohms you need a transformer to get there or add a
bipolar stage after the mosfet.

Rob.

4967. Re: Low noise FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580001105972144300001@news.europa.com>
Source record: 94063

In article <5ksg6k$c0b$4@news.uni-c.dk>, i3683@csc.dk (Anders Heerfordt) wrote:

:I cannot find noise data on commonly available FETs.
:
:Can anyone recommend a commonly available N-channel JFET as lownoise?
:
:The signal is in the microVolt range, the FET is used as a source-
:follower, the current can be selected between 0.1 and 2 mA, whatever
:suits the transistor best. The source-drain voltage is expected to be
:around 4.5 V. The frequency range is audio, or subaudio. DC-160 Hz. (not
:kiloHertz)
:
:
:Regards, Anders

National Semiconductor has a super-beta transistor pair that you can couple
with op amp to beat fets on input noise. Can get a sample for free from
their sample distribution center.

Rob.

4968. Re: Low noise FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: Alan.Peake@dsto.defence.gov.au
Message-ID: <Alan.Peake.24.097647AD@dsto.defence.gov.au>
Source record: 94064

>You might want to look at the datasheet for the J310.

Try National Semiconductors 2N4393 also. Not the absolute lowest in noise but cheap and available. input noise is about 2-5 nV/Hz^-0.5

Alan

4969. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: Bob Doyle <doyle@DELETE_THIS.primenet.com>
Message-ID: <3376ACBE.55531F6E@DELETE_THIS.primenet.com>
Source record: 94065

Doug Smith wrote:
>
> hynde@flash.net.no-spam wrote:
> > All the examples I've found show a modulated AM
> >carrier with what appears to be a sine wave changing in amplitude with
> >audio. I have a problem with this, if it's true when you hit 100%
> >modulation YOUR OFF THE AIR.
>
> This is exactly what happens. But you're only "off the air" at the
> negative peaks of the modulating waveform. (at the positive peaks,
> you're actually transmitting *twice* the power you'd have with no
> modulation at all)

Oops. I'm sure you already know this but, actually you're transmitting
four times the power which is twice the voltage.

> 73 Doug

73,
Bob Doyle

4970. Re: Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: jphipps@aztec.asu.edu
Message-ID: <5l56ij$lja@news.asu.edu>
Source record: 94066

In a previous article, whk@fast.net (Bill) says:
>
> However, I will soon be located close to a window and know that I will
>be able to get 2-3 AM stations over there by placing my Walkman on the sill.
>I've noticed that reception improves even further if I pass my hand over the
>radio cutting off the florescent light interference. My queston is: Is there
>anything I can take to work with me and place over the Walkman that will cut
>the lighting interference? Would tin foil or heavy cardboard do any good?

It wouldn't take a particularly heavy investment in tin foil to take a
piece with you, try it out, and see what difference it makes. That is the
essence of experimentation and is worth any number of speculations.
--

4971. Re: Help TEN TEC Active antenna kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: archer@netgate.net
Message-ID: <3375288f.6159017@nntp.netgate.net>
Source record: 94139
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

On Fri, 09 May 1997 23:21:44 -0400, Zamphir <Look@bottom.com> wrote:

>I just got through building one of these little kit boards.
>I had no problems with the construction. I housed it in a metal
>case and use a 9 volt battery for the power source. The problem
>is I can't figure out if it's working or not. I've hooked it to
>my Sony Pro-80 and it doesn't show any improvement over the stock
>telescopic antenna. The gain control doesn't seem to have any
>effect at all (The manual says it should have a very noticable
>effect) I checked the voltage on the drain of the dual gate
>MOSFET and it varies with the gain control from 8.5 volts to
>9.7 volts. This drain feeds into a .01 ceramic capacitor then
>directly to the receiver hook-up point on the circuit board.
>Has anyone else out there tried this kit? If so, what are your
>results with it. Maybe I'm expecting too much from it, but would
>like to see it make some difference.
>
>Ricky
>

Okay, I've never wired your particular kit, but have some ideas for
you to check out, as I've built several MOSFET-based active antennas.

First, tune to a signal you can hear with the whip attached and set as
short as you can make it. Touch the whip and look for a signal
strength increase when you touch the whip from signal pickup from
your hand. You may also hear buzzing on the signal from AC hum pickup
from your hand. Believe it or not, if this happens it is a good sign.

If that's inconclusive try the same on a frequency with no signal
around (4-6 Mhz), and
you probably will hear a lot more buzzing and noise when you touch
the whip than when you don't.

You should hear these changes if the amplifier is amplifying.

If you don't hear much (or any change), chances are the MOSFET
gate(s) were destroyed by static electricity during assembly (or
possibly before you received the kit, though Ten-Tec has a good
reputation, I've heard from hams...)

(Of course, I'm assuming you've
done voltage checks on the gates, source, and drain relative to
ground, and they match Ten-Tec's voltages. If not, you already
have a wiring or component problem.)

Unfortunately, if the gate(s) are fried, there may be no way to tell based on voltage measurements without knowing the characteristic curves and specs. of the particular MOSFET.

One thing you could check is the current consumption of the kit at full gain. If your kit specs. this, it should be fairly close to the spec. If it's much larger than spec., your gate is probably fried and/or biased incorrectly. Hopefully Ten-Tec can tell you how much the kit should draw from the battery at full gain!

Just my $0.02 worth.

4972. Re: Looking for Crystals - 6M

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: no.spam@ads.please
Message-ID: <33752af3.4139807@news.mnsinc.com>
Source record: 94140
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

No, we still have 6M AM nets out here on the east coast too!

On Thu, 08 May 1997 10:38:51 -0600, Jim Devenport
<jd_port@concentric.net> wrote:

>Ronald D. Lucier wrote:
>>
>> Just acquired (5) Gonset 6M Communicators, (1) 6M Amp, (1) 2M
>> Communicator. All Civil Defense Surplus. Only 3 Crystals for all the
>> units.
>>
>> Where can I purchase, beg, borrow, trade or steal more crystals? Is
>> there much 6M AM activity?
>>
>> Any help would be appreciated.
>I don't know the details of the Gonset, but you might post the basic
>frequency of the crystals (8 mhz, 6 mhz, whatever) so we can peruse our
>junkboxes for you.
>6 Meter AM activity was abysmally low back in the mid to late 1970's
>when I became a 6 meter enthusiast, and 6 was the lowest DX frequency
>for Technician licensees back then, and they constituted the majority of
>the contacts I conversed with. 10 Meter SSB is now the DX band of
>choice for many if not most Techs and I think this has impacted 6 meter
>activity.
>SSB had become the dominant mode by the mid- 70's and I eventually
>succumbed to 6 Meter SSB by building a transverter for my HF rig and
>eventually converted an old SSB CB rig directly to 6 meters.
>There are probably a few 6M AM nets still in existence, especially in
>the Midwest, and when the band gets really hot there are occasionally
>some AM'ers that come out of the woodwork. But I think you'll find they
>are quite few and far between.
>--
>|---|
>|Jim Devenport W5AOX |
>|All Standard Disclaimers Disclaimed |
>|Anti-Spam: Remove the "_" from address to respond |
>|http://www.concentric.net/~jdport/ |
>|---|

To reply to this message, you MUST IGNORE my shown address.
It is there to fool those annoying unsolicited e-mail advertising idiots!
Send replies ONLY to: bry AT mnsinc 'DOT' com
VISIT: http://www.mnsinc"DOT"com/bry/

4973. Re: Virtual Photos

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: no.spam@ads.please
Message-ID: <33752b12.4170784@news.mnsinc.com>
Source record: 94141

Only AOLers would be silly enough to go for this "deal!"

You can get 24 pictures scanned for $3.99 when you get your film
developed these days.

I guess the ones that don't know this will be the victims!

On Wed, 07 May 1997 19:07:27 GMT, texeyes@aol.com (Brady) wrote:

>http://members.aol.com/PicOfu4u/pic.html
>
>Hello Fellow AOLers,
>
> -------> Everyone you chat with wants your picture? Mailing
>takes sooo long, and you only have one or two photos....
>
> I'm your solution! Mail me any photo and I'll scan it and
>turn it into a JPG file and email it to you!
>
> Now when anyone wants to see you, your photo is just a
>click away! You can send it to whoever you want as many times as you
>want! All I want is only 3 bucks per scanned picture !!!!
>
> Just drop it in the mail to me and include your $3 to:
>
> B.Smith
> 119 Crest Dr.
> San Marcos, Texas 78666
>
> Photos are absolutely confidential. Be sure to give me your
>email address & write it on the back of your photo. If you want your
>original returned include a stamped envelope with your return address.
>
> If u are worried about quality, or just need more information
>before u decide to take this offer....e-mail me !!!!! I am making a
>reference list, of HAPPY Customers!!
>
> Hope To Hear From U Soon,
>
> -- Brady :)
> Eyes@theoffice.net
>
>http://members.aol.com/PicOfu4u/pic.html
>
>

To reply to this message, you MUST IGNORE my shown address.
It is there to fool those annoying unsolicited e-mail advertising idiots!
Send replies ONLY to: bry AT mnsinc 'DOT' com
VISIT: http://www.mnsinc"DOT"com/bry/

4974. Re: how to remove an article?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: kjellvl@online.no
Message-ID: <33757c7e.2908551@news.online.no>
Source record: 94142

On Fri, 09 May 1997 00:50:17 +0200, LA8AK <la8ak@online.no> wrote:

>it has sometimes happened (because of lousy server) that I have posted
>an article twice. How can I remove it via netscape?

Use the Cancel-function.
You select the message and press Edit and Cancel Message. Quick and
simple !

73 de LA2VY

Never explain - your friends do not need it and your enemies will not believe it anyhow.

4975. Re: Panel Engraving

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: Geoffrey Schecht <geoffs@onr.com>
Message-ID: <01bc5dd3$65b6e960$235a01c7@portabox>
Source record: 94143
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Save your money; photoengraving is a lot simpler. You'll go broke stocking all of the bits that one of those CNC engravers uses and the hold-down jigs required for the various panels you'll be doing is gonna run into a lot of money, too.

If you have a PWB layout package that can produce Gerber plots (there are some public-domain or shareware ones out there that'll work) , you can create the panel on your computer and then photoetch the panel yourself (acid or NaOH for aluminum) or have it done at a plating shop. It's possible to use regular CAD software like QuickCAD, AutoCAD or CADKey to do the artwork and have it plotted and shot photographically at a blueprint house if they don't have something like HPGL-to-Gerber converters on hand.

You can also cut a Rubylith photomask if you're really desperate for something to do; that's how they did it in the sliderule days and the front panels on the old Tek 500-series scopes do look pretty good. Any blueprint shop can shoot the ruby onto orthographic line-art film for about $30; then you're in business.

Either way, you wind up with a photomask that's good for a zillion panels if you take care of it when you're using it.

Nearly all of the WWII and later era panels that have sunken/raised lettering were done with a photoetching process. The neat thing about the sunken letters is that you can fill them with paint for a really professional look.

You can buy a can of photoresist spray-on at an electronics supply house (positive or negative working, take your pick). I think that GC Electronics sells it in kit form. Kodak and Shipley (if Shipley's still in business) sell it in larger quantities but it doesn't keep well and the last time I checked; you couldn't buy less than a gallon at a time. It can be exposed under a shortwave UV lamp and I think that Kodak KPR is exposable under sunlight.

Trust me, a can of photoresist weighs a >lot< less than that CNC mill, requires no CAM programming and your artwork is limited only by the capability of your CAD package.

BOB DUCKWORTH <bob@atl.org> wrote in article <33720D64.601@atl.org>...
> Saw a CNC engraver at a local surplus spot and got to thinking about
> all those BA panels that need lettering. It has 20 fonts so probably
> can't match perfectly without buying more or coding them (WORK!).
>
> If there is enough interest in engraving BA and homebrew panels

> I'll see if I can pick the thing up (as in acquire, it weighs 500lb)
>
> -bob
> wb4mnf
>

4976. Source-follower?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <33759E35.3B64@online.no>
Source record: 94144

Hi
while emitter follower have a voltage gain of 0.9-0.95, I have bad
experience with source followers. JFET's seems to be best of the kind,
the high conductance BF246 (yfs = 20mmho) is far better than any dual
gate mosfets (with G1 and G2 tied together). All measurements I have
done shows a negative gain of '-6dB' or worse.
Any other experience? I have seen applications where somebody thought
that the DG fet source follower was a good choice, but my experience on
that particular circuit always fail.
Any suggestions based practical experience??
--
From - Mon Apr 21 00:00:26 1997
From: Ian White <G3SEK@ifwtech.demon.co.uk>
Subject: Newsgroups

Hello Jan-Martin

>I am quite unexperienced with this media, so I find it difficult to find
>all the newsgroups interesting for me. Presently I read the newsgroups
>for boatanchors, homebrew, antenna, antique, equipment etc - are there
>any newsgroups for vhf uhf shf activity and experiments?

Yes, there are several, but they are mailing-lists (sometimes called
"reflectors") rather than newsgroups. The only difference is that you
receive the traffic with your personal e-mail.

Each mailing-list has two addresses:
1. The robot which handles messages to join the list, leave it and other
functions. When you contact the robot successfully it will send you a
message explaining how to use the other functions.

To make initial contact with the robot, the message format is usually

Subject line: <nothing>
Message: subscribe <list name> ; nothing more in the message!

2. A different address at the same place where you send the actual
traffic. If you use the Reply function of your mailing software, your
traffic will automatically go to the right place.

The biggest and busiest list is the VHF reflector at Stanford
University. That generates a lot of traffic!
Send message to vhf-request@W6YX.Stanford.EDU
Message: subscribe

A much smaller European list is called vhf-dx-discuss:
Send message to: majordomo@blacksheep.org

Message: subscribe vhf-dx-discuss
(or maybe that should be join vhf-dx-discuss - if you get it wrong, you should receive an error message containing the correct information)

Somewhere there is also a QRP list which might interest you. It carries too much traffic for me to handle! E-mail g3rjv@gqrp.demon.co.uk for details.

There are thousands of other mailing-lists! If you are interested in power amplifiers, big towers, Yaesu equipment or HF contests I can let you have the addresses. Also there is an EME list which I read.

I don't see the microwave lists, but you could e-mail my friend Roger g4pmk@marsport.demon.co.uk for details.

73 from Ian G3SEK

4977. Re: art to copper, what's best?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: Bob Hutson <bhutson@wchat.on.ca>
Message-ID: <3375EE69.688C@wchat.on.ca>
Source record: 94145

I work for Lockheed Martin in Canada...
All the prototype boards we do are by the photo resist method.
We use GC Electronics positive resist boards (pre-sensitized)
And to obtain the patterns...ACAD drawing of the layout sent to
a Hewlett Packard Laser printer on transparencies.
This method is good for boards up to 8" x 10" for us.
The limiting factor here is what we can fit into the EPROM
eraser (UV light source).
The options are - flourescent light for 20 mins or more..
or sunlight for 1/2 hour or more.
The smallest trace I have ever done is .03", although when I looked
at the final product, I could have gone smaller.
After the board is etched, we always flow the traces with solder.
This strengthens the traces and gives better performance.
Hope this helps.
Bob

4978. Re: Help TEN TEC Active antenna kit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: 3W8PE1B <willi6@erols.com>
Message-ID: <337573EB.4030@erols.com>
Source record: 94146
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.shortwave

Zamphir wrote:
>
> I just got through building one of these little kit boards.
> I had no problems with the construction. I housed it in a metal
> case and use a 9 volt battery for the power source. The problem
> is I can't figure out if it's working or not.

You might also try the TenTec WEB page and exchange some
E-Mail with them, if you don't make some progess.

Active antennas can be a little weird at time.

dave 3w8peib

4979. Re: 13.5V 15 Amp Power Supply?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: Rich Griffiths <richg@one.net>
Message-ID: <3375E2A5.3D36@one.net>
Source record: 94147

Jeep Meister wrote:
>
> On Fri, 09 May 1997 05:54:16 GMT, aco@almworks.com (Andrew C. Ohnstad)
> wrote:
>
> Andrew,
> Well when ur poor u have to think of alternatives. U are correct abt
> the xfmr es also the regulator componets. I use a 12V auto battery
> with a 2 amp charger floating on it for my TS-450. Go down to ur local
> pick-n-pull and see if u can find a battery, then try a thrift store
> for the charger.
> 73's Buzz
>

I can second this motion. I've been using a medium-sized deep-cycle marine battery and a 3-Amp charger (ordinary linear power supply) for years now. It's a cheap way to go, and you'll never get better quality DC. My experience is that batteries used in this kind of float-charge service last far longer than they are rated for in automotive service.

Rich W2RG

4980. Re: desin for simple solid state fm tourist info radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: archer@netgate.net
Message-ID: <3375e767.1350926@nntp.netgate.net>
Source record: 94148

On Sat, 10 May 1997 20:31:19 +0100, Nick Rogers
<nrogers.edo.ndown@nics.gov.uk> wrote:

>any one tell me where i might find a simple solid state fm radio with no
>moving parts able to broadcast a 3 min message over distances of about
>10-20 yards
>we are looking a a simple fm based tourist guide system for places of
>interest
>many thanks
>--
>nick rogers, econ dev officer
>north down borough council, bangor n. ireland
>vox +44 (0)1247 278034 fax +44 (0)1247 271370
>alt email 100126.1373@compuserve.com

If you can find a person who has kitbuilding experience willing to
donate an hour or so of time to your efforts, consider the following:

(1) Stereo FM transmitter kit (88-108 Mhz range) RK-FM10 US $34.95,

case & antenna set is an additional $14.95. Takes
line-level input from any stereo component. Requires a
3-12 Volt supply.

Transmitted sound quality is excellent, due to its using
a stereo IC used commercially for feeding CD sound
to an FM stereo radio without CD capabilities in
automotive applications.

If you choose
this option and have a monophonic source, of course you'll
have to use a "Y" cable to feed the left and right inputs so
that listeners with portable "Walkman" radios don't hear all
the sound coming out of one headphone.

(2) Mono FM transmitter kit (up to 1 mile) (80-110 Mhz) RK-FM4 US

$15.95.
Looks like it can accept a microphone (costs extra) or a
line-level input. Consult the manufacturer for details -- I'm

not as confident of the quality of this kit than #1, but the
catalog claims this kit is "great for beginners" [beginning
kit-builders.] No case option is listed.

For the sound source, look at the solid-state "memo recorders"
for sale. Hopefully there is some model with repeating playback

capability. Otherwise, you're stuck with cassette tape loops and tailoring your program to fit one of the available lengths. :(

A third option, if funds are available, is to record a CD with the program as a single track. Most CD players can be set to replay one track over and over. I think this option will cost the equivalent of a few hundred dollars US. Advantage is that sound quality will not degrade over time, and the message can be of any length from seconds to 75 minutes long. Of course, with either tape or CD option, equipment wear-out will eventually occur.

Source for kits:

JDR Microdevices
1850 South 10th Street
San Jose, California 95122-4108
1-(408) 494-1400. US&Canada 1-800-538-5000
International orders are no problem. Questions:
intl@jdr.com

Web page: http://www.jdr.com/

I am not affiliated in any way with JDR, just an intensely satisfied customer. (Why else would I bother to look all the above information up? ;) They are one of the best retailers of kits and "nifty" chips I have been able to locate, and their catalog is a lot of fun to browse through.

Hope these ideas help.

4981. Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: whk@fast.net
Message-ID: <5l4rdj$bu3@news1.fast.net>
Source record: 94149

Hi folks,

I'm sorry if this isn't an amateur radio question BUT it is a question about radio reception and you guys are good at pretty much anything that has to do with radio so here goes:

I work in a large room that is full of computer terminals and florescent lights. Needless to say, the reception on both AM and FM is not very good. But, they do allow us to take our Walkman's to work and most of us can get 3 or 4 stations... all FM.

However, I will soon be located close to a window and know that I will be able to get 2-3 AM stations over there by placing my Walkman on the sill. I've noticed that reception improves even further if I pass my hand over the radio cutting off the florescent light interference. My queston is: Is there anything I can take to work with me and place over the Walkman that will cut the lighting interference? Would tin foil or heavy cardboard do any good?

Thank you very much,

Bill
whk@fast.net

4982. Re: Make RF Liner Amplifier http://www.awt.com.tw

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: AWT <awt@ms2.hinet.net>
Message-ID: <01bc5c2f$6c189560$ea955fa8@awt>
Source record: 94150

We are make RF Amplifier
Please see the AWT CORP.HomePage.

http://www.awt.com.tw
E-Mail:awt@ms2.hinet.net

4983. IC-706 XCVR to Computer Interface Cable, Help Please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: seifertr@ix.netcom.com
Message-ID: <3375f9e5.6511231@nntp.ix.netcom.com>
Source record: 94151
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

I would like to connect my computer to my IC-706 transceiver, but I need the cable to connect the computer to the radio. MFJ sells the MFJ-5383i cable for $49.95, but I'd rather build my own cable.

(1) Can anyone direct me toward a schematic/wiring diagram for doing so? and (2) I prefer to connect the cable to my serial port; does the MFJ cable connect to the serial port or the parallel port? If I must use the parallel port, I will.

Many thanks,
Rich, KB2ZMF
seifertr@ix.netcom.com

Best Wishes,
Rich

---
seifertr@ix.netcom.com

4984. WTB: Heath DX-20 meter/parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: k9sqg@aol.com
Message-ID: <19970511193400.PAA13642@ladder01.news.aol.com>
Source record: 94152

Friend needs the meter (0-3 mil) from a Heath DX-20 or similar
transmitter, or a junker.

Sam
706-695-5658

Thanks!
Evan

4985. new website

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: n9sbv@worldnet.att.net
Message-ID: <337f2849.250551632@praxcus>
Source record: 94153

Check out the new website on the net! N9SBV's Ham Radio Connection at Http://members.tripod.com/~n9sbv/Status.htm

This new system is oriented toward helping the new ham radio operator with resources he or she may need to get the most out of their hobby.

Lots of shareware available for download from the FTP Site. With 2 of the NEC 7 disk Changers online for starters, there is over 15 Gig online of all types of shareware software.

The WebServer is focused on Amateur Radio Related Areas. Homebrewing, Weather, RACES, FCC Rules and Regs, general Ham Radio Aids, and the like. And if you would like to put up a home page at the site....well I may even be able to accomadate a few users for that purpose. The site will be maintaining a Ham Radio focus however.

This site is located in South Bend, Indiana. It's my hope that it will become a major link for Operators in the Michiana Area to keep in touch locally and worldwide.

See you on the site!

73 de N9SBV

4986. Crystal Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: sbrown@net1plus.com
Message-ID: <5l5bjd$i7r@supernews.com>
Source record: 94154
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

I am looking for help with design of a single channel crystal receiver to monitor my local police department. They are on 453.325 Anyones help or ideas would be sincerely appreciated!!!

73 de N1VLV
Steve

4987. [Fwd: Fwd: Ellen TV show]

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-11 00:00:00 UTC
From: keslark@k2nesoft.COM
Message-ID: <33763394.8299B4F9@k2nesoft.com>
Source record: 94155

```
This is a multi-part message in MIME format.
--------------DE6D56479D15FEBD4FEC335C
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Take A Look At This!
--

Visit Kenny's Home Page at:
http://www.k2nesoft.com/~keslark
-------------------------------------------------------
John 3:16
For God so loved the world, that he gave His only begotten
Son, that whosoever believeth in him should not perish,
but have everlasting life.
-------------------------------------------------------
--------------DE6D56479D15FEBD4FEC335C
Content-Type: message/rfc822
Content-Transfer-Encoding: 7bit
Content-Disposition: inline

Received: from k2nesoft for keslark
with Cubic Circle's cucipop (v1.13 1996/12/26) Sun May 11 15:51:36 1997
X-From_: RangerO@aol.com Sun May 11 15:44:35 1997
Return-Path: <RangerO@aol.com>
Received: from emout01.mail.aol.com (emout01.mx.aol.com [198.81.11.92])
by k2nesoft.k2nesoft.com (8.8.5/8.8.5) with ESMTP id PAA18265
for <keslark@k2nesoft.com>; Sun, 11 May 1997 15:44:33 -0400
From: RangerO@aol.com
Received: (from root@localhost)
by emout01.mail.aol.com (8.7.6/8.7.3/AOL-2.0.0)
id QAA28600;
Sun, 11 May 1997 16:42:42 -0400 (EDT)
Date: Sun, 11 May 1997 16:42:42 -0400 (EDT)
Message-ID: <970511164238_2051646768@emout01.mail.aol.com>
To: nwbc@hotmail.com, keslark@k2nesoft.com, steinbar@juno.com,
CnGMASSART@aol.com, jdiane@itw.com, budtax@juno.com, jpierrel@isrv.com,
SFMedWoman@aol.com, oj1112@exmail.usma.army.mil
Subject: Fwd: Ellen TV show

---------------------
Forwarded message:
Subj: Fwd: Ellen TV show
Date: 97-04-30 13:36:27 EDT
From: RYANRON
```

To: CSearcy@juno.com,BSchale
To: wgmoore@sprynet.com,Ranger O
To: psptg@juno.com,caslen@dtx.net
To: VSpalding

Forwarded message:
From: 102772.2742@CompuServe.COM (Anne P. LeGare)
To: legarejm@js.pentagon.mil (Marc (Work))
CC: MBarefield@n-link.com (Mike and Jan Barefied), pabesson@aol.com (Ann and Paul Besson), fcorbin@smartsun.smartnet.net (Fred and Erin Corbin), ryanron@aol.com (Ron and Sharen Cordell), Gandara@clark.net (Joe and Nita Gandara), cckauai@aloha.net (Bob and Becky Hallman), macpastor@aol.com (Pastor Paul Hansen), PeggyHoek@aol.com (Peggy Hoekenga), 71644.1401@CompuServe.COM (Larry D. McCallister), 105222.2645@CompuServe.COM (Stuart G. McLennan), Palekas@smartnet.net (Ed and Julie Palekas), 76352.3625@CompuServe.COM (Tania Patten), ppolk@aol.com (Peter and Pam Polk), 102617.1536@CompuServe.COM (Don and Jean Price), roberson@winning.com (Mathew Roberson), tschmj@aol.com (Tom & Jean Schmidt), inhisarmy@aol.com (Lenny and Liz Wong)
Date: 97-04-30 11:43:36 EDT

I got this from OCF on line. Please forward, Thanks, Anne

I checked the phone number, it is definitely Chrysler, but they are only open business hours.

Please pass on--Many friends were left off because each of you could pass on to more mutual friends than I could.

In a message dated 97-04-25 12:16:47 EDT, you write:
<<
Chrysler had pulled their ad from the TV series "Ellen" that's got a
woman who's coming out as a lesbian. They are trying to see if
there's much support for doing so. I would encourage you to call
their number--1-800-992-1997. You have to wait about 90 seconds to
get to a real person and then you can tell them something like,
"Thanks for having the moral character as a corporation to withdraw
your support for the Ellen show." They will ask for your name.

You also might want to pass this on to other friends and email lists
and encourage them to do the same thing. We need to flood their phone
system.
>>

--------------DE6D56479D15FEBD4FEC335C--

4988. Re: IC-706 XCVR to Computer Interface Cable, Help Please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: seifertr@ix.netcom.com
Message-ID: <33766ad6.470988@nntp.ix.netcom.com>
Source record: 94067
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Mon, 12 May 1997 00:16:40 GMT, ke4zv@bellsouth.net (Gary Coffman)
wrote:
>> [SNIP]
>>(1) Can anyone direct me toward a schematic/wiring diagram for doing
>>so? and (2) I prefer to connect the cable to my serial port; does the
>>MFJ cable connect to the serial port or the parallel port? If I must
>>use the parallel port, I will.
>
>The radio uses Icom's CI-V buss architecture. This is a party line buss
>driven by OC drivers at TTL levels, IE it's sort of like ethernet. Icom sells
>an interface which can break that out to RS232 serial, but it isn't cheap.
>For controlling a single radio (the buss can control several, all daisy chained),
>you can build a circuit to convert to RS232 levels and split Txd and Rxd for the
>serial link. This circuit is a couple of transistors and a diode. MFJ builds this
>into the cable. You can wire it up on a piece of perf board tucked inside the
>DB connector of a homemade cable.
>
>The circuit is included in the documentation for several of the shareware and
>freeware programs you can use to control the radio.
>
>Gary Coffman KE4ZV | You Make It | Email:

Gary,

Thanks for the reply, but I'm still unable to find any useful info.
I've downloaded John Hansen's (WA0PTV) radio control program, but
there are no plans to build the cable...he only recommends purchasing
the MFJ cable. Subsequently, I found a small circuit which converts
the RS-232 voltages to TTL levels and back; however, the circuit is
somewhat illegible and the broader context for its use is not
described (i.e. how does it get inserted in the cable between the comm
port and the XCVR port?) BTW, I found this at
http://www.synapse.net/~kentrol/ under the "PC Interfaces" menu,
"Level Translators" paragraph, "schematics" hypertext keyword in
paragraph.

I also noticed that the program I have will not work with Win 3.11,
which is what I have loaded on my notebook computer.

So at this point, I still need a circuit schematic, wiring diagram,
and additionally, the names/sources of some additional
shareware/freeware control programs (for both Win 3.1 and Win 95).
Sorry to pester...but please help...

Many thanks...

Best Wishes,
Rich

---
seifertr@ix.netcom.com

4989. AR1500, hints,kinks,hacks,opininions,etc.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: forensi1@ix.netcom.com
Message-ID: <5l618g$cdd@sjx-ixn4.ix.netcom.com>
Source record: 94068

My dad just gave me his old AR1500, my AR800 was stolen, and I was wondering if anyone knows of means of rs232 access, or any other tips etc. I don't realy care about cell freqs, which it already has, just not into listening to them. Opinions & tips would be grealtly appreciated.
thanks, KB5YOK, Scott.

4990. Re: IC-706 XCVR to Computer Interface Cable, Help Please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33765d94.27818081@news.atl.bellsouth.net>
Source record: 94069
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

On Sun, 11 May 1997 18:48:22 GMT, seifertr@ix.netcom.com (Rich Seifert) wrote:
>I would like to connect my computer to my IC-706 transceiver, but I
>need the cable to connect the computer to the radio. MFJ sells the
>MFJ-5383i cable for $49.95, but I'd rather build my own cable.
>
>(1) Can anyone direct me toward a schematic/wiring diagram for doing
>so? and (2) I prefer to connect the cable to my serial port; does the
>MFJ cable connect to the serial port or the parallel port? If I must
>use the parallel port, I will.

The radio uses Icom's CI-V buss architecture. This is a party line buss
driven by OC drivers at TTL levels, IE it's sort of like ethernet. Icom sells
an interface which can break that out to RS232 serial, but it isn't cheap.
For controlling a single radio (the buss can control several, all daisy chained),
you can build a circuit to convert to RS232 levels and split Txd and Rxd for the
serial link. This circuit is a couple of transistors and a diode. MFJ builds this
into the cable. You can wire it up on a piece of perf board tucked inside the
DB connector of a homemade cable.

The circuit is included in the documentation for several of the shareware and
freeware programs you can use to control the radio.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

4991. Simple Tube or Transitor Receiver plans.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: Trapper@nonya.com
Message-ID: <3376c12e.4698723@nntp.infoave.com>
Source record: 94070

I just got a GENERAL RADIO 20,40,80 meter Tube type X-mitter with plug in coils at our local ham-fest. I am very intersted in building a Tube type receiver. If anyone has plans for receivers, and access to a photo copier... I would be glad to send postage, etc..

Plans have to be super simple.... I am just now learning about transitors tank circuits.... and when I saw this beautiful lil' glow in the dark x-mitter.... I knew I had to change my course of study! :)

Thanks in advance for any assistance you may lend,
Marty KF4HTL ngcbwo@infoave.com

4992. Re: Spectrum analyzer rental?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: n1rkt@dekalb.Net
Message-ID: <5l6h67$iht@news1.infoave.net>
Source record: 94071
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

In article <3376699E.105E@pop.removethistomailme.net>, jmiles@pop.removethistomailme.net wrote:
>Is there any place where an individual hobbyist (not associated with any
>large 3-letter corporations) can rent a fairly modern spectrum analyzer
>(Tek 492/494 or similar) for a short time (~1-2 wks), at a reasonable
>cost?
>
>I need to tweak a homebrew hybrid DDS/PLL circuit for noise sideband
>performance, and would like to be able to see down to about 100
>Hz/division or so between 700 MHz and 1.2 GHz, with an amplitude range
>of at least 90-100 dB. I could always sell my car and buy a 494, but
>would rather not. :-) I'm in the Austin, TX area, if anyone knows a
>good rental place that will take Visa/MC.
>
>tnx -- jm
>
>---
>Note: My E-mail address has been altered to avoid spam
>---
>
I think you would have better luck buying one and then returning it. But you might try Tucker if you can handle a large security deposit or at least fake it.
Good Luck

4993. night photography

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: lee@thomas
Message-ID: <3376b310.0@lagoon.idirect.com>
Source record: 94072

Hi, we'll get right to the point. We operate one of the finest quality custom color labs in the USA. To introduce you to our service we're offering the following Internet enlargement special:

Your color negatives hand printed on Kodak Supra Professional 16x20 inch paper. All negatives printed full frame. Exhibition quality and color corrected---send us any size color negative (35mm up to 4x5 inches).

* * * * * * * * * *

16 x 20 inch color enlargement special
5 identical prints from same negative-------$79
10 identical prints from same negative------$129

* * * * * * * * * *

Most orders 1 to 2 days in the lab. Add $6 priority mail shipping; international add $10. We accept Visa and Mastercharge.

Mail your negative(s) and payment to:

TSP CUSTOM LAB
P.O. Box 248
Lake Village, IN 46349 USA
phone 219-992-2413 fax 219-992-2644

visit our website
http://www.centralcontrolsystems.com/saylordesign/photo/prolab.htm

4994. Re: Low noise FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: johnsonhe@aol.com
Message-ID: <19970512111101.HAA20858@ladder02.news.aol.com>
Source record: 94073

Try the 2SK369. Two in parallel are sub-nanovolt at 10 Hz.

Available from MCM Electronics, A dollar and change qty 1, $0.80 each 10 quantity.

W4ZCB

4995. Re: Source-follower?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5l6m57smm3@nadine.teleport.com>
Source record: 94074

In article <33759E35.3B64@online.no>, J M Noeding <la8ak@online.no> wrote:
>Hi
>while emitter follower have a voltage gain of 0.9-0.95, I have bad
>experience with source followers. JFET's seems to be best of the kind,
>the high conductance BF246 (yfs = 20mmho) is far better than any dual
>gate mosfets (with G1 and G2 tied together). All measurements I have
>done shows a negative gain of '-6dB' or worse.
>Any other experience? I have seen applications where somebody thought
>that the DG fet source follower was a good choice, but my experience on
>that particular circuit always fail.
>Any suggestions based practical experience??

To a first approximation, the output impedance of a source follower is 1/gm. So your BF246 will have an output impedance of about 50 ohms. Bipolar transistors have a very high gm, and correspondingly low output impedance. The low gain is probably due to the combination of output and load impedances (the latter including the source pulldown resistor) forming a simple voltage divider. You can take eliminate the loading of the source pulldown resistor by substituting for it a matched FET with gate connected to drain. (That is, the new FET is matched with the source-follower FET, for IDSS.) This "totem pole" circuit has the advantage of near-zero offset voltage from input to output. (You'll find this at the vertical input of many Tek 'scopes.)

You've apparently already discovered that higher-gm FET's do best. There are FET-bipolar combination circuits which can give the best of both worlds, with an FET at the input and transistor at the output. One of the most common, however, tends toward instability. The FET drain is connected to the base of a PNP bipolar transistor and a resistor to V+. The PNP emitter goes to V+. The PNP collector is connected to the FET source and a resistor to V-. This is also the output terminal. Input is the FET gate. Various methods can be used to stabilize it depending on the characteristics of the transistors and the frequency of operation.

Roy Lewallen, W7EL

4996. fs: microwave equipment ATV DATA 10Ghz c-band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: "petersmt@worldaccees.nl" <petersmt@worldaccees.nl>
Message-ID: <3376AF4C.AAD@worldaccees.nl>
Source record: 94075

Even kijken op...
Just look at..
http://www.worldaccess.nl/~petersmt/forsale.htm

4997. Re: Source-follower?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5l7lci$no0$1@nadine.teleport.com>
Source record: 94076

In article <5l6m57smm3@nadine.teleport.com>,
w7el@teleport.com (Roy Lewallen) wrote:
>. . .
>You can eliminate the loading of the source
>pulldown resistor by substituting for it a matched FET with gate connected
>to drain. . .

This should be "with gate connected to SOURCE. . ."

Roy Lewallen, W7EL

4998. Re: Crystal Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5l7kuv$aki@hpcvsnz.cv.hp.com>
Source record: 94077
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.basics

sbrown@net1plus.com wrote:
: I am looking for help with design of a single channel crystal receiver to
: monitor my local police department. They are on 453.325 Anyones help or ideas
: would be sincerely appreciated!!!

Simple way to keep things very cheap and reasonable quality: Buy an old
450MHz-band pager receiver...expect to pay about $10, maybe less. Get
one that uses one of the common FM IF/detector ICs that you can get data
for. Recrystal it and hack the detector output to an audio amp. Ones
I've gotten I can easily add squelch to, and something like an LM380 or
LM386 takes care of the audio amp. Sometimes you can find batches
of pager receivers all the same, if you are looking to make a bunch of
these. That would have the advantage of letting you replicate the same
hacks after you figured out the mechanical and electrical stuff for one
of them.

--
Cheers,
Tom
tomb@lsid.hp.com

4999. Re: Low noise FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5l7mp5$aki@hpcvsnz.cv.hp.com>
Source record: 94078

Bob Mueller (r.mueller@kfa-juelich.de) wrote:
: > On 8 May 1997 12:16:20 GMT, i3683@csc.dk (Anders Heerfordt) wrote:

: > >Can anyone recommend a commonly available N-channel JFET as lownoise?

: 2SK369 at 2 mA and 1 kHz noise voltage 0.8 nV/(rtHz)
: Noise figure at 100 ohms and Drain Current=2 mA is about
: 4 dB typ. at 10 Hz.
: gm is above 25 millisiemens at 5 mA (and the high gm is the
: secret of the low noise, along with clean processing.)

: 2SK371, 2SK170 and 2SK 147 are as good, or nearly so.

Thanks to Bob for these recommendations...but I suspect Anders should
have mentioned that the signal source is a capacitor microphone, and
at low frequency, the noise current will also be a consideration.
Are these parts good for low noise current as well? At 10Hz, the
source impedance Anders is dealing with may well be around 10^9
ohms. (Obviously this precludes using a bipolar as others
suggested.)

--
Cheers,
Tom
tomb@lsid.hp.com

5000. IC Announcement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: Todd Peterson <elab@netins.net>
Message-ID: <33777294.197C@netins.net>
Source record: 94079

Integrated Circuit Announcement

We are pleased to announce the addition
of two unique new IC's to our product lineup:

EDE700: Serial to LCD Interface IC - provides a
serial link(2400/9600 Baud) to most any LCD display.
Offers standard horizontal shifting & new vertical
scrolling, as well as custom character generation.
Data can also be read back from the display serially
for use in limited-memory systems. $15.00 Qty. 1

EDE1400 Serial to Parallel Printer IC - allows serial
data (2400 Baud) to be printed on a standard parallel
(Centronics) dot matrix or thermal printer. Great for
any application requiring hard-copy of data without
PC intervention. $13.90 Qty.1

Both of these 18-pin IC's are great for microcontrollers,
BASIC Stamp(tm) users, or OEM designs & come complete with
a printed datasheet fully explaining their operation & use.
For further information & PDF datasheets, see our web site:
http://www.netins.net/showcase/elab
Look in the 'Integrated Circuits' section.

E-LAB Digital Engineering, Inc.
1932 Hwy. 20 - P.O. Box 246
Lawton, IA 51030-0246

(712) 944-5344
FAX: (712) 944-5501

5001. Level Converter in 1996 Handbook question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: toms@inconnect.inconnect.com
Message-ID: <5l5p2s$s7m$1@news.inconnect.com>
Source record: 94080

Has anyone built the level converter in the station accessories section of the 1996 Handbook? This is the one that has the TTL/RS232 interface for all major radios. I remember seeing something posted somewhere about some rework required to get it to work with ICOM radios. Also, it is my understanding that the buffers are not required. Thge actual ICOM product only has the MA232 chip. (Actually, I have several versions of this chip some which do not require the discrete capacitors).

Any insight would be helpful.

-- Best Regards,

Tom Schaefer
Computer Consultant Unisys A Series & Windows NT: Amateur Radio NY4I

5002. Re: WTB: 10 meter amp - HELP

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <FVQOY3A3y1dzEwNf@two-way.demon.co.uk>
Source record: 94081

In article <336F3E62.6197@taxes.net>, Jim <jstrohm@taxes.net> writes
>unit77 wrote:
>>
>> WHY do you NEED an amp on 10 mtr?
>
>If you've ever worked a DX pile-up on 10, you know why.
>
>It's nice to work VKs on QRP phone -- I've done it from Texas -- but it
>doesn't happen very often and sometimes the "minimum power required to
>establish and maintain communications" is a kilowatt, even with a decent
>beam antenna.
>
>If you're using an HTX-100 or a CB conversion, sometimes it's nice to
>get up to "normal" ham power levels, especially if you're mobile.
>That's when it would be nice to have a 10 M amp. Too bad it's so
>hard to get them for legitimate use in this country.
>
>I bet you'd be surprised at the number of hams who've removed
>ILLEGAL CB "leen-yars" such as the Texas Star amps from CB service,
>and made them marginally legal by putting them on 10 or 15.
>You get to do this once a year.
Hi Jim,
Just let me know when you can hear europe on 160m and I'll call you from
the mobile and you can hear my amp!
I recently imported an SGC cube which seems to run just fine so if this
is in the budget give them a call, alternatively you'll find both Henry
and KLM supply HF all band mobile heaters that'll give you nearer a KW,
it's just that they don't advertise these much, I wonder why!
Also just completed my first RF Electronics 1.8-30Mhz home brew kw (only
allowed 400w sic) home brew, and you'll find him in Myrtle Beach, SC
plus QST.

73

Phil Unit 148 on 11m
G4ZOW most everywhere else, both Xtreme mobile.

Heil headset,Datong RF 12db processing,Trans World communications
tsvr,8X2SC2879 amp, Jennings Vac Variable, home brew Bug Catcher (no
taps!) 13'6", 20" cap hat, corona ball! And thats just for 160. WE TAKE
NO PRISONERS.

--
philip de cadenet

5003. Student ham looking for tube-era Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: mjsilva@ix.netcom.com
Message-ID: <5l7e6t$rlf@dfw-ixnews12.ix.netcom.com>
Source record: 94082

Hi all,

I'm helping a high-school ham build his first tube transmitter around some 6L6s he got hold of, and while he's very enthusiatic he's noticed that his '93 Handbook doesn't have much tube info :) / :(So, I'd like to find
him a Handbook from the tube era (say mid '50s to mid '60s) that won't break his meager bank. If anybody has one at a reasonable price please let me know and I'll put you two in touch. Thanks.

73,
Mike, KK6GM

5004. Re: how to remove an article?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1205970045580001@news.vcnet.com>
Source record: 94083

In article <33757c7e.2908551@news.online.no>, kjellvl@online.no
(Kjell-Viggo Lovhaug) wrote:

> Never explain - your friends do not need it and your enemies will not
believe it >anyhow.

How true.
To people who don't know something, who don't know you, an explanation may
do some good.
cheers
Rich---

--
--Rich-- ---805-386-3734, ag6k

5005. Re: Source-follower?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580001205971319160001@news.europa.com>
Source record: 94084

In article <5l6m57smm3@nadine.teleport.com>, w7el@teleport.com (Roy Lewallen) wrote:

:In article <33759E35.3B64@online.no>, J M Noeding <la8ak@online.no> wrote:
:>Hi
:>while emitter follower have a voltage gain of 0.9-0.95, I have bad
:>experience with source followers. JFET's seems to be best of the kind,
:>the high conductance BF246 (yfs = 20mmho) is far better than any dual
:>gate mosfets (with G1 and G2 tied together). All measurements I have
:>done shows a negative gain of '-6dB' or worse.
:>Any other experience? I have seen applications where somebody thought
:>that the DG fet source follower was a good choice, but my experience on
:>that particular circuit always fail.
:>Any suggestions based practical experience??
:
:To a first approximation, the output impedance of a source follower is
:1/gm. So your BF246 will have an output impedance of about 50 ohms.

Note that this is small signal approximation.

When I was referring to my use of dual gate mosfets, I was talking about large signal performance, i.e. fast settling amps, osc buffers, and later stages in IF's

To get a common drain FET circuit to really have any large signal performance directly driving 50ohms, it would need alot of standing current- much more than any small signal FET can handle.

Rob.

ps. failure to pay heed to this is common cause of inband IMD in poorly designed IF stages- been there

5006. My Last Post

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: keslark@k2nesoft.COM
Message-ID: <33778FAD.AC15C50E@k2nesoft.com>
Source record: 94085

Hi,
Sorry Bout My Last post.. It was an accident.. click on mailin list
stead of somin else.. Please Do-NOT Flame me i realise my misteak and am
sorry for all the trouble!
--

Visit Kenny's Home Page at:
http://www.k2nesoft.com/~keslark

John 3:16
For God so loved the world, that he gave His only begotten
Son, that whosoever believeth in him should not perish,
but have everlasting life.

5007. Re: Panel Engraving

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: dana@randomc.com
Message-ID: <5l84vk$4hg@news1.randomc.com>
Source record: 94086
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

you alt to see this hammarlund that phil restored. he is in atlanta. so
bob, give me a call sometimes, i am located in griffin, georgia. you'all
have fun with the old radios, i like them also. from n4pge.
Geoffrey Schecht (geoffs@onr.com) wrote:
: Save your money; photoengraving is a lot simpler. You'll go broke stocking
: all of the bits that one of those CNC engravers uses and the hold-down jigs
: required for the various panels you'll be doing is gonna run into a lot of
: money, too.

: If you have a PWB layout package that can produce Gerber plots (there are
: some public-domain or shareware ones out there that'll work) , you can
: create the panel on your computer and then photoetch the panel yourself
: (acid or NaOH for aluminum) or have it done at a plating shop. It's
: possible to use regular CAD software like QuickCAD, AutoCAD or CADKey to do
: the artwork and have it plotted and shot photographically at a blueprint
: house if they don't have something like HPGL-to-Gerber converters on hand.

: You can also cut a Rubylith photomask if you're really desperate for
: something to do; that's how they did it in the sliderule days and the front
: panels on the old Tek 500-series scopes do look pretty good. Any blueprint
: shop can shoot the ruby onto orthographic line-art film for about $30; then
: you're in business.

: Either way, you wind up with a photomask that's good for a zillion panels
: if you take care of it when you're using it.

: Nearly all of the WWII and later era panels that have sunken/raised
: lettering were done with a photoetching process. The neat thing about the
: sunken letters is that you can fill them with paint for a really
: professional look.

: You can buy a can of photoresist spray-on at an electronics supply house
: (positive or negative working, take your pick). I think that GC Electronics
: sells it in kit form. Kodak and Shipley (if Shipley's still in business)
: sell it in larger quantities but it doesn't keep well and the last time I
: checked; you couldn't buy less than a gallon at a time. It can be exposed
: under a shortwave UV lamp and I think that Kodak KPR is exposable under
: sunlight.

: Trust me, a can of photoresist weighs a >lot< less than that CNC mill,
: requires no CAM programming and your artwork is limited only by the
: capability of your CAD package.

: BOB DUCKWORTH <bob@atl.org> wrote in article <33720D64.601@atl.org>...
: > Saw a CNC engraver at a local surplus spot and got to thinking about

: > all those BA panels that need lettering. It has 20 fonts so probably
: > can't match perfectly without buying more or coding them (WORK!).
: >
: > If there is enough interest in engraving BA and homebrew panels
: > I'll see if I can pick the thing up (as in acquire, it weighs 500lb)
: >
: > -bob
: > wb4mnf
: >

5008. Re: Source-follower?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: Christopher Trask <ctrask@primenet.com>
Message-ID: <5l8frhkhh1@nnrp01.primenet.com>
Source record: 94087

jupiter@europa.com wrote:
: In article <33759E35.3B64@online.no>, J M Noeding <la8ak@online.no> wrote:

: :Hi
: :while emitter follower have a voltage gain of 0.9-0.95, I have bad
: :experience with source followers. JFET's seems to be best of the kind,
: :the high conductance BF246 (yfs = 20mmho) is far better than any dual
: :gate mosfets (with G1 and G2 tied together). All measurements I have
: :done shows a negative gain of '-6dB' or worse. Any other experience?

For driving a low impedance load, the best approach that I've
found to date is to use what is know as a bootstrapped source follower.
Here, a PNP bipolar is added to the circuit. The drain is connected to
the supply by a resistor, possibly with a choke in series. The base of
the PNP device is connected to the drain, and the emitter to supply with
an appropriate biasing resistor, as well as AC bypassed to the supply.
The PNP collector is connected to the FET source. If the drain to supply
impedance is sufficiently high, this has the effect of multiplying the
gm of the FET by the hfe of the PNP bipolar.

For a thorough treatment of this circuit, see:

1. Ridler, P.F. and A.M. Rhod, "The Parameters of the
Current-Driven Source Follower," Electronic Engineering,
May 1967, pp. 290-291.

as well as,

2. Sevin, Leonce J., "Field-Effect Transistors,"
McGraw-Hill, 1965, pp. 64-67.

I gotta go.

Regards,

Chris

,----------------------.
/ If you understand it, \ Circuit Design for the
/ then it's obsolete! / RF Impaired
\ _______,--------------'
_ |/
oo\ Chris Trask / N7ZWY
(__)\ _ Principal Engineer
\ \ .' `. ATG Design Services
\ \ / \ P.O. Box 25240
\ '" \ Tempe, Arizona 85285-5240

. ( ) \
'-|)__| :. \
| | | | \ '.
c__; c__; '-..'>.__ Email: ctrask@primenet.com

Graphics by Loek Frederiks

5009. FS: Kenwood YK-455C-1 500Hz Filter , Lower priced.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: grainone@caserta.peoples.it
Message-ID: <337a7f4c.438975@news.interbusiness.it>
Source record: 94088
Cross-posted to: rec.radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Specially dedicated to TS-140/680, but VG also for lot of others KW
rtx.I sell it tested OK, like new for $ 70 shipped to your door.
e-mail me to:
grainone@caserta.peoples.it

73 de Vanni - I8JJB
--
Vanni R.
Caserta,Italy

5010. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: desmith@telalink.net
Message-ID: <5l84oi$83q@apple.telalink.net>
Source record: 94089

Bob Doyle <doyle@DELETE_THIS.primenet.com> wrote:
>(at the positive peaks, you're actually transmitting *twice* the power you'd have with no
>> modulation at all)
>Oops. I'm sure you already know this but, actually you're transmitting
>four times the power which is twice the voltage.

Oops. Bob is absolutely right.

73 Doug

5011. Re: desin for simple solid state fm tourist info radio?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-12 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <5l7ej7$je8$1@news1.rmi.net>
Source record: 94090

```
: On Sat, 10 May 1997 20:31:19 +0100, Nick Rogers
: <nrogers.edo.ndown@nics.gov.uk> wrote:

: >any one tell me where i might find a simple solid state fm radio with no
: >moving parts able to broadcast a 3 min message over distances of about
: >10-20 yards
: >we are looking a a simple fm based tourist guide system for places of
: >interest
: >many thanks

Nick,
For a plug-n-play solution you could look into those drive-by units
which real estate folks plant in the front yard of homes for sale.
Those suckers are in the 10-20 yard (-: sic :-) range.

--
Marvin Jones jonz@rmi.net
Gunnison, Colorado
```

5012. Was Re: LINUX for hams??? Now: cheap CAD packages for Mac?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580001305971204540001@news.europa.com>
Source record: 93956
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

In article <33738AB5.6D25@cycat.com>, MichaelN@cycat.com wrote:

:> Don't depend on M$, use Linux for your HAM software AMATEURS FOR AMATEURS !
:
:Can you give a pointer to a good distribution of Linux for hams?
:Which distribution and where is it available.
:I would really like something that is available on CD rom, has all the
:ham and electronic goodies and doesn't require me to become a total
:UNIX guru to get working.
:
:Am I asking for too much?
:
:michael N6CHV

I'm running Mac OS on PPC now, but am thinking about adding extra hard drive and install MkLinux for Mac.

Get this- local bookstore sells 7 CD set of MkLinux including gigabytes of extra stuff for $50.

On that basis alone, it may be hard to resist.

One big factor is that I am using Microsim 7.1 CAD suite and have come up against limits on eval version for designing variable BW constant CF crystal filters.

I have MacSpice, but has no nice GUI or schematic capture. The last time I used Spice on Unix was at Berkeley Evans hall basement using punch cards :) Does it now have nice GUI like Microsim??

Rob.

5013. Re: QST Hams with Macs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: measures@mail.vcnet.com
Message-ID: <measures-ya02408000R1305970740370001@news.vcnet.com>
Source record: 93957
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

In article <scott-0405972024590001@allnet.pr.mcs.net>, scott@allnetinc.com (Scottso) wrote:

> Thank you, Thank You, THANK YOU!!!
> It is about time!!!
>
> Scott
>
I agree, Scott.
-editorial-
Dollar Bill's clunky OS has a bit too much in common with a quagmire for me.
I see that the world's fastest laptop is currently an Apple Power Macintosh. CISC technology is old hat. RISC is where it's at.
>
> In article <john-0105970655410001@wd1v.mv.com>, john@wd1v.mv.com (John D.
> Seney) wrote:
>
> > Announcing New WWW Site for Macintosh Ham Radio Enthusiasts
> >
> >
> > http://www.mv.com/ipusers/wd1v
> >
> >
> > Mac Ham Software including:
> >
> > Macnet Roster:
> > a database of all hams in the world using Mac computers
> >
> > WD1V's Ham Radio EXAM Simulators:
> > the fast path for upgrading your ham license with a Mac
> >
> > Plus more Mac information - come see!
> >
> > 73,
> >
> >
> > John D. Seney |_|_|_|_| john@wd1v.mv.com
> > 144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
> > Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
> > Voice Mail 617.686.9882 | | | | | Fax 603.627.1623
> >
> > http://www.mv.com/ipusers/wd1v

--
--Rich-- ---805-386-3734, ag6k

5014. Etching Panels

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: "Barry L. Ornitz" <ornitz@tricon.net>
Message-ID: <01bc5f53$eaf54c80$LocalHost@ornitz>
Source record: 93958

Geoffrey Schecht <geoffs@onr.com> replied to an original post by Bob Duckworth, WB4MNF, about panel engraving:

> Save your money; photoengraving is a lot simpler. You'll go broke
> stocking all of the bits that one of those CNC engravers uses and the
> hold-down jigs required for the various panels you'll be doing is
> gonna run into a lot of money, too.

He then wrote some useful, but very outdated, information about photoengraving and photoresists.

Most "photoengraving" of electronic panels today is really a photo-anodizing process. Either the colored anodizing on an aluminum panel is dissolved away, or in high-production runs is applied to a blank panel. The deep engraving of the past has almost disappeared in today's modern world.

The idea of using a CAD program to generate an original panel layout is certainly a good one. A Gerber file is rarely necessary as today's inkjet and laser printers usually have quite adequate resolution for most panels. Negatives can be shot directly from your original on paper, and you can often print directly on transparencies.

Using printed-circuit photoresists is possible IF you know what you are doing. Not all photoresists are capable of withstanding both acid and caustic baths. The modern dry-film photoresists typically develop in mild caustic and dissolve in strong caustic baths.

KPR (originally Kodak photoresist) has not been made by Kodak for years. I believe they may have sold the rights to Shipley. It seems to keep extremely well as I have three bottles of the concentrate from back in the days when Eastman Chemical was part of Kodak. KPR can achieve really fine details but I STRONGLY suggest the amateur stay away from it. The material is extremely toxic and it contains known carcinogens both in the resist itself and in the developer (mainly monochlorobenzene). Unless you have the proper safety equipment including respiratory protection - stay away from it.

If you have access to a laminator, the dry-film resist is easy to work with. The developer is safe and relatively mild. I suspect some of the "iron-on" resists for home use would work well too. I have used the dry-film resist and mild hydrochloric acid to etch lettering into a brass plate successfully. I used an acetate transparency in a laser printer to expose the dry-film photoresist. You often need to play with the font styles and sizes as the etching can undercut the resist.

Remember when etching metal to not use the same etchant as you do for copper circuit boards. Also remember that acid etching releases extremely flammable hydrogen gas. Strong caustic etching of aluminum is possible but you have to have a resist that can handle the caustic. Agitation of the bath during etching is important.

73, Barry L. Ornitz WA4VZQ ornitz@tricon.net, ornitz@eastman.com

5015. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: netking@dircon.co.uk
Message-ID: <5lam4u$hs1$1@newsserver.dircon.co.uk>
Source record: 93959

In article <3379e2e1.4212171@eskinews.eskimo.com>,
wrt@eskimo.com (Bill Turner) wrote:
>n4mxf@aol.com (N4MXF) wrote:
>
>>However, the sidebands do not have a
>>distinctive different frequency from the carrier--they are inherently part
>>of the carrier as the amplitude is varied (increased/decreased) to create
>>what we call modulation.
><><><><><><><><><><><><><><><><><><><><><><><><><><><><><>
..And if you have a really narrow filter where you can listen to the carrier
alone, you will hear NO modulation at all. Amazing, huh?
>
>73, Bill W7TI

If you tune in to the carrier frequency with a sufficiently narrow filter,
you will hear a continuous carrier. In fact if you had a variable bandwidth
filter, and perfectly accurate measuring equipment, you could observe the
carrier variations drop off and tend towards
a constant carrier, but never precisely constant, as the filter bandwidth
tends to zero. Of course if you had a zero bandwidth filter, the time
delay through the filter would be infinity. Therefore, in a finite universe
(timewise), you can never observe a truly constant carrier.
Is it the carrier itself that remains constant? If you have a varying
carrier going through a very narrow filter, it is known that the response
of a filter to an excitation of higher bandwidth than the filter causes
it to "ring" at the centre frequency. So, you could say that there is
no constant carrier- it is the filter that is ringing to fill in
the modulation. Whether you model this mathematically as a set of
line sidebands being selected by a filter, or a varying carrier causing
a filter to ring, amounts to the same thing in the end.
It is perhaps a bit like the dilemma of describing a photon as either
a particle or a wave. It has elements of both- depending on which way
you look at it.

==
Colin Seymour
1Mb/s 2.45 GHz spread spectrum radio modems & digital video:
http://www.he.net/~netking/index.html
http://www.users.dircon.co.uk/~netking/

5016. Re: Etching Panels

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5laq8n$bek@hpcvsnz.cv.hp.com>
Source record: 93960

<<Hi Barry; good to see your postings after a long drought!>>

Barry L. Ornitz (ornitz@tricon.net) wrote:
: He then wrote some useful, but very outdated, information about
: photoengraving and photoresists.

..

: Using printed-circuit photoresists is possible IF you know what you
: are doing. Not all photoresists are capable of withstanding both acid
: and caustic baths. The modern dry-film photoresists typically develop
: in mild caustic and dissolve in strong caustic baths.

..

: Remember when etching metal to not use the same etchant as you do for
: copper circuit boards. Also remember that acid etching releases
: extremely flammable hydrogen gas. Strong caustic etching of aluminum
: is possible but you have to have a resist that can handle the caustic.
: Agitation of the bath during etching is important.

To Barry's good words of wisdom, I'll add some of my practical experience in the area...

Back when I was a graduate student, as a sideline I made front panels for a smallish high-quality consumer stereo manufacturer. The panels were (are) black anodized aluminum, the lettering showing as aluminum color. The font used was a fine serif font, and the manufacturer wanted to maintain detail int he serifs. The process I used I spent quite a bit of time on, to get it repeatable in my kitchen. Over about four years, I probably made close to 10000 panels...keeps one off the streets in the evenings.

My process was to coat the anodized panel with photoresist. I used Shipley AZ111 (later AZ111S). It comes as a lacquer. It develops in nominally 0.3 molar hydroxide. Since it's very hard to coat sharp edges well enough to keep them from etching, I did the development AND etching using a single application of a "puddle" of developer/etchant on the areas where lettering was to appear. Control of the photoresist application, drying, exposure, developer concentration and temperature, and develop/etch timing resulted in high yield...I really hated reworking panels, because it meant re-sanding and re-anodizing them. Note that there was no agitation involved, and no strong caustic etching. 0.3 molar is strong enough to dissolve the anodization layer. A finishing touch was mild scrubbing with a fine-bristle brush before the photoresist was removed. (Brighter lettering resulted from using a little Comet or similar cleanser with the brush...but wasn't normally

worth the effort.) It was very important in this process to properly dry the photoresist after it was applied to the panel. Baking (at about 150F) for half an hour was necessary, not optional. A day of curing after baking helped considerably, but the process could be "rushed" without the curing if other steps were controlled very carefully. I did some experimenting with post-development baking of the photoresist at higher temperatures, and found that indeed, as Shipley's ap notes said, the resist became much more chemically inert...the highest temperature baking results, as Shipley says, in a coating which is very difficult to remove. (A very long soak in MEK, as I recall, softens it a little.)

A couple words about the aluminum: When I was getting started, I visited the local anodizing shop, Anadite, who over the years did very good work for me. I asked about alloys that would give me a good deep black, and they recommended 2024-T3. So, I ordered 2024-T3 for the panels. Indeed, it gave very consistent deep black from Anadite, and I discovered along the way that the anodize layer on that alloy for "normal" processing is about 1/3 as thick as for other more common alloys. That bit of good luck saved me a lot of time: when I processed other alloys, I found they took about three times as long to etch, and for best results required baking the photoresist after development so it would hold up for long enough. Also, the 2024 alloy resulted in finer detail in the lettering. But when I moved and didn't have an Anadite division close at hand, I found that 2024 was exceptionally hard for most shops to anodize without doing nasty things to it: ending up with pits in the surface or streaks in the finish or other problems. Ended up actually shipping the panels to Anadite!

For those that like to experiment: I found that Ferric Chloride, as you'd use to etch a circuit board, etches anodized aluminum pretty quickly. However, it doesn't leave the exposed aluminum surface bright. Also, ferric chloride will etch many stainless steel alloys.

My experience with the Shipley AZ111 lifetime is similar to Barry's with KPR, I guess...I'm using the last of a quart I bought in about 1981, and it still works OK. Was stored dark and cool most of the time.

--
Cheers,
Tom
tomb@lsid.hp.com

5017. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5larjl$bek@hpcvsnz.cv.hp.com>
Source record: 93961

Colin Seymour (netking@dircon.co.uk) wrote:

: If you tune in to the carrier frequency with a sufficiently narrow filter,
: you will hear a continuous carrier. In fact if you had a variable bandwidth
: filter, and perfectly accurate measuring equipment, you could observe the
: carrier variations drop off and tend towards
: a constant carrier, but never precisely constant, as the filter bandwidth
: tends to zero. Of course if you had a zero bandwidth filter, the time
: delay through the filter would be infinity. Therefore, in a finite universe
: (timewise), you can never observe a truly constant carrier.
: Is it the carrier itself that remains constant? If you have a varying
: carrier going through a very narrow filter, it is known that the response
: of a filter to an excitation of higher bandwidth than the filter causes
: it to "ring" at the centre frequency. So, you could say that there is
: no constant carrier- it is the filter that is ringing to fill in
: the modulation. Whether you model this mathematically as a set of
: line sidebands being selected by a filter, or a varying carrier causing
: a filter to ring, amounts to the same thing in the end.
: It is perhaps a bit like the dilemma of describing a photon as either
: a particle or a wave. It has elements of both- depending on which way
: you look at it.

But the filter is simply a way to observe the system...the behavior of
the system is independent of the filter used to observe it. The math
says the carrier remains constant amplitude, and you can make
measurements that match the math within the accuracy of your system and
your measuring tools...you can also use a filter with only zeros to
observe the system, without ringing, and see only the carrier, assuming
you have put zeros exactly on the sideband frequencies. You don't have
to measure a practical system very long to exceed the dynamic range of
any realizable instrument. (I regularly make such measurements, and
when I need to, do it to in excess of 140dB dynamic range. I can also
implement an amplitude modulated signal and spectral analysis tools
entirely within a DSP or other processor and get much greater dynamic
range.)

--
Cheers,
Tom -- K7ITM
(Somewhat spoiled by easy access to some nice spectral analysis tools)
tomb@lsid.hp.com

5018. RE: AM, why handbook shows carrier changing.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: ecsclfe@lux.latrobe.EDU.AU
Message-ID: <9705130222.AA26755@lux.latrobe.edu.au>
Source record: 93962

Just my 2 cents on this subject.

Doug Smith wrote:
>
> hynde@flash.net.no-spam wrote:
> > All the examples I've found show a modulated AM
> >carrier with what appears to be a sine wave changing in amplitude with
> >audio. I have a problem with this, if it's true when you hit 100%
> >modulation YOUR OFF THE AIR.
>
> This is exactly what happens. But you're only "off the air" at the
> negative peaks of the modulating waveform. (at the positive peaks,
> you're actually transmitting *twice* the power you'd have with no
> modulation at all)

This subject has always been a "gripe" with me. For years I have
heard lecturers and hams talking about a "modulated" carrier. When
in fact, the carrier is not modulated at all. The carrier remains at
a constant amplitude, regardless of if you talk or if you don't.

The mistake people fall into is that they speak of the
"AM Envelope" as if it was a picture of a varying carrier. The
"AM Envelope" is a COMPLEX signal, containing more than one frequency,
therefore you cant make any comments about single frequencys in
that envelope.

The equation for an AM transmission of carrier frequency (wf) with
modulation frequency (wm) is :

AM(t) = sin(wf)t + 1/2cos(wf - wm)t - 1/2cos(wf +wm)t

This equation shows that the carrier does not change at all,
but the sidebands of the carrier do. However, depending on our
definition of "modulation" we may say that the carrier is modulated
with our audio tones, etc.

However, my point is that if anyone simply points to a
"AM Envelope" stating that here is a picture of a carrier changing
with the modulating frequency, they are wrong.

Hope this sheds some light on the subject.

Regards,
Luke

--
Luke Enriquez VK3EM "I only cook with Non-violent

3rd Year Electronic Engineering fruit that pulps itself."
Latrobe University, Victoria, Australia.
ecsclfe@lux.latrobe.edu.au
--

5019. Rockford Fosgate!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: "Carol N. Wright" <cnw@HiWAAY.net>
Message-ID: <Pine.OSF.3.94.970513212206.13498A-100000@fly.HiWAAY.net>
Source record: 93963

Hey Gange,
I need some information. I have a Rockford Fosgate of a friends that is a Punch 45 HD Mosfet. Someone has let the speaker wires touch and burnt some transistors up I think.

The transistors are the BUZ R238. Any help is much appreciated. Thanks,
Matt, AE4JM
cnw@HiWAAY.net

5020. Re: compression trimmer caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <33786D07.2234@crpl.cedar-rapids.lib.ia.us>
Source record: 93964

joewalsh wrote:
>
> I'd like to build a small receiving loop for 80 or 160 meters. The designs
> I've seen call for a variable cap in the 1000pf range. The author says he
> uses compression trimmers. Anyone know where I can find these? Thanks,
> Joe

Call Antique Electronic Supply at 602-820-5411 in Tempe AZ.

Bill W0IYH

5021. Cushman 301 Scope followup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: w7lej@aol.com
Message-ID: <19970513123101.IAA24077@ladder01.news.aol.com>
Source record: 93965

Someone named George replied to my earlier post seeking info on the
Cushman
301 Scope plug-in. If you are still out there, George, I lost your e-mail
address.
Please reply to me at the address below.

All others, please pardon the bandwidth.

73,

Marty Gulseth
W7LEJ@aol.com

5022. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Gabe Nemeth <gabe@bnr.ca>
Message-ID: <33785E71.587D@bnr.ca>
Source record: 93966
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Michael wrote:
>
> > Don't depend on M$, use Linux for your HAM software AMATEURS FOR AMATEURS !
>
> Can you give a pointer to a good distribution of Linux for hams?
> Which distribution and where is it available.
> I would really like something that is available on CD rom, has all the
> ham and electronic goodies and doesn't require me to become a total
> UNIX guru to get working.
>
> Am I asking for too much?
>
> michael N6CHV

Try the Debian CRDOM is is available for around $40.00 CDN. Yhey have a
web site at:
http://www.debian.org

--
Gabe Nemeth (VE3SLJ) The information above, that may appear as
Northern Telecom Canada forms of text, graphics, etc, is not endorsed
by
522 University Ave. 14th Flr. Northern Telecom, NORTEL, BNR.
Toronto, M5G1W7
Ontario, CANADA

5023. how?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Jacques Mallette <alain.mallette@sympatico.ca>
Message-ID: <33794ABD.709E@sympatico.ca>
Source record: 93967

Hi! I would like to know how i can do a Amateur Radio!!!

5024. Re: Simple Tube or Transitor Receiver plans.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Andy <muldowne@wilde.oit.umass.edu>
Message-ID: <01bc5fd4$4fcbe800$a0b37780@oit.umass.edu.umass.edu>
Source record: 93968

Trapper Jones <Trapper@nonya.com> wrote in article
<3376c12e.4698723@nntp.infoave.com>...
> I just got a GENERAL RADIO 20,40,80 meter Tube type X-mitter with plug
> in coils at our local ham-fest. I am very intersted in building a
> Tube type receiver. If anyone has plans for receivers, and access to
> a photo copier... I would be glad to send postage, etc..
>
> Plans have to be super simple.... I am just now learning about
> transitors tank circuits.... and when I saw this beautiful lil' glow
> in the dark x-mitter.... I knew I had to change my course of study!
> :)
>
> Thanks in advance for any assistance you may lend,
> Marty KF4HTL ngcbwo@infoave.com
>
I hear you :) I have some books that have some tube receivers, ranging
from simple AM to Ham Band Regen's. If you give me your address, I'll send
a photocopy. Or, one of the books is only a $19 dollar book that I got ad
the local Media Play. It's Called "Radio Receiver Projects You can Build".
ISBN 0-8306-4190-4. It's by Homer L. Davidson. I recommend just buying
that book. Has 33 projects in all, MANY of which use tubes.
Andy
KB0MMU

5025. Re: WTB:Motorola Programming Software/Hardware

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: jupiter@europa.com
Message-ID: <jupiter-ya023580001305972308270001@news.primenet.com>
Source record: 93969
Cross-posted to: rec.radio.amateur.dx,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

In article <01bc56ba$48eb0980$70b278cf@shane.multipro.com>, "W.S.H."
<shane@multipro.com> wrote:

:I would like to purchase the necessary PC software/hardware to program
:Motorola Radius P110, P200 and GP350 VHF Portable Radios.
:
:Any and all information regarding this matter is Greatly Appreaciated!
:
:Send any and all replies to the e-mail address below!
:--
:Shane H.
:shane@multipro.com

Seeing all the paranoid ads about software piracy is strange. If you deal
with Motorola Semiconductor uP applications, they give software away for
free and hardware on the cheap. Funny how different divisions can be so
diametrically opposeed.

5026. Re: Michigan Mighty Mite and You!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Andy <muldowne@wilde.oit.umass.edu>
Message-ID: <01bc5fd8$27c61980$a0b37780@oit.umass.edu.umass.edu>
Source record: 93970

Jim Dallas <jim_dallas@hotmail.com> wrote in article
<5koksh$74h@atlantis.utmb.edu>...
> I found the plans to a 500mW transmitter on the "Homebrew QRP
> is Gud 4 U" Page (http://brink.com/brink/QRP/) and, for the
> life of me, I can't interpret a few symbols on the schematic. I
> havent built anything yet, but I'd like to get into building
> QRP stuff because it is a.) cheaper b.) gives me more experience
> with electronics.
>
> Anyhow the schematic reads, from positive power,
>
> 10-14 vdc power

You CAN run it off a 9V (look at the picture)

> 10k ohm resistor
> xtal (by the way, where can I get a 40 meter crystal?)

You can get 40 Meter Xtals from Norcal
(http://www.fix.net/~jparker/norcal.html)

> 365 pF variable capacitor
> loops (needs explaining)

If you read the text, the loops are explained. It has a table with the
number of turns to use and it says to wind them on a film can (or other
1.25" form). It says use 20-22 AWG enamled wire. You can pick up a nice
assortment of enamel wire from radio shack for $3.99

> antenna, grounded
> ?????? (unknown, two parallel lines, looks similar to capacitor, labeled
"0.05")

Yes, that's a capacitor. It's a slight variation on the standard symbol.

please refer to as "Y"
> ground
> NPN transistor
> ?????? (unknown, rectangle w/ "s"s in it, labeled "27") <---please refer
to as "X"

It's a resistor with a value of 27 Ohms. Again, a variation on the
standard sybol.

> key
> negative power
>

```
> looks like:
>
> xtal---------------o------
> | | ||L1 _Antenna
> | 365 pF--o| |
> | Var. || ||
> | || || L2
> o---NPN------------------o| ||
> | | | |
> | | | -Ground
> | | |
> -10k-|--------------------o-------------(+)
> | |
> X> [SSSSS] 27 ? ----
> | ---- 0.05 ? <Y 10-14vdc
> | |
> -----(key)----------o-------------(-)
> |
> Ground
>
> ANY Help would be appreciated. THX for your time, sorry about crude
> drawing/ explanation. Bear with me: Im new at this.
>
```

There you go. Have fun making this!
73s, Andy
KB0MMU

5027. 5/8 up and 5/8 down antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Kip Martin <sl0ym@cc.usu.edu>
Message-ID: <3379446E.1547@cc.usu.edu>
Source record: 93971

Hello all,

I was wondering if a home made diepole of 5/8 length could be built and
matched with a matching network ?
I want to hang a diepole with the 5/8 elements instead of the 1/4.
Theoreticaly, I have heard the 5/8 in a diepole has more gain than a
ground plane configuration. So does this imply a 5/8 up and down
diepole may out perform the maico ?
--
Kip Martin
E-mail sl0ym@cc.usu.edu
http://www.declab.usu.edu/~sl0ym/index.html

5028. Re: Antenna Help Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5laso3$v05@camel1.mindspring.com>
Source record: 93972

Brian <brianb@hughes.net> wrote:

>I am trying to build a directional antenna that I can use with my
>scanner (receive only) to locate signals.
>I have experimented with a number of designs but I am making slow
>progress since I know only a little about rf stuff. Any help would be
>appreciated.

>The design that sort of works is as follows:
>
>I took a piece of PVC approx. 1/4 wavelength long and wrapped a 1/2
>wavelength piece of wire around the perimeter so the antenna ended up
>being approx. 1" tall and quite wide. The two ends of the antenna loop
>are hooked to each end of the center conductor of a 1/2 wavelength loop
>of RG59 coax. The lead in is a 1/4 wavelength long RG59 coax with the
>center wire tied to one side of the antenna and the shield tied to the
>shield of the loop of coax.

SNIP

>The antenna picks up signals quite well but the directional aspect of it
>needs improving. It would also be nice to eliminate the loop of coax
>and reduce the size of the antenna.

>Here are the calculations I used:

>Wavelength=300,000,000/47,000,000=6.382979 Meters (251.3 inches)

>RG59 Wavelength=.66*6.382979=4.212766 Meters (165.9 inches)

>As you can tell I am a beginner at this rf stuff (digital background) so
>any help would be appreciated.

>Please respond via E-Mail.

>Thanks,
>brianb@hughes.net

If your HT has a BNC connector on it you can get a 1m length of
coax with BNC connectors on the ends and a BNC tee.

make a loop of the coax and put it in the ends of the tee.
when you are ready to use it, you will just plug the side of the tee
into the HT.

BUT FIRST, clean an inch of the shield off the top of the loop,
which is the middle of the one-meter length of coax.

open one end of the coax and cut the center conductor and patch
the shield to the center pin of the BNC connector.

Badly said, I know, but it will make a useable DF antenna. Only takes
a fews mins, too.

It can be improved quite a bit, and that not hard, but this will get
you a start.

Go to used book stores and look for old ARRL handbooks.
Many antenas are there.

Go to the public library and look for old radio magazine articles.
there are a great number.

If your library doesn't have the stuff, they can get it on loan.
Ask them.

Good luck.

Lou WB0NRU
aruder@pipeline.com
use this address, not the one on top.

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

5029. Re: TM-V7A Software Coming from Kenwood

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Rick Bates <rbates@wco.com>
Message-ID: <3378F0DD.E5C@wco.com>
Source record: 93973
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Jan Marius Evang wrote:
>
> >> Rick Bates writes:
>
> RB> Major hint. The control head is just that, a control head. Four
> RB> wires (ground, power, data in and data out) are all that will be
> RB> used. Someone want to figure out how to interface it? Or make
> RB> new software other than the cloning software?
>
> This has been discussed for the TM733 as well, but nobody has done
> it... It seems like all restrictions as to out-of-band operation,
> xband repeater, 1750Hz tone etc. Is only present in the "control head"
>
> MArius (LC1MAT/LB4PE/9H3WF)

So if you can replace the control head with a computer, the limits
should only be in the software... <:

Rick

5030. petition

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: KA8YKK <KA8YKK@concentric.net>
Message-ID: <3378D2AA.71F6@concentric.net>
Source record: 93974

Please forward to all amateur radio operators

I am circulating this petition across the state of Michigan. Anyone wishing to join in on this petition can change it from the state of michigan and change it to their own state. You can also down load it off my web page http://www.concentric.net/~ka8ykk

Amateur Radio Operators
>From the State of Michigan
We the Amateur Radio operators from the State of Michigan do hereby agree to continue to abide by all the rules of Amateur Radio. We pledge to improve the amateur radio bands, and teach new hams joining the hobby the correct operating procedures which should be followed on the amateur bands. By doing this, we are petitioning the American Radio Relay League in our fight to help clean up the language on the Amateur bands, and are looking for civility/politeness in conversations. By showing our support in this petition, we are hoping that the American Radio Relay League can help us fight the language that we are hearing on these bands.

We are asking the American Radio Relay League to help in this clean up by: Hosting several national forums on this problem, and how it can be addressed, We are looking for a promise from the ARRL to report on how enforcement is currently done. We are also looking for a promise from the ARRL to create a sort of self enforcement mechanism, and possibly create a large fine mechanism that will generate enough money to help correct this problem. We realize there is such a thing as freedom of speech but, there are also the words such as civility, and politeness.

I Deborah K. Kirkbride KA8YKK am asking all amateurs in the State of Michigan to please sign this petition, and send it to me at the following address: 1315 Center Avenue, Apartment #1 Bay City, MI 48708. I will in turn when enough signatures are gathered be sending all petitions received to the ARRL.
Please make copies of this petition and pass it along to other clubs, and Amateurs in you area. Please help me in this fight to get the Amateur Bands back on the right track and keep them there.

73 deb ka8ykk

5031. Re: AM, why handbook shows carrier changing.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEA6GL0.FE2@netcom.com>
Source record: 93975

In article <9705130222.AA26755@lux.latrobe.edu.au>,
Luke Enriquez <ecsclfe@lux.latrobe.EDU.AU> wrote:
>The equation for an AM transmission of carrier frequency (wf) with
>modulation frequency (wm) is :
>
> AM(t) = sin(wf)t + 1/2cos(wf - wm)t - 1/2cos(wf +wm)t
>
> This equation shows that the carrier does not change at all,
>but the sidebands of the carrier do. However, depending on our
>definition of "modulation" we may say that the carrier is modulated
>with our audio tones, etc.
>
> However, my point is that if anyone simply points to a
>"AM Envelope" stating that here is a picture of a carrier changing
>with the modulating frequency, they are wrong.

And you are dogmatic and didn't pay much attention to the
table of trig identities.

(1 + sin(wm)) * sin(wf) is equivalent to your expression.
(envelope) (carrier)

You can factor it to emphasize the spectrum or emphasize the
carrier and envelope, but they are the SAME equation.

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

5032. compression trimmer caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: joewalsh <joewalsh@shore.intercom.net>
Message-ID: <01bc5f32$68e876c0$096a09d0@ICNet.intercom.net>
Source record: 94091

I'd like to build a small receiving loop for 80 or 160 meters. The designs I've seen call for a variable cap in the 1000pf range. The author says he uses compression trimmers. Anyone know where I can find these? Thanks,
Joe

5033. Re: Spectrum analyzer rental?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5l8fkdfvm1@nadine.teleport.com>
Source record: 94092
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

In article <3376699E.105E@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:
>Is there any place where an individual hobbyist (not associated with any
>large 3-letter corporations) can rent a fairly modern spectrum analyzer
>(Tek 492/494 or similar) for a short time (~1-2 wks), at a reasonable
>cost?
>
>I need to tweak a homebrew hybrid DDS/PLL circuit for noise sideband
>performance, and would like to be able to see down to about 100
>Hz/division or so between 700 MHz and 1.2 GHz, with an amplitude range
>of at least 90-100 dB. I could always sell my car and buy a 494, but
>would rather not. :-) I'm in the Austin, TX area, if anyone knows a
>good rental place that will take Visa/MC.

The times I've rented test equipment, the minimum rental time was one month and the cost per month was just about 10% of the new price of the instrument. If this is "reasonable", you probably have several rental company choices. If not, I don't know of a rental place for you -- perhaps some other folks do.

I'd be surprised if you'd find anything as old as a 492 or 494 at a rental company.

Roy Lewallen, W7EL

5034. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: rick@area.com
Message-ID: <5l8p4u$s4s$1@nixon.area.com>
Source record: 94093

In article <33722027.5E75@flash.net.no-spam>, <hynde@flash.net.no-spam> wrote:
>While trying to understand what is REALLY happening with AM I of course
>refered to the handbook. All the examples I've found show a modulated AM
>
>73, Tim, ka8ddz

I don't know which edition of the handbook you are reading, but
I worked on the chapter on modulation used in the 1995-1997 books
along with Dave Newkirk. This question prompted more discussion
than anything else in the chapter. I don't think there is any
really good way to explain this intuitively. You can, of course,
define everthing rigorously in mathematics and prove it. But as
Dave N. used to say "equations don't teach". So you may find
what we wrote to be unsatisfactory as well. However it was not
for lack of awareness. If anyone feels they have a really good
explanation, submit it to the ARRL and maybe it will be in the
next handbook!

Rick Karlquist N6RK
rkarlqu@scd.hp.com

5035. video driver for PCAD V5.02

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Ference Kish <fkish@dove.mtx.net.au>
Message-ID: <01bc5f53$7abc0d00$7b1e0fcb@attila.mtx.net.au>
Source record: 94094

Hi!

I've got a Pentium based PC with a Hercules Terminator video card which does not
have a driver for PCAD V5.02 and therefore I cant run PCAD in high-res mode.

I was wondering if there are people out there using PCAD V5.02 with high resolution mode and what video card and driver are they using.

Specifically intereseted if anyone is using S3 based cards.

Any help will be appreciated, Ference

Ference Kish fkish@dove.mtx.net.au

We never grow up only our toys get bigger

5036. Re: Student ham looking for tube-era Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: archer@netgate.net
Message-ID: <337cf38e.5934805@nntp.netgate.net>
Source record: 94095

On 12 May 1997 15:49:49 GMT, mjsilva@ix.netcom.com(michael silva)
wrote:

>Hi all,
>
>I'm helping a high-school ham build his first tube transmitter around
>some 6L6s he got hold of, and while he's very enthusiatic he's noticed
>that his '93 Handbook doesn't have much tube info :) / :(So, I'd like
>to find
>him a Handbook from the tube era (say mid '50s to mid '60s) that won't
>break his meager bank. If anybody has one at a reasonable price please
>let me know and I'll put you two in touch. Thanks.
>
>73,
>Mike, KK6GM
>

I wouldn't pass up scouring the local public libraries. A lot of
times, an old copy of the AARL Handbook is all they have,
since funds are so limited these days... :(

I assume your ham friend is aware of the lethal nature of
the voltages involved in tube circuits, the need for bleeder
resistors, proper isolation from ground, etc. etc. When I was
experimenting with tube circuits in high school, aware of the
dangers, I got a nasty 360 volt shock despite the fact that I
was standing on a wooden stepladder and one hand was
in my pockets. How? The insulation on my multimeter had
been burnt accidentally with a soldering iron (unbeknownst
to me), and I must have touched the weak spot in the insulation
at the same time I was measuring plate voltage on the final.

For my $0.02, i'd encourage him to play with FETs (VMOS power
and small signal or MOSFETs) instead. Similar operation,
but battery powered and portable and not likely to blow him up.
For that matter, aside from multi-hundred watt RF, tubes are
virtually never as good as solid state. A 6L6 isn't going to
produce enough power to bother with tubes anyhow!

Ross

5037. Re: Student ham looking for tube-era Handbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: archer@netgate.net
Message-ID: <337ef7fe.7070911@nntp.netgate.net>
Source record: 94096

On Tue, 13 May 1997 05:01:13 GMT, archer@netgate.net (Ross Archer)
wrote:
> When I was
>experimenting with tube circuits in high school, aware of the
>dangers, I got a nasty 360 volt shock despite the fact that I
>was standing on a wooden stepladder and one hand was
>in my pockets. How? The insulation on my multimeter had
>been burnt accidentally with a soldering iron (unbeknownst
>to me), and I must have touched the weak spot in the insulation
>at the same time I was measuring plate voltage on the final.

The above should have read "the insulation on the test probes
of my multimeter had been burnt accidentally with a soldering
iron." This could happen to any teen. ;)

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5038. www.hamradio-online.com: Ham Files Suit Claiming Ownership of Ham Frequency

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: vbook@vbook.com
Message-ID: <5l8m1i$kl9$1@kanga.accessone.com>
Source record: 94097
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew,aus.radio.amateur.misc,aus.radio.amateur.digital
Body handling: HTML body converted to readable text

http://www.hamradio-online.com - the all volunteer, online ham radio magazine is now read in 65 countries. Some of the feature stories we have now include:

Ham Files Suit Claiming He "Owns" An Amateur Radio Frequency
In an ongoing dispute in Southern California (USA), Ron Ames has filed a lawsuit against the Keller Peak Repeater Association (KPRA) claiming ownership of a sanctioned and coordinated repeater frequency.

13cm PSK transceiver for 1.2Mbit/s packet radio
Here, Matjaz Vidmar details his design of a 1.2 million bits per second digital radio for Amateur use.

Simulated Satellite Projects Using High Altitude Balloons
Operated by NASA in conjunction with AMSAT and local amateur radio groups, this project simulates many of the practices and remote observing challenges inherent in working with real satellites, and offers a unique hands-on experience for students in K-12 earth science, physical science, physics, electronics or aerospace classes.

Equipment Options for Medium and High-Speed Packet Radio
Here is an excellent summary of the hardware options available for constructing medium- to high-speed packet radio links (9600 bps to 56 kbps and beyond).

Ham Radio Operators: Communications of Last Resort
The Grand Forks North Dakota Herald reports on amateur radio in the flood stricken Red River Valley.

Discussion on Sunspots and Earth Climate
The sun-climate connection is something that's been talked about many times. It's like everybody knows there has to be some connection but no one can prove a good case. This time the evidence seems pretty compelling and we have a better handle on Earth's climate past.

And many more articles this month too!

Plus the best propagation resources you'll find on the Net; equipment specifications; product directory and other sites lists; disaster situation updates and so much more.

This is a free web site, run by volunteers. No ads. Since October 1995. There is a reason this is the world's leading amateur radio web site. Stop on by and enjoy!

Ed (KF7VY) and Kim (N7VPL) Mitchell
REPLY TO will not work in order to avoid spam-mail.
Instead, SEND your email to vbook@vbook.com
Visit Ham Radio Online, it's free! at
http://www.hamradio-online.com

5039. 28MHz SSB/CW rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: pavel.reberc@guest.arnes.si
Message-ID: <5l916resc1@kanja.arnes.si>
Source record: 94098

Hello,
I am searching for a modern design radio for 28MHz band
with good receiver performance for use in VHF contest conditions with
a modern transverter for 2m in front of it. I already have built
transverter, but i think it is stupid to buy far-east toy with
flashing front pannel for >2K US$ and terrible receiver performance.
(IP3 / Sensitivity /NF)
I have found some designs for receivers, but i need transmiter too.

Thanks for any info.
Paul, s57ra

5040. Seeking help in identifying specs for vaccuum fluorescent display

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Ron Tsur <ron@lynx.coredump.com>
Message-ID: <3377BA4D.6F0C@lynx.coredump.com>
Source record: 94099

Fellow experimenter,

I recently purchased several vaccuum fluorescent display modules from a
local surplus store. unfortunately, the store could not provide any
data about the display modules (in fact they did not even know what they
were...). I tried to identify the units by scanning through catalogs,
but it was all in vain.

Here is an obseravatory description of the module:

General: 20 character 5x7 matrix
Dimensions: 1.25" x 6.0" x 0.75"
Designation: ISE Electronics Corp. - CU205SCPB, Made in Japan
Connector: 13-pin single-in-line header type

Parts Identified on PCB assembly:
DC-DC converter (using discrete parts)
SED2000 (display driver? - large surface mounted IC)
NEC 80C42G (microcontroller?)
12 MHz crystal
Multiple surface mounted transistor, resistors, caps

I would appreciate any information that would help make good use of
these displays. An interface spec or full data sheet will be excellent.

Thanks,

Ron.

--

==
==== Ron Tsur
====
==== Logical Ventures, Inc. TEL: 1-503-324-8960
====
==== 45171 NW Hartwick Road FAX: 1-503-324-4432
====
==== Banks, OR 97106, U.S.A. Email: ron@lynx.coredump.com
====

==

5041. F/S - Tantalum Chip Caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Don Buska <"Don Buska">
Message-ID: <337877A9.7B01@aaiate.com>
Source record: 94100

I have some Tantalum Electrolytic Chip Capacitors I want to sell.
I'd never be able to use all these in my life time. So.......

22uFd 16V Tantalum Electrolytic Chip Capacitors
Made by - Fujitsu Towa Electron Ltd. P/N TA-016 TCM 220 M-D1R

100 caps for $15.00 shipped.

73

Don N9OO
d.buska@aaiate.com

5042. SRAM's F/S

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: Don Buska <"Don Buska">
Message-ID: <3378797C.33E8@aaiate.com>
Source record: 94101

I was using these for an automatic station controller in the shack,
but just haven't had the time to dink with them. So.......

For Sale:

32K X 8 Static RAM's.
Sony CXK58257-12L

How about a buck each? Minimum of 20 pcs shipped!!!

73
Don N9OO
d.buska@aaiate.com

5043. NN1G's QRP SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33788f02.0@lightning.ica.net>
Source record: 94102

Anyone building NN1G's QRP SSB rig as featured in April QST ?
I ordered the bare board (pretty good quality !!) and am in the
process of populating it for use on 20M.

I've also been thinking about using it with my Ten-Tec transverter
on 6 meters, hopefully in time for the upcoming Es season.

Hugh VA3TO

5044. Re: Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: "Robert R. Koblish" <Xn3hat@erols.com>
Message-ID: <33789C1B.6555@erols.com>
Source record: 94103

Bill wrote:
[...]
> However, I will soon be located close to a window and know that I will
> be able to get 2-3 AM stations over there by placing my Walkman on the sill.
> I've noticed that reception improves even further if I pass my hand over the
> radio cutting off the florescent light interference.

You aren't cutting off the fluorescent light interference, you are
augmenting the antenna.

> My queston is: Is there
> anything I can take to work with me and place over the Walkman that will cut
> the lighting interference? Would tin foil or heavy cardboard do any good?

Try a larger antenna -- there are passive and active ones out there. A
big loop in the window, resonated with an old 365 pF broadcast variable
capacitor. Don't know if you could place your receiver next to it, or
whether you'd have to make a separate coupling loop.

Experiment!

--
regards
-rrk

To reply, remove the leading X in my return address.

5045. Re: compression trimmer caps

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: bowman <bowman@montana.com>
Message-ID: <3378888E.3497@montana.com>
Source record: 94104

joewalsh wrote:
>
> I'd like to build a small receiving loop for 80 or 160 meters. The designs
> I've seen call for a variable cap in the 1000pf range. The author says he
> uses compression trimmers. Anyone know where I can find these? Thanks,
> Joe

check out

http://www.fix.net/dans.html

he has some trimmers, but nothing in the 1000 pf range. i'd really advise against using a trimmer. if it is a set once and forget situation, used fixed values, with a small (40 of) trimmer. if you are going to be twiddling it a lot, an air variable has much better adjustment.

5046. Re: 28MHz SSB/CW rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-13 00:00:00 UTC
From: moritz@ipers1.e-technik.uni-stuttgart.de
Message-ID: <5la3se$3qvq@info4.rus.uni-stuttgart.de>
Source record: 94105

>...i think it is stupid to buy far-east toy with
>flashing front pannel for >2K US$ and terrible receiver performance.
>(IP3 / Sensitivity /NF)

I do not know which brand you refer to, but if you have a receiver
design that even *remotely* matches the performance of e.g. the TS850,
without needing 1000$+ worth of components, please let me know.

>I have found some designs for receivers, but i need transmiter too.

The transmitter is comparably trivial, use your RX-LO chain, a mixer,
filter and off you go.

73, Moritz DL5UH

5047. Looking for air variable cap 1500pF min 2KV

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: corry@eburg.com
Message-ID: <863576411.162197@moon.aa.net>
Source record: 93976
Cross-posted to: rec.radio.swap,rec.radio.amateur.homebrew

Hello, I have a friend that is looking for an air variable capacitor
that is at least 1500pF and has a minimum voltage rating of 2KV.
Perhaps someone has a lead on something of this size?
73, de KB7SVP
corry@eburg.com

5048. transmiter

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: smooth@inficad.com
Message-ID: <5lb5f9bbb1@news.inficad.com>
Source record: 93977

I'm looking for an F.M. radio transmiter

thanx

5049. Re: Spectrum analyzer rental?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc6016$0a8b9c80$3b0f2399@peter->
Source record: 93978
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

John Miles <jmiles@pop.removethistomailme.net> wrote in article
<3376699E.105E@pop.removethistomailme.net>...
> Is there any place where an individual hobbyist (not associated with any
> large 3-letter corporations) can rent a fairly modern spectrum analyzer
> (Tek 492/494 or similar) for a short time (~1-2 wks), at a reasonable
> cost?

The large guys are expensive.

Try to find a local "instrument repair" and calibration house, one that
serves local
companies. They frequently have stuff for sale or rent and you can
sometimes
do quite well. Look in the yellow pages or ask around.

These are good people to get friendly with!

5050. baggybob's smd parts at Dayton

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: BAGGYBOB <Baggybob@cris.com>
Message-ID: <Pine.SUN.3.96.970514003855.12751B-100000@galileo.cris.com>
Source record: 93979

!!!!!!!!!!!!!!!!!! IMPORTANT !!!!!!!!!!!!!!!!!
My local ISP (townsquare.net) is calling it quits and taking his domain
name with him. Any e-mail sent to townsquare.net after May 30 will bounce.
As as of May 15, 1997 I will be moving to baggybob@elknet.net.
The account at baggybob@cris.com should be good until the end of July 97

!!!!!!!!!!!!!!!!!!!!!!! BAGGYBOB AT DAYTON!!!!!!!!!!!!!!!!!!!!!!!!!!!!
We will be peddling many of the surface mount parts and other stuff from
previous postings in the flea market at spaces 4055 and 4056. Stop in and
say hello. Kim talked her way out of attending this year.

Please excuse me it this notice shows up more than once. I tried posting
from my new ISP and did not see the message appear after 4 days.

5051. Re: IC-706 XCVR to Computer Interface Cable, Help Please?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: k5gh@flash.net
Message-ID: <5lb9gnoov1@excalibur.flash.net>
Source record: 93980
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

The best thing to do is buy a JBI universal radio interface kit.
The JBI kit is reviewed in Dec 96 issue of 73 magazine. I bought
two just as the author of article did and they work great.
There are 3 articles in QST magazine relating to computer interfaces
all good reading. July 92 "A Low-Cost PC Interface for ICOM Radios"
Feb 93 "Everything You Always Wanted to Know about Hardware for
Computer-Controlling Modern Radios" and Sept 91 "An Inexpensive
Computer/Radio Interface". Hope this helps. 73, George K5GH

5052. 2 x 266pF cap needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: pmooney@onyx.octacon.co.uk
Message-ID: <33794f5e.108147@nntp.onyx.net>
Source record: 93981

Hello all,

I'm trying to get hold of a Toko Polyvaricon capacitor, twin gang, 266pF.

Everbody I've tried in the UK (Farnells, R Spares, Cirkit, etc) tells me they are no longer avaiable.

Does anybody know of a source?

Thanks in advance,

73's de Paul G7SPV

5053. ** FLEA at MIT ** Sunday May 18th Cambridge MA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: w1gsl@athena.mit.edu
Message-ID: <5lc0hb$elp@senator-bedfellow.MIT.EDU>
Source record: 93982
Cross-posted to: rec.radio.swap,rec.radio.amateur.misc,rec.radio.info,sci.electronics.misc,ne.forsale,ne.general,rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

This coming Sunday..

*** !!!! WE ARE BACK IN THE GARAGE !!!! ****
so come rain or shine or super heat the Flea is on !!!

********* $1 buyers discount with hardcopy of this notice ********

COMPUTERS - ELECTRONICS - HAM RADIO - COMPUTERS - ELECTRONICS - HAM RADIO

FLEA all SUMMER at MIT
May 18th, 1997
9AM-2PM

Come to the city for a great flea - plenty of free parking.

MIT's electronics and ham radio flea will take
place on the third Sunday of each month this summer,
April thru October.

There is tailgate space for over 600 sellers and
free, off-street parking for >1000 cars!

Buyers admission is $4 (you get $1 off if
you're lucky enough to have a copy of our ad)
and sellers spaces are $10.00-each at the gate.

The flea will be held at the corner of Albany and
Main streets in Cambridge; right in the Kendall
Square area from 9AM to 2PM, with sellers set-up
time starting at 7AM.

*** Attention Sellers ***
Prepaid vendors.. Season Pass or monthly,
will be admitted FIRST.
Seperate lines will form prior to gate opening
for prepaid and nonprepaid vendors

A discount sellers SEASON PASS is available for
$50 per space if purchased by April 20th.

!! RAIN or SHINE !! Have no fear of rain, a covered
well illuminated tailgate area is available for all
sellers (6'8" clearance).

Talk-in: 146.52 and W1XM/R-449.725/444.725 (PL 114.8/2A).

Sponsors: MIT Electronics Research Society
MIT UHF Repeater Association (W1XM)
MIT Radio Society (W1MX)
Harvard Wireless Club (W1AF)

For more info / advanced reservations 617 253 3776

********** $1 buyers discount with hard copy of this notice ************

<<<<<<<<<<<<<<<<<<<<<<< cut here >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>

If you are going to buy a season pass at the meet please bring this coupon
filled out to speed the process.

SELLERS ADVANCED DISCOUNT REGISTRATION if Mailed by the 5th

Name..... Call.....

Address..... Phone.....

City..... State..... Zip.....

E-Mail .....

Spaces Required ___ Season @ $50 / space = $ ..... CK # .....

___ April ____ May ___ June ____ July

___ Aug ____ Sept ___ Oct

Total Monthy spaces @ $9/ Space = $ ..... CK # .....

Make checks payable to The MIT Radio Society

Mail to PO Box 397082 MIT Branch Cambridge MA 02139-7082

rcvd by..... Stamp

.....

RECEIPT fill in only your name..

Received $ from .....

By ..... Stamp

****
Steve Finberg W1GSL w1gsl@mit.edu
PO Box 82 MIT Br Cambridge MA 02139-7082 617 258 3754
****

5054. Specs for RJ-1A???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: bart@wb6hqk.ampr.org
Message-ID: <EA6DKt.HIC@wb6hqk.ampr.org>
Source record: 93983

Does anyone know the contact ratings of a Jennings RJ-1A relay at 4MHz? I'm interested in using one to switch mobile loading coil taps on 40/75 meters and need the capability to switch (dry) about 10 amps and have a standoff voltage of around 10 KV. I think the RJ-1A is only good for about 5 KV but don't know for sure.

Thanks,

bart wb6hqk

5055. Re: Morse

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5lcnu0$jb5@camel2.mindspring.com>
Source record: 93984
Cross-posted to: alt.ham-radio.morse,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

"Dale" <rug@edison.dialix.com.au> wrote:

>Can someone pls (nicely:) direct me to a reference in relation to the
>basics of Morse code equipment. Specifically as to the design and
>construction of the old style of electr mechanical sounders.
>I have an understanding of general electronics, but i do not understand the
>relevance of the resistance of the sounders used in the Morse system. As i
>have been asked to rewind an old sounder, i need to ensure the resistance
>as well as the magnetising force (gauss?)...is there a basic formula or
>software tools to assist in the winding of such coils

>Any help would be greatly appreciated....

>Regards,
>Dale

As a one-time motor/transformer.coil rewinder for pay, let me ask you,
is the original lwire still on the solenoid you are to rewind?

If so, you might be well served to do what we used to if we had not
the original specs: We counted turns. Put it on a spindle with a
counter attached, and start pulling the wire off. Not too fast, since

if the wire is burned or breaks, you don't want the monentum to give
you a false reading.

The wire size and the turns count will give you an exact report.

However, if you take the outer diameter of the solenoid, the O.D. of
the spool, the size of the wire, and the thickness of the insulating
paper (if any), then you can use 8th-grade schol math to see the
number of turns.

That will put you well in the ball park.

Correct Resistance will follow as the day follows the day before.

Gud Luk es 73

WB0NRU Lou.
aruder@pipeline.com
don't use the reply address, it's bollixed.

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

5056. F.S. - Tubes, radios, publications...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970514161100.MAA12761@ladder02.news.aol.com>
Source record: 93985

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #514-T.

5057. Re: Spectrum analyzer rental?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: John Emerick <74160.525@compuserve.com>
Message-ID: <3379DDA4.1313@compuserve.com>
Source record: 93986
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

John Miles wrote:
>
> Is there any place where an individual hobbyist (not associated with any
> large 3-letter corporations) can rent a fairly modern spectrum analyzer
> (Tek 492/494 or similar) for a short time (~1-2 wks), at a reasonable
> cost?
>
> I need to tweak a homebrew hybrid DDS/PLL circuit for noise sideband
> performance, and would like to be able to see down to about 100
> Hz/division or so between 700 MHz and 1.2 GHz, with an amplitude range
> of at least 90-100 dB. I could always sell my car and buy a 494, but
> would rather not. :-) I'm in the Austin, TX area, if anyone knows a
> good rental place that will take Visa/MC.
>
> tnx -- jm
>
> --
> Note: My E-mail address has been altered to avoid spam
> --

John:

You may want to try a place I've used called Naptech in CA that's a fair amount cheaper than Tucker or Test Equity. They've rented older equipment to me on a monthly basis. I think it was 10% of their current sale price per month. They take MC, I not sure how they handle security deposits, I've always had enough available credit on my card to cover it.

I checked their current catalog and they list TEK analyzers back to and including the 491, 492, 495, 496. You mentioned the 492, I checked their last catalog and the purchase price is 6,900.00 so it won't be real cheap to rent. They also stock a bunch of the HP and some Avcom analyzers that are cheaper.

The stuff I've gotten from them has been clean, calibrated, and with all probes and manuals.

Their number is 800-336-7723 and I think they have a website now but I would just call.

good luck,

John Emerick
74160.525@compuserve.com

5058. Wntd 2 Build: Poor Mans Packet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: gjpeyemd@aol.com
Message-ID: <19970514180900.OAA20696@ladder02.news.aol.com>
Source record: 93987

I'm intrested in packet, but would like to start out chhep then if I like it I may invest in a TNC...I was wonering where would I find a PMP(Poor Mans Packet) to set up... I have a Lugable 8088 and a 20meg hd, 2 serial ports, and a 2m Ht. Now I need the last link. Any Ideas on where I can find a cheep packet(Possibly homebrew) to build?
Thanx, Nick
73's KF6HTZ

5059. fs - OP AMPS!! UV-EPROMS MISC ...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: deli-bear@worldnet.att.net
Message-ID: <337A296B.42F0@worldnet.att.net>
Source record: 93988

```
...... FOR SALE....:
.
IDE hard drives:
Seagate 341 meg ........$ 99
Seagate 428 meg ........ 119
Seagate 120 meg ......... 79.
Maxtor 120meg ............ 79.
IBM 256 meg ............... 89.
Western Digital 540 meg. 135

COLORADO 250meg backup tape drive with tapes. $55
(includes Arcada software for 350meg tapes)
.
MAINBOARDS WITH CPU CHIP: Tested with Dos and Windows
386sx 16Mhz ........................... $10
486sx 25mHz ........................... $30

MEMORY SIMMS: (specify parity or not)
4 meg 72pin non-parity .... $ 25
4 meg 72pin parity ........ $ 25
30-pin memory SIMMS: 256K 60 or 70ns ($4)
80ns ($3)
100ns ($2)

OP AMPS... I have a bunch of op amps and comparators
that I've been collecting during the last couple of years.
They are new, never used, and are marked. In most cases
I also have the literature with characteristics, pinout, and
suggested circuits. There are singles, duals, and quads,
with about 50 or so in the DIP form, and another 20 or so
in surface-mount form. Some are hi-frequency (up to 900
mHz), others are micro-power. You get the whole lot for
just $10 + shipping, probably another $2-3.

------------- UV - EPROMs for sale ---------------
These are 27C512 EPROMs, erasable by ultra-violet light. The
catalog price is a little over $10, but will sell them at $3.50 each,
plus shipping. I have 22 available....

---------------- P O W E R S U P P L Y M O D U L E S ------
I have several power supply modules available. These are
complete, requiring only the DC input voltage. The modules
contain the necessary IC regulator and caps or coils as
needed. These are new, never used. The boards have the
input and output terminals marked.
```

1.) 2" x 2" PCB with regulator, transformer, etc, installed.
8V to 16VDC input, +12V / 1A out.
6 units available at $8 each, plus shipping.

2.) 24pin DIP regulator-on-a-chip. No external components
are needed! Up to 40VDC input, +5V/1A out.
3 available at $5 each, plus shipping.

.............CPU CHIPS............
AMD 386DX40mHz. A great way to speed up those older boards!
Only $ 8
.
.............MODEMS..............
2400 baud external modem with power supply. The easy way to
add a modem, since you don't have to open your computer to
install it! Only $ 9.
.
2400 baud internal modem card. Only $ 5
.
2400 baud PCMCIA fax/modem card (9600 fax). Only $17
(only 2 available)

14.4K baud PCMCIA fax/modem card. Only $29
. (only 2 available)

14.4Kbaud internal fax/modem card. Only $25

add postage to listed price.
e-mail me if interested...

5060. Microscope Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: "K.R.Burtchaell" <kburt@telis.org>
Message-ID: <337A1859.BAA@telis.org>
Source record: 93989

I am looking for a modestly priced microscope suitable to use for the assembly of small surface mount parts. Ken W6GHV

5061. FS: Several Vector-2XG Digital Compass Units

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: Gary Herbst <ggherb@ccmail.monsanto.com>
Message-ID: <01bc608e$475b0060$23022389@GGHERB.MONSANTO.COM>
Source record: 93990
Cross-posted to: comp.robotics.misc,rec.radio.amateur.homebrew

I have just aquired 2 Vector-2XG Digital Compass Units which are brand new and still in the box. Originally I was going to uses these in robotics, but have recently obtain a GPS unit to use instead.

As they are brand new, in the box, never used I am asking $80.00 for each one. Original cost was $99.00 in quantity.

These units are the top of the line model with full gimbal mounts which will compensate up to 15 degrees of til in either X or Y.

Gary-
ggherb@ccmail.monsanto.com

Views and comments are mine and do not represent those of
my employer, Monsanto Company(s)

5062. Re: Simple Tube or Transitor Receiver plans.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <337a1f90.0@cheese.pcug.org.au>
Source record: 93991

Trapper@nonya.com (Trapper Jones) wrote:
>I just got a GENERAL RADIO 20,40,80 meter Tube type X-mitter with plug
>in coils at our local ham-fest. I am very intersted in building a
>Tube type receiver. If anyone has plans for receivers, and access to
>a photo copier... I would be glad to send postage, etc..
>

Marty - you may not even need to do that - receiver designs and articles are available on SM0VPO's Homebrew Home Page. There's several simple receivers - valve and transistor. A link to SM0VPO's page is provided on the Australian QRP Home Page. You can reach that by going to my home page (see URL below) and selecting QRP.

73,

Peter VK1PK

--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____

5063. Re: Was Re: LINUX for hams??? Now: cheap CAD packages for Mac?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: slug@bbs.aeminium.pt
Message-ID: <5lc057$1sj@pc2.local.aeminium.pt>
Source record: 93992

jupiter@europa.com sabiamente escreveu:

: I have MacSpice, but has no nice GUI or schematic capture. The last time I
: used Spice on Unix was at Berkeley Evans hall basement using punch cards :)
: Does it now have nice GUI like Microsim??

Yes!
It's called spicecad... it was programmed by Martin Maschmann and you can
get it on any sunsite.unc.edu/pub/Linux mirror...i think its on the
circuits directory.It would be nice if MicroSim could do a Linux version
of its MicroSim DesignLab Eval Soft ...
bye

--
Nuno Sucena
CT1FOX CQG9304 CQM9228 Eng.Electrote'cnica FCTUC
To reply by e-mail use "slug" as user and "cygnus.ci.uc.pt" as domain.
My web page & PGP sig are located at the same place.

5064. Parts Wanted: (CP640)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: soldan@ksu.edu
Message-ID: <5ld98m$71n@cbs.ksu.ksu.edu>
Source record: 93993
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Need CP640 FET made by Teledyne/Crystallonics. For Repair of Signal
One CX-11A. Please email responses to: soldan@ksu.edu. Any info on
equivalents also appreciated.

N0IN
--
David L. Soldan, Ph.D., Professor and Head, Electrical and Computer Engineering
Kansas State University, Manhattan, Kansas 66506. (913) 532-5600
INTERNET: soldan@eece.ksu.edu BITNET: soldan@ksuvm.bitnet

5065. HELP: Rpt noise when windy!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: George Worth <gworth@ibm.net>
Message-ID: <337A9BA1.50F2@ibm.net>
Source record: 93994
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.equipment

Gentlemen,
I have a question for anyone that may have experienced "crackling" noise on their VHF repeater when the wind is blowing. Here is the scenario. We were donated a spot on a wooden utily pole which sticks out of the ground (the earth here is rock with a couple inches of soil over it) about 85 ft. There are 4x4 wooden cross arm systems at a couple places on the pole. At each cross arm there are 2) 4x4's bolted through the pole
with u-clamps at the ends. This is where the 2" pipes are clamped to the 4x4's for the antenna mounting. All 4 UHF machines work well. No noise. The VHF one does not. If the wind blows, the noise gets so strong it kicks incoming signals right out of the repeater. We have checked all antenna and feedline connections. They are good. What we did find was that if we wiggle or touch (with metal object) any (!!!ANY!!!) metal parts on the 4x4 support angle irons, 6 ga lightning ground wire which runs from the antenna mounts to central pole wire and down, pipes, anything metal at all, the noise is horrendous. What we suspect is that due to lack of RF ground, there is a pretty decent RF voltage/current, whatever, flowing or present on all the metal parts up there. If every piece of metal was bonded together and we nail copper flashing to the pole to connect RF grounds to, would this get rid of the dreaded "cracklies"?? How can we get a decent RF ground for VHF in the earth on top of this mountain? Any ideas would be more than greatly appreciated. Thanks for your help.

George

gworth@ibm.net

5066. Re: NN1G's QRP SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: zygo@azstarnet.com
Message-ID: <zygo-1405972121020001@usr1ip4.azstarnet.com>
Source record: 93995

In article <33788f02.0@lightning.ica.net>, hduff@ica.net wrote:

> Anyone building NN1G's QRP SSB rig as featured in April QST ?
> I ordered the bare board (pretty good quality !!) and am in the
> process of populating it for use on 20M.
>
> I've also been thinking about using it with my Ten-Tec transverter
> on 6 meters, hopefully in time for the upcoming Es season.
>
> Hugh VA3TO

Just finished it from the complete kit. Working great today (the receiver does a really great job). Had a brief problem with the transmitter lineup but traced the problem to the "test" pin header, where the right pin hole (as viewed from front of the board) apparently was not plated completely through between the top and bottom traces, leading to lack of audio drive to the first mixer. Make sure you have that pin soldered to both top and bottom traces!!

Do you know if there is a QRP newsgroup or how to contact other SSB QRPers for scheds, etc ?

Jim W7JIT (Tucson, AZ)

5067. WA6FHI and WinHdg 2.0 Homepage

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: John Jearos <jearosj@hughes.net>
Message-ID: <01bc60e5$b25abe80$0a2a61ce@jearosj>
Source record: 93996
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.boatanchors,rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.packet,rec.radio

Hi,

I just reworked my homepage, so come on down and check it out. I also have the latest 30-day evaluation version of WinHdg 2.0 (Windows Heading & Country Finder) available for downloading.
--
John -WA6FHI-
74562.37@compuserve.com
http://ourworld.compuserve.com/homepages/john_jearos

5068. Re: AM, why handbook shows carrier changing.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: jfriley@worldnet.att.net
Message-ID: <337a4864.85508752@netnews.worldnet.att.net>
Source record: 93997

On Tue, 13 May 1997 23:53:19 GMT, desmith@telalink.net (Doug Smith)
wrote:
>why does exceeding 100%
>negative modulation cause so much more splatter than exceeding 100%
>positive?

It doesn't UNLESS you are deriving you modulation from a
voltage-modulated amplifier. In that case, you drive the amplifier to
cut off and hold it there for the period of over modulation. It isn't
the over modulation that makes for wide band sideband, it's the sharp
corners when the amplifier starts and stops cutting off the carrier
that makes splatter.

Now, technically--and this is a point that separates the men from the
boys-- you can never exceed 100% modulation, the point of carrier cut
off. No matter how negative you driver the anode (or screen or grid)
of a voltage-modulated amplifier you never get less than nothing.
And, at that point, the carrier is indeed cut off. However, in the
case of a voltage multiplier (like a 1496), when you exceed the point
of carrier cut off (100% negative modulation) you start increasing the
output voltage again. The carrier never disappears! The only
difference is that the audio energy in the area of "over modulation"
is out of phase with the input voltage.

Fred
jfriley@airmail.net

5069. newbie to ham radio wants to get involved

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-14 00:00:00 UTC
From: none <guitarist@ibm.net>
Message-ID: <337A5CCE.5FED@ibm.net>
Source record: 93998

Hey, I'm COMPLETEY new to ham radio, and I wanted to see what all the fuss was about. I don't know anything about local ham radio clubs or anything, but I don't have much cash. I also wanted to build my own... uh..... thingie. Can anyone send me plans or whatever I need to get started building my own ham radio. Thanks!

-Jeff
mailto:guitarist@ibm.net

5070. FS High Voltage Capacitors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: dxhog@netsync.NET
Message-ID: <337A624A.7F1D@netsync.net>
Source record: 93999

Greetings to all, I have the following ceramic high voltage "doorknob capacitors" for sale, all are + & - 10% value and are new. Will ship anywhere in the USA and they are $10.00 each. I can be reached at 716-569-3585 or by e-mail at dxhog@netsync.net.

25PF AT 7.5KV
50PF AT 7.5KV
40PF AT 5KV
50PF AT 5KV
75PF AT 5KV
100PF AT 5KV.

Have fun home brewing 73 Dave/N2ODU.

5071. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: Rick Pemble <pemble@ix.netcom.com>
Message-ID: <01bc60d9$dd9db040$27d1bbcd@pemble.ix.netcom.com>
Source record: 94000
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

I am sorry, Can't help adding to the age old argument with the same old *&$

but, if someone is too lazy or too stupid to learn something as simple as
code,
what possible contribution can the make in any field.
Your argument is the same as "Why learn to add and subtract? calculators
are less than 5 dollars, why learn to read, everyone has a TV" It always
amazes me that there are people willing to spend time and effort defending
why they shouldn't learn something.

Sorry everyone, don't want to start a flame war -- forget what I said- just
dinosaur talk.

P.S.

It is spelled "renaisance" yeah, yeah I know, why learn to spell when
spell checkers are the current technology?

Carl R. Stevenson <wa6vse@fast.net> wrote in article
<01bc5d5e$d6fdd680$e390f5ce@wa6vse.fast.net>...
> Michael Ruther <Ruther@alliedsignal.com> wrote in article
> <3370D1C5.1AB2@alliedsignal.com>...
> >
> > Hi
> > I made a similar comment on the local repeater here in phoenix.
> > the topic was no-code vs. know-code.
> > except adding to the "number" what have they done to promote
> > ham radio. even the novice 20 years ago did his part.
> > built kits , learned electronics,and code.
> > now the newbies want it all for free.
> > aa7qa
> >
>
> The "newbies" and "would-be newbies" are NOT "wanting
> it all for free" ... many are technical professionals that this
> service desparately needs and all they want is the ability
> to participate and contribute without having to waste large
> amounts of their valuable time on developing "skill" in an
> obsolete technique dating to 1847 when they're employed
> at the leading edge of technology and want to experiment,
> develop, and build systems using new technologies.
>
> Ham radio would be FAR better off for welcoming these people

> with open arms than by trying to keep them out with ridiculous
> hazing rituals. The main problem is that most of the incumbents
> are so technically inferior to the types of folks I'm talking about
> that they can't begin to understand the benefits that they could
> bring. And lack of understanding breeds fear, resentment, and
> discrimination ... ham radio is in it's "dark ages" ... we need
> major changes in licensing requirements/structure, technical
> regulations, and ATTITUDES to create a rennisance ...
>
> Carl - wa6vse
> wa6vse@fast.net
>
> (friends and cordial acquaintances, please note the change in
> e-mail address ... everybody else, please continue to send your
> flames and crude remarks to <carl@ais.net> ...)
>
>

5072. Re: Spectrum analyzer rental?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: joe@widind.com
Message-ID: <5lea3m$6ev@news.jump.net>
Source record: 94001
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.equipment

In article <5l6h67$iht@news1.infoave.net>, n1rkt@dekalb.Net (Tracy) says:

>>Hz/division or so between 700 MHz and 1.2 GHz, with an amplitude range
>>of at least 90-100 dB. I could always sell my car and buy a 494, but
>>would rather not. :-) I'm in the Austin, TX area, if anyone knows a
>>good rental place that will take Visa/MC.
>>
>>tnx -- jm
>>
>>

Hi,

I don't know if a 7L13 will get you the performance you need but I'm in Austin with one if you want to try it.

Thanks and Best Regards
Joe Westenhaver joe@widind.com

5073. Re: FS: Several Vector-2XG Digital Compass Units

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: JEHANSON <JEHANSON@mailgw.sanders.lockheed.com>
Message-ID: <337AE53D.3688@mailgw.sanders.lockheed.com>
Source record: 94002
Cross-posted to: comp.robotics.misc,rec.radio.amateur.homebrew

Gary Herbst wrote:
>
> I have just aquired 2 Vector-2XG Digital Compass Units which are brand new
> and still in the box. Originally I was going to uses these in robotics, but
> have recently obtain a GPS unit to use instead.
>
> As they are brand new, in the box, never used I am asking $80.00 for each
> one. Original cost was $99.00 in quantity.
>
> These units are the top of the line model with full gimbal mounts which
> will compensate up to 15 degrees of til in either X or Y.
>
> Gary-
> ggherb@ccmail.monsanto.com
>
> ----------
> ----------
> Views and comments are mine and do not represent those of
> my employer, Monsanto Company(s)
> ----------
> ----------How heavy are they and what are their power requirements?

5074. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bc611e$79e51260$6790f5ce@wa6vse.fast.net>
Source record: 94003
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Rick Pemble <pemble@ix.netcom.com> wrote in article
<01bc60d9$dd9db040$27d1bbcd@pemble.ix.netcom.com>...
> Sorry everyone, don't want to start a flame war -- forget what I said-
just
> dinosaur talk.

Right you are ... forgotten already ...

>
> P.S.
>
> It is spelled "renaisance" yeah, yeah I know, why learn to spell when
> spell checkers are the current technology?

Actually ... I don't exactly have a spelling problem ... it's more that I
have
a problem with fine motor coordination and sensation in my hands and
fingers as a result of a spinal chord injury ...

Note, I'm not claiming to be the national spelling bee champ or anything,
just pointing out that sometimes my fingers trip all over themselves and
don't do exactly what I told them to do (sometimes they hit the right keys,
but in the wrong order, sometimes they miss a key or two, and sometimes
they hit adjacent keys)

Prior to the injury, I could type a solid 60wpm ... now I can hardly do
35-40
and that's seldom 100% error free ... I have to either slow *way* down or
use
a spell-checker to find the blunders ...

I am loath to invest a lot of extra time in chit-chat here, so I haven't
been
inclined to slow down to a snail's pace, and my newsreader doesn't
have a spell-checker ... so I guess you'll have to learn to live with my
imprefections as I have ...

73,
Carl - wa6vse
wa6vse@fast.net

p.s. If you doubt the veracity of my "excuse", I'd be quite happy to send
you a GIF or JPEG of the MRI from the neurosurgeon's letter to my primary
physician, clearly showing the spinal chord compression at C5-6 ...

5075. NEW DIY PCB PROTO TECH.- Printing direct on metal foil?!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: stephens@enteract.com
Message-ID: <5le8ul$8vv@thorgal.et.tudelft.nl>
Source record: 94004
Cross-posted to: sci.electronics.misc,alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.design

I've been reading a some threads on these newsgroups on toner transfer for fine pitch SMT and printing on metal foil. I tried it in my Epson Action Laser II, and it worked good!

Getting a SMOOTH piece of Al (Aluminum) foil, I folded it over a piece of paper and fed it into the manual paper feed slot. I took care that no wrinkles would scratch the drum! The transfer and fusing worked great! Unlike others results (dirty foil maybe?) the toner did not rub off. Inspite of the fact that, logicaly, it shouldn't work.

The significance of this is:
1. Print a reverse circuit image (toner around trace) on the foil.

2. Copper plate the aluminum foil. Very cheap, fast & simple (if not dirty)

3.With adhesive, glue the foil to a substrate. No doubt the hard part. I'm thinking of perfboard (I hate drilling!) Mylar (MULTILAYER BOARDS!!! Tooo coool!) or shitty old G10.

4. Etch the aluminum off, resulting in copper traces remaing behind.

No more expensive Mylar sheets & half transfered ironed toner. But best yet, by using multiple sheets, you might be able to do decent multi-layer boards. Via's would be made by punching holes before laminating the foil to the plastic. Copper traces extend over the hole, which would get filled with solder paste. I can't wait to try it!

But don't blame me if you mess up your toner drum, I bet Al foil will scratch it up real good. And a neg. image will use lots of toner. But should still be far cheaper, easier, and more powerfull than current iron on crap, which never worked well for me.

5076. GB0RDA

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: Brian Marshall <brian.marshall@zetnet.co.uk>
Message-ID: <19970515100542704 69@zetnet.co.uk>
Source record: 94005

There will be a special event Station on the 1st of June from the Riding School for the Disabled , Sauchieburn , Stirling , Scotland.The station will coincide with the Schools fund raising open day. The bands we will be on is 80m 40m 20m 6m 2m and 70cm. Hope to make a lot of contacts on the day and pass on some greeting messages.

73's
Brian
GM7OIZ

5077. DOES ANYONE OUT THERE HAVE SCHEMATICS FOR A DIGITAL FREQ GENERATOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: jorgenj@uddeholm.se
Message-ID: <337b0ecf.0@d2o61.telia.com>
Source record: 94006

Is anyone out there have any schematic for a digital
frequencygenerator that creates frequency up to about 20 mhz
if so pse send mailto:jorgen.jonsson@uddeholm.se

5078. Re: new web site...address correction

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5ldnbd$44i@camel2.mindspring.com>
Source record: 94007

n9sbv@worldnet.att.net (bob stephenson) wrote:

>> This new system is oriented toward helping the new ham radio
>> operator
>> with resources he or she may need to get the most out of their
>> hobby.

At first I read it too quickly where I thought it said:
"get.... out of their hobby..."
Sorry, my QRP frontal lobes beg forgivness.
72 & 73s de WW2W Tony Catalano
~~~~~ The Max Spectrum ~~~~~~~
http://www.pipeline.com/~acatalan/
~~~~~

5079. Re: 2 x 266pF cap needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: rohrwerk@pconline.com
Message-ID: <rohrwerk-1505970854580001@tsc-p6.pconline.com>
Source record: 94008

In article <33794f5e.108147@nntp.onyx.net>, pmooney@onyx.octacon.co.uk
(Paul Mooney) wrote:

> Hello all,
>
> I'm trying to get hold of a Toko Polyvaricon capacitor, twin gang,
> 266pF.
>
> Everbody I've tried in the UK (Farnells, R Spares, Cirkit, etc) tells
> me they are no longer avaiable.
>
> 73's de Paul G7SPV

They're in my Mouser catalog (whether Toko or no, I don't know) --
stock no. 24TR218, $2.98 in quantities of 1-9. Mounting screws also available.

This is catalog no. 589 (Feb-April '97), so it may be possible they aren't
available. Anybody with a more recent catalog handy can confirm this.

Too bad for you -- Export orders minimum order $100 or $25 fee. (This
sucks, because Maplin didn't have anything this exorbitant when I ordered
from them!)

But if you're desperate -- export order fax number 817-483-0931

These are indeed handy parts -- they're part of a few tunable HF front-end
receiver filters, and my QRP Z-match antenna tuner.

John Seboldt K0JD

5080. Re: LINUX for hams??? Where? Was SoundCard

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: "green spleen..." <gnome@nwu.edu>
Message-ID: <trd892.863709986@merle>
Source record: 94009
Cross-posted to: rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc

bboone@mindspring.com writes:

>I hear that Redhat is easy to set up, I am running Slackware now. You
>can get the distributions from www.cheapbytes.com. -- Bobby kr4bu

RedHat is pathetically easy to set up; however, I would not advocate
dumping a perfectly good Slackware distribution to run the RedHat.
Slackware's rc files, bootup scripts, and config files are much better
kept than RedHat's, which, in my opinion, are needlessly scattered
into too many subdirectories.

/lw
--
Reverend Thomas Robert Lars Mary Lunarwolf Dobrowolsky Jr. XXIII
31 Kresge Hall
Multi Media Learning Center (847) 491-3360 http://www.mmlc.nwu.edu
Northwestern University gnome@nwu.edu

5081. Microwave Gear at Dayton Hamvention

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: Walter Dail-KT4JA <dail@jlab.org>
Message-ID: <337B30D5.2F15@jlab.org>
Source record: 94010
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.swap,alt.radio.pirate,comp.robotics.misc,sci.electronics.repair,rec.radio.amateur.misc

```
ATTENTION MICROWAVE ENGINEERS
Dayton Hamvention in booth #2675-76

1.8- 18 GHz Microwave Laboratory

PRD 236 VSWR Measuring Set Includes:
=B7 SWR/Attenuation Meter PRD 277-D w/ Battery Pack
=B7 Adjustable Probe Carriage
=B7 3 Slotted Lines:
Coaxial "N" 1.8-18GHz
RG51/U 7-10 GHz Waveguide (aka WR 112)
RG52/U 8-12 GHz Waveguide (aka WR 90)
=B7 Coax to Waveguide Adapters:
N to RG51/U =

N to RG52/U
=B7 RG51/U to RG52/U Adapter
=B7 HP 444A Broadband Detector
=B7 Cables =

=B7 Spare 1N76 Detector Diode and tips
=B7 Manual (With GREAT measurement tutorial)
=B7 Transit Case
Great companion system to Struthers, Bird, etc.
$175.00
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Reconditioned / Recalibrated
HP 628 A
16 GHz - 21 GHz Signal Generator
Great 24 GHz plumbing (WR 42):
=B7 Reflex Klystron
=B7 WG Directional coupler
=B7 WG Bolometer (power head)
=B7 WG Precision Variable Attenuater
=B7 Tuning Cavity
$75.00
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=
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Hickok Card-O-Matic
USM-118 A
Tube Tester
Includes Complete Card Set !!
```

Manual Also Included=85=85.
Will test 811A, 6146B, etc.
$100.00
=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=3D=
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We are in booth #2675-76

5082. Re: art to copper, what's best?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: edbu@sepia.wv.tek.com
Message-ID: <5lfcvfINN85d@sepia.wv.tek.com>
Source record: 94011

In article <Pine.OSF.3.95.970509085547.24307A-100000@aurora.alaska.edu> Possum
<fnjlh1@aurora.alaska.edu> writes:
>
>Howdy,
> I've been using the PNP Blue to get art into resist on the board,
>but, even with the small, simple boards I make, I always need a little
>touchup, both before and after etching.
>
> My complaints about PNP:
>
Stuff deleted
>
>I've tried photo transparencies and photo resist board, but the photo
>stuff goes out of house, takes some time, costs some money.What are other
>options for getting small boards from artwork to copper? Thanks.
>
> j harris

I have nothing against the PNP or blue line stuff at all. It is a pretty
good product, it works well, is not terribly expensive for what you get,
and is easily available through the back of magazines. I have used it
with success in the past, but reverted to another method that I was using
over 10 years ago.

The method I have been using involves a clay-coated (zinc oxide) paper.
This type of paper is commonly used for thermal-wax transfer printers,
and some ink-jet printers. Since I work for a color printer group,
we have lots of this stuff around. The basic process is the same as
the PNP stuff, except you can fuse it to the copper much longer.
As long as you don't burn the paper, you are probably ok. Don't try to
pull the paper off after it has fused, but instead, soak in hot water
(the hot water doesn't affect the laser toner at all). After 20 minutes
(more or less) you can rub the paper off with your thumb. The only
thing left is the laser toner, and a little zinc oxide coating. The
zinc oxide will bubble a little when you first put it in the etchant,
but clears up pretty quick.
To get the stubborn spots off, use a small brush with the bristles cut
short (acid brush or 1/2" paint brush works best). After a little
practice, the results I have had are better than the PNP stuff, and the
cost of the paper is around 10 cents or less. I have used this method
for single side, double side, and surface mount boards with trace widths
down to 4 mil. I use a Tee-Shirt press to laminate the paper to the copper.
I also clean the copper with dutch cleanser, then rinse with tap water,
with a final wash of rubbing alcohol. Do not touch the board, the oils
in your hand can cause adhesion problems.

When chosing a paper, look for a smooth surface, and drag a penny across
it. If the penny leaves a colored mark, then you have a coated paper.

OK, now the disclaimer: I work for Tektronix, we sell a paper for our
Phaser 200 series printers. If you were to buy the paper from us, we
would make a profit from it. I get no benefit from it other than I work
for the company that would make the profit (and the satisfaction of helping
fellow Hams and hobbiests). Other papers are available at your local
office supply store, and of course the PNP stuff (which works pretty well,
but I never seem to have enough around when I need it).
I have not tried all of the papers available since I have one that works
well already, but some of them are likely to work based on the above criteria.

I think I'm gonna have to do a web page on this to spread around what
I've learned, and gather more information on home circuit board prototyping.
The opinions expressed do not necessarily reflect the opinions of my
employer. The opinions above are mine only.

Ed Burress
KC7GFX

5083. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: Julian Frost <jfrost@odaiko.ss.uci.edu>
Message-ID: <Pine.LNX.3.95.970515110832.283C-100000@odaiko.ss.uci.edu>
Source record: 94012
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

On 15 May 1997, Rick Pemble wrote:

> I am sorry, Can't help adding to the age old argument with the same old *&$
>
> but, if someone is too lazy or too stupid to learn something as simple as
> code, what possible contribution can the make in any field.

You're kidding, right? Yeah, you *must* be! No one would state that in all seriousness.

> Your argument is the same as "Why learn to add and subtract? calculators
> are less than 5 dollars, why learn to read, everyone has a TV"

It can be argued that knowing how to add and subtract, and read, is somewhat of a necessity in order to be able to live in today's society. Knowing CW certainly isn't. Neither does knowing the code make one a "good amateur radio operator" -- listen in to the crap on 75m phone once in a while for evidence of this, only "know coders" there! CW is but *one* mode of operation, and one mode whose use is declining the world over because better modes are taking over. It makes no sense whatsoever to judge an applicant's ability to contribute to the Amateur Service, via their technological know-how, or other people-oriented service, based soley on his/her ability to use one particular (outdated) mode!

> Sorry everyone, don't want to start a flame war -- forget what I said- just
> dinosaur talk.

Dinosaur talk indeed. Consider it forgotten.

Julian
[Someone who *has* passed the 20wpm code test]
--
INET: jmfrost@uci.edu - Public Key for Encrypted Mail available.
** Irvine Aikikai (USAF Western Region) Home Page --
** http://odaiko.ss.uci.edu/Aikido/Aikido.html
The Unofficial SIG-Sauer Home Page --
http://odaiko.ss.uci.edu/sig/sig.html

5084. Antenna tuning gimmick

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: "Sid Phillips, W5SP" <sphill@pnx.com>
Message-ID: <337B72A0.5696@pnx.com>
Source record: 94013

Could (and would) anyone point me in the direction of a schematic for
an Antenna tuning gimmick (audio) for a sightless ham friend of mine.
TIA
73,
Sid, W5SP

P.S. Please reply via e-mail to conserve bandwidth.

5085. Re: Microwave Gear at Dayton Hamvention

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: keng@techlock.com
Message-ID: <337b803e.37061643@news.erinet.com>
Source record: 94014
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.space,rec.radio.shortwave,rec.radio.swap,alt.radio.pirate,comp.robotics.misc,sci.electronics.repair,rec.radio.amateur.misc

I look forward to seeing you there. I've got some SP6T and SP8T
SMA switches if you're interested. Let me know. I'm in Dayton.

Excellent weather will be had by all -- for a change !!!!!!!!!!!!!!!!

On Thu, 15 May 1997 11:50:45 -0400, Walter Dail-KT4JA <dail@jlab.org>
wrote:

>ATTENTION MICROWAVE ENGINEERS
>Dayton Hamvention in booth #2675-76
>
>1.8- 18 GHz Microwave Laboratory
>

Ken Gunton WB6QWF Microwave & RF Components
http://www.techlock.com Techlock Distributing
Phone 937-434-5078, Fax 937-434-5079

5086. Re: NN1G's QRP SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <337B7EA5.1822@qsl.net>
Source record: 94015

RE:QRP Newsgroup. You can subscribe and get REALLY
involved with QRP by doing the following:
3. COMMON LIST SERVER COMMANDS

Remember, all these commands must be sent to listserv@Lehigh.EDU in
the
BODY of the mail message, NOT in the Subject: of the message.

* GETTING ON THE LIST

SUBSCRIBE QRP-L your_name your_call

where "your_name" is your real name, and "your_call" is your
callsign,
if any. For example:

SUBSCRIBE QRP-L John Doe K5FJZ

* GETTING OFF THE LIST

UNSUBSCRIBE QRP-L
This FYI.
-Ed Loranger

Jim Mandaville wrote:
>
> In article <33788f02.0@lightning.ica.net>, hduff@ica.net wrote:
>
> > Anyone building NN1G's QRP SSB rig as featured in April QST ?
> > I ordered the bare board (pretty good quality !!) and am in the
> > process of populating it for use on 20M.
> >
> > I've also been thinking about using it with my Ten-Tec transverter
> > on 6 meters, hopefully in time for the upcoming Es season.
> >
> > Hugh VA3TO
>
> Just finished it from the complete kit. Working great today (the receiver
> does a really great job). Had a brief problem with the transmitter lineup
> but traced the problem to the "test" pin header, where the right pin hole
> (as viewed from front of the board) apparently was not plated completely
> through between the top and bottom traces, leading to lack of audio drive
> to the first mixer. Make sure you have that pin soldered to both top and
> bottom traces!!
>
> Do you know if there is a QRP newsgroup or how to contact other SSB QRPers
> for scheds, etc ?

>
> Jim W7JIT (Tucson, AZ)

--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee (First and Last callsign!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
mailto:we6w@qsl.net QRP-L member #1068.
http://www.qsl.net/we6w

5087. pl decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: Tony Zuanich <tonyz@filenet.com>
Message-ID: <01bc60ce$72732710$33359ace@tonyz>
Source record: 94016

Does anyone know of a PL (CTCSS) decoder chip.

5088. Re: Microscope Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5lf08o$hfc@news2.zippo.com>
Source record: 94017

"K.R.Burtchaell" <kburt@telis.org> wrote:

>I am looking for a modestly priced microscope suitable to use for the
>assembly of small surface mount parts. Ken W6GHV

Try a tool supplier such as Rutland tool. They have a 10x,30x stereo
scope for $370. It has a swivel head and some other nice features.
It is hard to find used microscopes that are reasonably priced. You
might find a cheap scope,. and have to pay a furtune for eyepieces.

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

5089. Re: Jamboree On The Air - 1997?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-15 00:00:00 UTC
From: Trevor <corky@sunline.net>
Message-ID: <337BBC5A.383D@sunline.net>
Source record: 94018
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Ronald D. Lucier wrote:
>
> I am looking for information on JOTA - the Scouting Jamboree on the Air
> event. The local Girl Scout and Boy Scout troops want to participate
> next Fall. Can anyone tell me when this is? We need a date for
> planning purposes. Any help would be appreciated.
>
> 73 de Ron, WA1UWZ
>
> QCWA#28749 - FISTS #3099
>
> http://www.3doptics.com
The JOTA will be taking place in the third week of October here is a
link which you may find helpful
http://www.ocbsa.org/troop319/319jota.htm

5090. LOOKING FOR SCHEMATICS ON A HARLOM 2METER

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: jorgenj@uddeholm.se
Message-ID: <337bf46d.0@d2o61.telia.com>
Source record: 94019

mailto:jorgen.jonsson@uddeholm.se

5091. Spy people on the Net

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: benh@hotmail.com
Message-ID: <337b9d3b.5353210@bang-olufsen.dk>
Source record: 94020

I present here my two most recent software which I hope they interest you.
they are progammed by Turbo C++ and run under Windows(3.11 and 95).
here is a short description of these two software.

1-Robot Spy 1.0
at my knowledge, this software is the first and the unique of its kind.
This software allow you to spy your friends who are on the net at the same time
of you, it permits to see exactly what they do on their screen, pixel by pixel,
anywhere, in the world, at the condition they are connected to the internet.
how does-it work?
it's simple, you send a file to the person you want to spy telling to him it's a
game or everythings else, the objectif is this person run the file. from this time,
a batch file is installed on his computor, and everytime this person use internet,
this batch connects him secretly on our server.
on your side, you , after the installation of the other part of the software every time
you want, you can connect on our server with your password and have the list of all the
persons who received your batch and who are connected at this time.
the only thing you have to do is to click on the name of the person you want to spy.
a window opens containing exactly the screen of the person spied, you can have
ten pictures per second with 256 colors, if you switch to balck and white mode you can
onbtain a real time sequence, approximatly 30 pictures by second.

Robot Mailer 1.1
The message you are reading presently is sent to more then 20,000 newsgroups with
this software. This program automates FreeAgent, and reach with a connection of 28,8 Kbauds
5,000 news per hours. It can also find a maximum of 50,000 e-mail adresses from internet
and
send a message in 4 or 5 hours. You can obtain with this sofware the most powerful tool of
mass transmittion on the internet.

Robot Spy 1.0.................20 US$
Robot Mailer 1.1.............20 US$
Both.............................30 US$

I'm sorry i can't accept credit card, but you can send an international money order to:

Ben Hedi Nassef
1481 Ste-Catherine est #7
Montreal, PQ, H2L-2H9
Canada

Don't forget to include your e-mail on a paper, you receice the software ordered in your
e-mail the day we receive the money order.

5092. Re: HELP: Rpt noise when windy!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: Bob Doyle <doyle@DELETE_THIS.primenet.com>
Message-ID: <337C1C5C.C4F8C08@DELETE_THIS.primenet.com>
Source record: 94021
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.equipment

George Worth wrote:
>
> Gentlemen,
> I have a question for anyone that may have experienced "crackling" noise
> on their VHF repeater when the wind is blowing. Here is the scenario.
> We were donated a spot on a wooden utily pole which sticks out of the
> ground (the earth here is rock with a couple inches of soil over it)
> about 85 ft. There are 4x4 wooden cross arm systems at a couple places
> on the pole. At each cross arm there are 2) 4x4's bolted through the
> pole
> with u-clamps at the ends. This is where the 2" pipes are clamped to the
> 4x4's for the antenna mounting. All 4 UHF machines work well. No noise.
> The VHF one does not. If the wind blows, the noise gets so strong it
> kicks incoming signals right out of the repeater. We have checked all
> antenna and feedline connections. They are good. What we did find was
> that if we wiggle or touch (with metal object) any (!!!ANY!!!) metal
> parts on the 4x4 support angle irons, 6 ga lightning ground wire which
> runs from the antenna mounts to central pole wire and down, pipes,
> anything metal at all, the noise is horrendous. What we suspect is that
> due to lack of RF ground, there is a pretty decent RF voltage/current,
> whatever, flowing or present on all the metal parts up there. If every
> piece of metal was bonded together and we nail copper flashing to the
> pole to connect RF grounds to, would this get rid of the dreaded
> "cracklies"?? How can we get a decent RF ground for VHF in the earth
> on top of this mountain? Any ideas would be more than greatly
> appreciated. Thanks for your help.
>
> George
>
> gworth@ibm.net

Welcome to the joys of operating and maintaining a repeater...
Where else do you get to play with a system that has a 175 dB
of dynamic range.

I wouldn't be suprised if you could get the 'cracklies' by rubbing
two peices of metal 20 feet away from the antenna with no
connections to the repeater system at all. In fact, a friend of
mine had to go lubricate his neighbors attic fan regularly to keep
his repeater cracklie-free!!

I wouldn't be that quick to blame the 'cracklies' on grounding.
Remember that anytime you have two dis-similar metals touching
each other, you have the potential for galvanic corrosion and an

opportunity for introducing a non-linearity (a crude diode) into the system. Changing the non-linearity by changing the pressure on it or by moving the surfaces causes de-sense. I suspect that the non-linearity is modulated at 600 KHz when wiggled but am unable to make any measurements to confirm this.

Since I can't afford a 'real' repeater antenna, mine comes down every year for cleaning. It is completely disassembled, cleaned, all joints are lubricated, and then it is reassembled. It had a steel mast for a week but we never could make that work well. An aluminum mast fixed everything up (the antenna is aluminum).

As for a definition of a "good connection", for me that meant absolutely corrosion free, lubricated, and with both conductors of the same metalurgy... and remember a connection is made any time two metal objects touch each other.

I'd recommend the 'divide and conquer' strategy.

Bob Doyle
WA3TGF

5093. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5lgg1i$nrm@camel4.mindspring.com>
Source record: 94022

wmeara@erols.com (Bill Meara) wrote:

>On Thu, 08 May 1997 22:18:28 -0400, Douglas Wielfaert <marcy@vic.com>
>wrote:

>>Built the VXO controlled CW xmtr in ARRL QRP classics p 59 (1990 ARRL
>>handbook c30 p.43). (30 meter version) I get a clean signal when I first
>>turn the rig on (testing into a dummy load) I do hear a background
>>oscillation in a nearby receiver even when the key is up though. The
>>sig soungs good for a minute then gets very "Clicky" until it dies. The
>>grounded base amplifier transistor (a 2N2222A) gets very warm to the
>>touch. I have carefully checked the component tolerances including the
>>transistors and everything looks O.K. Prety sure the bifilar toroids are
>>wound in correct phase, but you never know. The specs call for a ground
>>plane on the component side of the board. I did not do that. The
>>crystal is 32pf from Peterson Radio. Oh... I am using 2SC2092s
>>amplifiers instead of MRF 472s or MRF476s as called for.
>>
>>Anyone have any ideas?
>>
>>Doug Wielfaert
>>WB8PAD

>Doug: Amazin! A couple of years ago I built two of these rigs, one
>for 20 and one for 30. Both worked great from the very first try.
>Today I was going to post a question about the history of this
>circuit. (See my other posting).

>A couple of observations:

>-- You are supposed to hear the oscillator during key up. this design
>keeps it running all the time to prevent unwanted frequency shifting.

>-- As I recall the driver transistor does get hot, but it should not
>get too hot to touch.

>-- Make sure your power supply is adequate. It may be that even with
>this little rig, you are pulling more amps than your supply can
>provide. If you are using a battery, try getting a bigger one, or
>putting a few smaller ones in parrallell.

>-- Also, make sure your antenna is providing a proper load. Try
>running the rig (briefly) into a 2 Watt 51 ohm resistor. See if you
>notice a big increase in monitored signal strength when you key down.

>-- I wouldn't worry about not having done the ground-plane thing. I
>used this technique with mine but I'm not sure it was absolutely

>necessary.

>Keep us posted. I had great luck with this rig. My first CQ was
>answered by a statio in Poland! Didn't even have the rig in the box
>yet!

>73 Bill N2CQR

As I undwerstand it, you say the only thing(s) different were the
2sc's and the absent ground plane.

The second poster said he had a ground plane but don't worry
about it. WHY NOT? It seems one of the prime suspects.

The proper xtors should be simpler, but the graound plane had a
reason and you may have discovered it.

Maybe to prevent a self-parasitic=suppression?

Good luck
Lou WB0NRU

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

5094. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5lgg1b$nrm@camel4.mindspring.com>
Source record: 94023

BOB DUCKWORTH <bob@atl.org> wrote:

>Lou or Annette Hinshaw wrote:

>> I don't need confidence in my claims, I need advice how to protect.

>No inventor or investor is going to make a dime without taking on
>some risk and extending some trust. If the inventor or investor
>can not figure out how to do this, then they hire someone who can
>or they find another line of work.

>You may not need confidence in your claims but finding someone, fool
>enough,
>to put up money based on your confidence is a waste of time and effort.

>-bob

Apparently, so is getting this thread to stick to my original subject,
I say again, I do not need your approval, your confidence or even
your diluted snidery.

WHAT I DO NEED IS ADVICE HOW TO KEEP SOMEONE FROM
HAVING THE IDEA THAT IDEAS ARE FREE, and never mind if
the poor sod that developed it spent all his money and half his life
in the process.

I do not refer to myself as that poor sod, because I can criticise my
own idedas until I bring them into working order. I just cannot sell
them thereafter, and never yet have I successfully trusted anyone
with the basis of the idea.

By the time I was 16, I knew better, and many is the time someone
thought they hadit all and said some version of "don't call us" as
they went on their merry way, only to find later that they hadn't got
the whole thing after all.

There is some method of assuring that the process is more or less
safe, and that is what I need.

Se, all the people who want me to *prove* that what I "claim" is true
can spend their time on something more profitable.

All i asked for was advice how to protect the stuff.

Actually the radio thing is minor, I have more and bigger stuff, and
can't see how to protect it either.

Any suggestions anyone (except naysayers)?

Thank you in advance.

Lou Hinshaw
tulsa OK USA,
WB0NRU

PS, in 1976 I tried to talk to ARRL about it to get the credit
for ham radio, and damn' if the guy that called me didn't try to steal

it himself.

Ciao.
LH.

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

5095. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bc620e$9d646d80$e690f5ce@wa6vse.fast.net>
Source record: 94024

Lou or Annette Hinshaw <aruder@pipeline.com> wrote in article
<5lgg1b$nrm@camel4.mindspring.com>...
> BOB DUCKWORTH <bob@atl.org> wrote:

{someone, who I'm not sure, but I guess maybe it was Lou Hinshaw wrote:]

>
> WHAT I DO NEED IS ADVICE HOW TO KEEP SOMEONE FROM
> HAVING THE IDEA THAT IDEAS ARE FREE, and never mind if
> the poor sod that developed it spent all his money and half his life
> in the process.
>
> There is some method of assuring that the process is more or less
> safe, and that is what I need.
>
> All i asked for was advice how to protect the stuff.
>
>
> Any suggestions anyone (except naysayers)?
>
> Thank you in advance.
>
> Lou Hinshaw
> tulsa OK USA,
> WB0NRU

Plain and simple, consult a competent pattent attorney or patent agent,
who is registered to practice before the US Patent Office (a list of such
is available on the US Patent and Trademark Office at
<http://www.uspto,gov>

If you truly have confidence in the value of your ideas and that they are
new,
novel, and useful, then you need to seek legal protection in the form of
patent
rights, if that's possible.

That's the plain and simple answer ...

Carl - wa6vse
wa6vse@fast.net

5096. ALINCO EC10 LPD radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: Jochen Ziegler <jochenzi@hpbbn.bbn.hp.com>
Message-ID: <337C5E68.5592@hpbbn.bbn.hp.com>
Source record: 94025

I have bought a LPD radio from ALINCO. The name is EC10.
The low power device has 10mW output power.

Let me know, how to change the output power from 10mW to 50 or 400mW.
Is the frequency after the change the same?

Jochen

5097. Re: CB to 6 ??????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: whiteway@portal.ca
Message-ID: <5li3t8$gru@thoth.portal.ca>
Source record: 94026

On 1997-05-15 jvaldes@whoi.edu said:
>Newsgroups: rec.radio.amateur.homebrew
>X-Mailer: Mozilla 4.0b3 [en] (Win95; I)
>X-Priority: 3 (Normal)
>I've seen one or two references to CBs converted to 6 meters. Does
>anyone have a specific reference on which radio's might be the
>easiest to convert? I have many of the articles (73) from the late
>70's on conversions but nothing timely. My interest is SSB
>conversions, as it would be nice to get a few of the newcomers on
>six when we have Es propagation.
>Thanks, Jim WA1GPO
Hi Jim; if you check with Lou Franklin at CBC International, Inc.; he has
all kinds of books and information on CB conversions.
The address is:
CBC International, Inc.
P. O. Box 31500
Phoenix, Arizona.
85046 USA
retreive fax at 602-996-8700

73 de VE7UW

from the untidy desk of Bing Whiteway

Net-Tamer V 1.08.1 - Test Drive

5098. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: BOB DUCKWORTH <bob@atl.org>
Message-ID: <337CBDF8.57B3@atl.org>
Source record: 94027

You'll have to trust your patent attorney!
-bob

5099. Re: CB to 6 ??????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: Paul Jordan <jordan@santanet.com>
Message-ID: <01bc6211$a9287be0$522977cc@jordan>
Source record: 94028

If you find anything out about this, can you pass it on to me also?? I too am interested in converting some old CB radios over to 6 meters.

Thanks, Paul KL0AN

jrv <jvaldes@whoi.edu> wrote in article <337B69AD.A0B6AC09@whoi.edu>...
> I've seen one or two references to CBs converted to 6 meters. Does
> anyone have a specific reference on which radio's might be the easiest
> to convert? I have many of the articles (73) from the late 70's on
> conversions but nothing timely. My interest is SSB conversions, as it
> would be nice to get a few of the newcomers on six when we have Es
> propagation.
>
> Thanks, Jim WA1GPO
>
>
>

5100. junk sale

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: Brian Marshall <brian.marshall@zetnet.co.uk>
Message-ID: <19970516214140704 69@zetnet.co.uk>
Source record: 94029

```
The Stirling & District Amateur Radio Society are having a junk sale
on the 25th of May at the Scout hall, Menstrie, Clackmannan,Scotland
more info at
http://www.users.zetnet.co.uk/bmarshall
```

5101. Re: new radio concept

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: codyspc@aol.com
Message-ID: <19970516095500.FAA09532@ladder02.news.aol.com>
Source record: 94030

Greetings!

In article <5lgg1b$nrm@camel4.mindspring.com>, aruder@pipeline.com (Lou or Annette Hinshaw) writes:

>There is some method of assuring that the process is more or less
>safe, and that is what I need.

Documentation, and your own analysis and how the idea can improve a product, or replace a product, or a concept that has not been expressed that provides a means to improve the quality of life - or a physical device that utilizes a unique process, either by function or designs, in it's operation, neverbefore considered.

>Se, all the people who want me to *prove* that what I "claim" is true
>can spend their time on something more profitable.

You don't need to tell them your idea, only what the idea can do.

An Attorney may be in order...

>All i asked for was advice how to protect the stuff.
>
>Actually the radio thing is minor, I have more and bigger stuff, and
>can't see how to protect it either.
>
>Any suggestions anyone (except naysayers)?

Documentation! Documentation! Documentation!

Contact an Attorney, discuss the terms in which you'd like for him to witness an idea - follow his instructions - it may go something like this...if they are different [instructions] follow them exclusively.

Describe the idea...date it and sign it. Make a written statement.

Put in an envelope and send it to yourself, or to him, or both - it'll have a
postmark of the actual date of the postal system, acknowleging that this envelope existed at some time, somewhere.

It's up to you now, to find an Attorney, and or Nortary Public to witness the envelope being opened. They will have to view the contents of the envelope and assure that the envelope was sealed before it was presented.

The idea inside the envelope, if you have an Attorney present - can reseal the envelope as a "confiscation" clause. It can remain in his possession, so copies are needed. As a part of the witnessing that occurs, they should

be able to supply a certified means of acknowledgement and/or copies. However, when discussing "copies", it's usually frowned upon. Usually a receipt process occurs.

It is now your responsibility to provide the attorney with the details on which you wish to apply for a patent, or collateral to develop a prototype, based upon your idea.

If a prototype was developed at your own expense - this can be presented as workable evidence of your idea - then a patent can be easily applied for.
A search within the Patent database is going to take some time - however you have some protection during the search time, due to the witness and postage cancellation stamp. This occurs "up front" with a witness.

It is up to your Attorney to decide on workable means to develop collateral
or applying for a patent - this is the most expensive, and time consuming part of the process.

Good luck, some trust, as said earlier - is needed.

~~~ A note from the Litter box : ~~~~~~~
|\w^w/| *73* to you and yours |\^v^/|
(-- --) from all of us..... (O --)
` =^=' :+> Andy and Alpha<+: `=^='
Squeaky =======&========Screamy
The Feline controlling interests...;-)
~~~

5102. Re: pl decoder

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-16 00:00:00 UTC
From: frederick.mckenzie-1@kmail.ksc.nasa.gov
Message-ID: <frederick.mckenzie-1-1605971421300001@k4dii.ksc.nasa.gov>
Source record: 94031

In article <01bc60ce$72732710$33359ace@tonyz>, "Tony Zuanich"
<tonyz@filenet.com> wrote:
> Does anyone know of a PL (CTCSS) decoder chip.

Tony-

Communications Specialists make encoders and decoders. I don't know if the decoder chip is available alone.

Their products are carried by Amateur Electronics Supply and others. I don't know if they have a web page.

73, Fred, K4DII

5103. Re: Jamboree On The Air - 1997?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: Jim <jim.parnell@nzart.org.nz>
Message-ID: <337D597A.1254@nzart.org.nz>
Source record: 94032
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Ronald D. Lucier wrote:
>
> I am looking for information on JOTA - the Scouting Jamboree on the Air
> event. The local Girl Scout and Boy Scout troops want to participate
> next Fall. Can anyone tell me when this is? We need a date for
> planning purposes. Any help would be appreciated.
>
> 73 de Ron, WA1UWZ
>
> QCWA#28749 - FISTS #3099
>
> http://www.3doptics.com
Ron,

JOTA this year is on the 18th and 19th October.

It is _ALWAYS_ on the third full weekend of October. Knowing this, you
can plan your JOTA activities for any year

I hope that you have a good time on it.

73,

Jim, ZL2APE,
New Zealand National Organiser for JOTA,
jim.parnell@nzart.org.nz

5104. FS_HOMEBREW CELL PHONE!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: kc4srn@aol.com
Message-ID: <19970517042600.AAA28366@ladder02.news.aol.com>
Source record: 94033

FOR SALE
CSI CS-900 VOX SIMPLEX (or repeater) AUTO TELEPHONE PATCH (Interconnect). Makes your HT like a Cell Phone. Works extremely well. Dual-bander not needed at base. 90 speed dials, two level safety codes. Built in programable keypad and volume adjustments. Needs only a mic and audio out conection on any base radio (or HT). Phone line plugs right into the back. Multiple and flexible options like notification if someone is on the base phone, and when they are done. Range over 15 miles simplex (30 mile across circle) on 2m band. More simplex range with nice base antenna, more height or an amplifier. Ever more range through a repeater. Just tune the rig to a wide coverage repeater (A club could run this patch from a home). Connects to any rig so use it with a LOW COST spare 2m (220 or whatever). Easy volume adjustments and BUILT-IN keypad. Of course CW ID makes it legal. Dispach and selective calling too. It's your choice, YOU are the control operator. Plus, a long list of other professional features. With a cross-banding rig in your car, you can go all over town making AND RECIEVING calls on simplex with your HT on low power 440! Set it to ringout, send DTMF (touch tone) code or use a silent PL tone, sent to your HT. Imaculate $299

5105. SOME INTERESTING QUESTIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <337e612a.149612@noticias.mundivia.es>
Source record: 94034
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Dear friends, I own a ICOM 706.
I would like any of you to send me all information, mods, improvements, and so with the 706. I would like to know also about the interfaces and programs for the 706 and the PC.
I am also very worried about these questions about blowing the 2 metre section up if you have the HF aerial very close to the 2 metre one. I have a vertical antenna for 144 in the same post support than a windom for 80-10metres. Is it any dangerous?. What is the proper distance?
By the way in my building there is a lightning arrestor (pararrayos) post at only 2 metres from my antennas support. I have always thought that this could be some dangerous though Valencia is not a very stormy city. Anyway, some friends have told me that it is the same dangerous as it would be 50 metres away as a lightning has an action radius of about 150 metres, even a local ham told me to put my windom aerial up to the lightning arrestor mast which is 5 or 6 metres higher than my antenna post. He said is the same danger in the lighning post than only two metres away. What can you tell about all this?.
Will it be enough just swithching off the antenna plugs of the transceiver in case of a storm?.

Another question is, What is the proper high for a HF vertical (WARC Bands 18 & 24Mhz) above the roof of a 14 floor building? Mine is only at 1.5 metres from the roof and works OK, but many often is beated by the windom one which is only 4 metres from the roof. This is strange for me as I have always read that a vertical is always better than a dipole if that one is not at least at wave over the ground. For this theory, my vertical should be better because the dipole windom is only at 4 metres over the ground (the roof of my building), but in many cases the dipole overbeat the vertical. Can anyone explain this to me? I have read many E mail messages of hams talking about the pros and cons of verticals and dipoles, but nothing is clear yet. What is the real truth? Is really any real truth?

Thank you.

/|\
@ @
-----oOO-(_)-OOo----------
Francisco Garcia
e-mail: jorgegc@mundivia.es

5106. Message too large for system (Max 30KBytes)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: postmaster@emarkt.COM
Message-ID: <170597132117681Cpostmaster@emarkt.com>
Source record: 94035

```
Failed to deliver message for the following reason:
Message too large for system (Max 30KBytes)

Original message follows:

Received: from mailbox1.ucsd.edu by fmgateb.PhoneLink.COM id aa03754;
17 May 97 13:20 BST
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id DAA23159 for <ham-homebrew-list@mailbox.ucsd.edu>; Sat, 17 May
1997 03:52:06 -0700 (PDT)
Received: by noc.ucsd.edu; id DAA04919
sendmail 8.8.5/UCSD8.3
Sat, 17 May 1997 03:32:29 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id DAA04894
sendmail 8.8.5/UCSD8.3
Sat, 17 May 1997 03:32:23 -0700 (PDT)
Message-Id: <199705171032.DAA04894@noc.ucsd.edu>
Date: Sat, 17 May 97 03:32:21 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #307
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest

...rest of message truncated
```

5107. FT-901/902 22ways to improve - part one - (second try)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: J M Noeding <la8ak@online.no>
Message-ID: <337E1F13.6527@online.no>
Source record: 94036

This is a multi-part message in MIME format.

--------------658F57743B8
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

hi
believe first msg was too large so I divide it
--

OPR.: Jan-Martin Noeding - LA8AK, Voielia 39B, N-4623 KristiansandS
Main interest: Amateur radio technical experiments, QRV: 3.5-10369MHz
CW/SSB
Tel. QTH +47-380-87178, QRL: +47-380-52660, GSM: 9064-4295,
NMT:944-26396

--------------658F57743B8
Content-Type: text/plain; charset=us-ascii; name="FT-9012.TXT"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="FT-9012.TXT"

PROCESSOR LEVEL CONTROL is a perhaps just a JOKE, no control range is achieved.
Replace Q207 with a P-channel FET type J177, 2N5462 will work, too.
Change R229 to 10K.
R225 is increased to 330 ohm - LA8AK 1989

NOISE BLANKER
The noise blanker is not the worst I have tried!
Some time ago I modified the noise blanker in FT-7, and the solution to FT-7
is found in FT-7B! Unfortunately it seems that although the persons who made
the FT-7B made a good job in this respect, they may not be engaged to work
with other equipments so often.....
On PB-1995 FILTER UNIT (PB 1716 in FT-901) C328 was increased by 0.1uF
Result was 1 S-unit reading (S9+20 without noise blanker).
With 0.22uF, there was no reading at all, and the noise could hardly be
heard. LA8AK - 1989

FT-902 IMPROVEMENTS (2)

PUSHBUTTONS.
After some tears in use the tend to be difficult to operate, with a little
spray, they will be as new. It is in particular a spring seen from behind the
front cover that must be operating easy. (LA8AK)

10M FM
Modulation seems to be for 2M standard, 25KHz channel spacing standard.
On 10M is 10KHz standard, and a smaller filter should be used.

(A narrower filter should be used) - LA8AK

RECEIVER INCREMENTAL TUNING (CLARIFIER) - FIRST TRIAL (LA8AK 1989)
Requirements
HF SSB +/- 5KHz
HF CW +/- 1KHz
2M CW +/- 2KHz
2M CWMS +/-5KHz
2M/70CM SSB +/-5KHz
2M AURORA +/-5KHz
70CM AURORA +/-10KHz
I have chosen to use +/- 1.5KHz approx
VR06 is overcoupled with 1K5, VR06 in my RIG is 5K, in other FT-902's I am informed they have another value, so the modification must be different.
VR01 (470 ohm) is re-adjusted, in my RIG the nominal voltage is 2.6V

CARRIER LEVEL CONTROL- LA8AK 1989
A 5K potmeter is used, but the effective variable value is only 1K, it means that 80% of the rotation makes no change in RF output level.
To improve this, connect a 1K2 resistor on PB-1994 (NB-UNIT) pin 5 to ground.

AUDIO QUALITY - LA8AK - 1988
As manufactured the quality is terrible, I could not use the receiver made me headache! Bass-response. Solution to the problem is found in FT-7, same IC is used here. C511 - AF to AF-power amplifier is changed to 47nF, and quality is now perfect!!

FSK - LA8AK-1988
DC level to FSK input on the RIG is low, and the input transistor may be damaged. Only 1.5-2V dependent on series of production on PB-1706 carrier unit.
Loosen base of Q701, insert a 4K7 resistor between PCB and the transistor.
Now the noise margin is better and TTL level can be used if you want.

IMPROVING FT-902-DM (3)

BETTER BIAS CIRCUIT - LA8AK-1989
Connect a diode - 1N4007 - between (PB-1708 RECT A UNIT- NO 10) pin 5 and C11, cathode to C11. Will help for as in valve.
Connect a 100K resistor between C11 and R12 (over one part of potentiometer VR01 10K) This will help to protect valves when bad contact in potmeter.
...I have bad contact in keyboard...read...gas in valves
Although not shown on circuit diagram a diode, similar to 1N4148 is connected in series with screen grid voltage to valves. In series with the RF-choke.
Connect a 10K resistor over this diode, PA printed board.
Cconnect one varistor SIEMENS S14K150 from each screen grid connections to ground, to help in case of flash over, to protect the opposite valve and the power supply, which is not particular over rated.

KEYING - LA8AK-1989
As original the keying sounds bad on a good ear.
Connect a 0u47 capacitor on PB-1717 RECT-C pin 16 to ground, MOUNTED ON THE

printed circuit board.
Connect as follows on PB-1708 RECT-A UNIT
KEY PIN 2

PIN 2 -!-----100K-!-----------0.33uF-------I GROUND
! ! 100V capacitor
!-->I------!
1N4007 cathode

The diodes mentioned here 1N4007, the reason to use 1N4007 (1N4002) is not for current (1N4148 is good enough in this respect), but this rectifier type will be a bad RF rectifier, and that is important.
The reason to use this device capacitor, is that charge and decharge current is different, so to make same start and fall times for the keying, a diode circuit must be used.
Reports on the air is good. I operate quite a bit on CW on HF/VHF/UHF

PTT
Connect a diode in series with PTT relay. Otherwise the RIG will activate a transverter when switched off. - LA8AK-1989

MIKE
I changed the mike connection to the KENWOOD connection, so that I can use same mikes for different RIGS - LA8AK-1989
Later I used only YAESU mikes for all my RIGS! Even KENWOOD.

AUDIO OUTPUT - LA8AK-1989
An unused part of LM324N/MC3403P on PB-1705 can be used as buffer for independent audio output for packet radio, RTTY, CW-METEORSCATTER.
An unused cable goes from AF-board MJ6 to VOX MJ-7, since I do not use tone output of transceiver from sidetone osc. The connection to the rear can be used, but it is too difficult to describe it here.

Independent line output for FT-901/FT-902
PCB: PB-1705 AF, PB-1846 VOX

+8V I-R533 10K-----I
I I ---------- I
Q502 I I I Q504A I I
C R532 1M I I I I
B I I I I I
E--22nF----I I--PIN2 I I
I I I PIN1 ---I----C520--I--2K2--I<MJ6 PIN16>---
R513 4K7 I------------PIN3 I 2u2 I
I I I I 1000pF(posn.R504**)
I R531 1M ---------- I
I I 1/4 MC3403P=LM324N I
GND GND unused part of IC GND
used for AF line O/P buffer

PB-1705<MJ6 PIN 16> screened cable<MJ7 PIN 7-VOX>-- 1K*-----J17 TONE OUT
SCREENED CABLE 'REAR'
Notes:

**R504 position used for 1nF capacitor, RF decoupling
* 1K original resistor mounted to J17 is 4K7, leave it or change it, depend upon your interest, output level is 0.5V P-to-Peak
This modification uses an unused part of the IC 'Q504'. Some components are marked on the PCB. Some of this existing components use some of these points, remove these first, and connect then into the air above the PCB.
R533 10K goes between pin 2 and 1
The 22nF capacitor must find a place between emitter of R513 and the IC. A link must be inserted between C520 and the 2K2 resistor on the output.
(R52 is losen in one end to do this modification) -LA8AK 1990

FT-902: BIAS CIRCUIT RECT - LA8AK 1990

Perhaps this circuit diagram is better to understand...

```
'-100V'
I
R12
I----NEW 100K-------------I-------I<----------I
I I NEW 1N4002 I
END1 I I----'BIAS'
POT.METER I I
CENTER--------------I----R05------------I
VR01
END2
I
I
R09
I-------KEY(2)
```

The two added components are: 100K 0.25 or 0.5W +/-10% resistor
1N4002/1N4007/BY100 rectifier diode
The diode should help to protect the valve if positive ionization occurs in the valve/grid circuit - it might reduce bias voltage. This was mentioned in RADIO COMMUNICATION, Technical Topics about 1972-1974...sometime
The resistor as connected are always FB to use. I used this also for some british AJAX transmitters used for coast radio stations to save 4-400 valves and avoid break-down.

FT-902 CALIBRATOR PB-1846 - LA8AK 1990

Proposed change to avoid intermodulation distortions as described for FT-7 and FT-250.

```
------>I--------------I
D608 I +13.5V(15)
------>I--------------I I
D609 I I
R650 47K
I I
I---------------I-----10nF----GND
C
```

MARK B+---47K--------B BC547/BC548/BC238/2N3904/MPS3394
(4) E TUN (NPN general purpose transistor)
I
GND
Connect: 47K from collector Q613 (marked Q6) to GND
47K from collector Q614 to GND point of printed circuit board

PB-1846 VOX/MARK UNIT -(LA8AK-1990)
Also: refer to earlier note: separate AF line output, R652 (pin7) is lifted up in one end, since pin 7 of edge connector is used for this line-output circuit.

FT-902: PB-1707B FM UNIT -(LA8AK-1990)

Nominal TX IF voltage is 60mV. Carrier from FM board is far too high, but there is used 'some funny practice with trimming capacitors' in several japanese RIGS to adjust levels. This should be avoided whenever possible, because unstability may occur because the different stages do not see a real & low impedance. Diode gates are much better policy!
On FM-UNIT PB-1707B I removed TC903 and replaced it by a trimpot 2K2. In about same position. The input from TC903 goes to the wiper. One end is grounded, the other is "output"...to diode gate.

I----C963--I--->I------PIN-4--60mV FM carrier
I I 1N4148/BA182
UPPER END I
FROM---CENTER 2K2 2K2
T903 LOWER END I------10nF----GND
I I
GND 2K2
<FM level> I----PIN 4 FM CARRIER SWITCH

FM out is pin 14 (not pin 4!!)
Under the socket must be connected a 4K7 resistor to ground or better at input to NB board <pin 13> on the junction of different cables which also comes from FM-UNIT <pin14>
The obscure trimmer capacitor connected between <CARRIER PB-1706A> and <NB pin 13> is removed, wires on each side are joined.
A similar diode switch is also mounted on the output from PB-1706A.
Nominal IF voltage for TX is 6mMV, however with a defective RF speech clipper <so called speech processor> or signal from FM-UNIT adjusted far too high, it may reach 400mV.

Well, this is some of the modifications I have made, personally I think this RIG is now splendid! I have used over 20 different RIGS/receivers during 1960-1989

FT 902: DOES AMGC WORK? - LA8AK 1990

I just wonder if anybody has considered the 'AMGC' function.
I believe it is thought to be used to reduce the signal level into SSB modulator when background is noisy.
However, my experience from similar use of transistor as Q709 (2SC1815) on

PB-1706A CARRIER UNIT (see NB UNIT - Q207 2SC1815) is that it does not work
at all..., and how can it then work in another similar circuit?
I would suppose that a vmos fet would have been better.
The actual circuit is:
---FROM NORMAL MIKE AMP---TO BALANCED MODULATOR
I
C753 33uF
I
C Q709 2SC1815
FROM MC14011/A--56K---I--------B
PIN 3 PULSE/FUNCTION 22uF E
GND
Proposed change (not tried):
BASE TO GATE, COLLECTOR TO DRAIN

+8V-------10K-----I------------I---- TO SOURCE BF245
22K POTMETER 47uF
I I
GND GND

AMGC function switch was later used to select between SSB/CW filter for
CW reception. LA8AK-1992

FT-301/FT901/FT902 RF-CLIPPER(SPEECH PROCESSOR) - ONCE MORE

After having received some requests for this circuit, here it is once more
same clipper is in FT-301.

I-->I--I diodes 1N4148/1N914/1N916
I I
I--I<--I
I I
PIN 4 PIN 5 Q206 TA7060P (SSB limiter amplifier, which does not limit voice)

Gain control/processor level (not processor level, he cant be so stupid!)
Change R229 to 10K
Change transistor to P-channel FET 2N5462 will work but it could have worked
better, poor 6dB-8dB, but it is a waste improvement to the original. Some
effect is lost in ALC operation.
I
D
---------G
I S
C224 I
I--------I--GND

Perhaps it is possible to use an N-channel FET for better operation and more
easily available transistor. Proposal is BF245C. N-channel...
I
C223
I
D

GND-----G
S
I----100uH---I-------I----PIN 10 EDGE CONNECTOR
I I I
tantalum 1uF C224 R229
I------------I I CONNECTED AS BEFORE
IGND GND I

R229 IS 2K2....10K

In the first circuit diagram 'D' is connected to C223 as original (collector)

------PB-1994----- will also work for FT-901

FT-902(2) RF SPEECH PROCESSOR

It is necessary to invert the function of the 'processor level' potmeter
The center connection is connected to the opposite end-terminal (LA8AK)

FT-902: REDUCING TRANSVERTER RF DRIVE (1989 LA8AK)

It is very simple, and I have used this for all my previous RIG's:
FT-250 (200), FL-DX-500, HX-20, FT-101B, DRAKE TR-4, TRIO TS-500

Instead of a 10pF capacitor from PA-GRID circuit I use a capacitor and
resistor

------2p2----1K------TRANSVERT OUTPUT
Output will now be maximum 10mW, perhaps less. So 4p7 may be a better
capacitor value. But I use my MICROWAVE MODULE transverter with maximum
sensitivity for TX-drive

FT-902DM, CW-WIDE/2.4KHz MOD.

Here is a list - as I remember it to install a CW-MS keying circuit as
described or a similar unit for proper keying with transverters.
PB-1706A Carrier pin 8 ----CW/AM/FSK +12V---Connect to CW MS board +12V
PB-1706A Connect on the board: pin 11-->I---pin 10 1N4148/1N4002
PB 1705A AF pin 6 is used for +AM which enables the keying on CW MS board
Connect a wire from key-jack to key input on CW MS board PB-1994/1703C NB.
Connect a resistor on plug pin 13--4K7-- pin 12
Remove all the wires for the built in keyer in the transceiver, even the
wires to and from the switch/potentiometer on the front.
FILTER PB-1995/1716
SSB pin 13---------I<---I------- C318
AM pin 14---------I<---I R315,R317,L308 (junction)
If you wish to have variable bandwidth control for 'CW WIDE' (I do not see
the point) remove the wire going to 'IF' pin 16 from S2C, and connect a new
wire from 'FM' pin 4 to 'IF' pin 16, this wire is only used to remove the
variable bandwidth function for FM, when voltage on it - function is
disabled, the IF board is in FM-mode only used for S-Meter function.

The modes referred to function switch as modified
1 LSB LSB (SSB)

2 USB USB (SSB)
3 CW CW NARROW (USB RX) CW NARROW (USB RX)
4 FSK (CW NARROW FILTER/LSB) FSK (as before/LSB)
5 AM CW-WIDE, USB RX 2.4KHz BW
6 FM FM
All these modification has been made without any impossible changes at the
mode switch, I looked at it and resigned !!
One problem remains, the output PWR on HF (not VHF with transverter) will be
lower for CW wide than for CW/SSB.
A 15K resistor is inserted in series with the screengrid supply voltage at
RECT-C. If you are a good operator, this resistor can be removed, otherwise
the mode switch should be rewired at position AM, S2A-front wafer.
S.G +-I-------SSB/CW---0
I S2A--------I-----------160/15M---0
I---15K----------0 I BANDSW.--- SCREENGRID
RECT-C I--2K2------10M-------0
A smaller reduction in screengrid voltage is also introduced for 10M

The next modification is receiver incremental tunning:
+/- 5KHz for SSB/CW-NARROW/FM
+/- 1.5KHz for FSK/CW-NARROW (should read CW-WIDE above)
For this modification I would use a dual op-amp and a J177 P-channel FET.
This will be shown later
CWMS KEYING BOARD WAS LATER ABANDOMED BECAUSE OF AURORA SOUND ON SIGNAL
RECEIVED- THE FAULT WAS NEVER TRACED. SEE NOTE ABOUT AMGC SWITCH - LA8AK

FT-902. 'CLARIFIER RANGE' SELECTED BY MODE.. -<< LA8AK >>-

Selected clarifier (Receiver Incremental Tuning) range for different mode
I have made a suggestion for the range meeded dependent upon different mode:
LSB/USB/CW-WIDE/FM/(AM) +/-5 kHz RIT
FSK/CW-NARROW +/-1.5kHz RIT range
In fact the result using simple components with this RIG is:
Narrow range: +/- 1.4KHz, for mode selector position CW (marrow) and FSK
Normal range: +/- 4.8KHz, for other selector positions
The circuit uses an MC3458P1 (LM358) dual op amp and a J177 P-channel FET.

FILTER PIN 16 (+12V)-------------------------I--------0u1----GND
I
------8------
I I
VR01 470 ohm reference---10K------------6 4----GND
I I
PIN number above is '5' I--------6 I
I I I
I--------7 I
I I-----------I
S
CW GND/FILTER
PIN 15---------1M------------G J177 P-channel FET MC3458P1
D MOTOROLA

```
I I-----------I
10K I I
I I B I
VR06 CENTER---22K--------------I--------3 I
CLARIFIER I I
5K or 10K* I--------2 I
SOME MODELS HAVE I I I
10K, CIRCUIT DIAGRAM I--------1 I
SAYS 5K I I-----------I
I
I-----ORANGE WIRE---- TO S04/S05
LA8AK RX/TX CLARIFIER
SELECT PUSHBUTTONS
This circuit shows the solution for YAESU FT-901/902DM
However, the idea may be applied to most available transceivers up to the
newest versions, most of the circuit details are similar or easy to see how
to insert this circuit.
The reference potmeter is the small trimming potmeter used to adjust the
RIT/clarifier center frequency.
The orange wire from clarifier center is removed and connected to the output,
pin 1&2. A new wire is connected between the 10K resistor at the input to pin
5 (!!) and the center of the clarifier potmeter. <LA8AK>
```

COLLECTED BY HARRY..G0LHX @ GB7TJF #45.GBR.EU - NOVEMBER 1994

Hallo OM Jan-Martin,

I saw a message from you titled "FT-902: Improving
RX-MIXER.....". I own both a FT-901 and a FT-902. Some years ago
I changed RF unit of the FT-901 (PB-1702) by a FT-902 RF unit
(PB-2154). I can tell you it works fine! The only thing you
should be aware of is that the three connectors on top of the
module have changed position as follows:

```
position |FT-901 FT-902
---------+----------------
top |Red Yellow \
middle |Yellow Green } colour mark of
bottom |Green Red / the coaxial cable
```

If you make the right connections the PB-2154 works right away
in an FT-901. No further modifications necessary. <LA8AK>

73, Ronald - PA3FGE @ PI8WNO.#UTR.NLD.EU
931221

--------------658F57743B8--

5108. Would like some suggestions about QRP rigs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: QRP <Indiana@CW.QRP>
Message-ID: <01bc62dd$67bf0e40$35fe35ce@larin>
Source record: 94037

I am looking to buy a QRP rig. I would like it to cover at a minimum 80 and 40 but would prefer 10 - 160 cw and ssb. Does anyone have any opinions of what are the best radios and what I should be looking for in a QRP rig? I am open for any help. Thanks!

5109. New Radio Book Store!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: wrldradio@aol.com
Message-ID: <19970517223300.SAA02910@ladder02.news.aol.com>
Source record: 94038

A note from "The Antique Radio Collector" <<
http://members.aol.com/wrldradio/index.htm >>

Beginning this month, we are happy to announce our affiliation with "Amazon.com " We believe you will find our new book store offers one of the most comprehensive listings of books and tapes relating to the collecting of Antique Radios, Old Time Radio and Amateur Radio, and related subjects offered anywhere, many with discount pricing. Hopefully, we have now found a way to support our website so that we may continue to offer "free classified advertising" to collectors and maintain a site you'll find worth visiting often.

You should also know that all transactions made from the store are handled directly by Amazon.com, through their "Secure Server" service, for your protection over the Internet "and all orders and shipping are processed directly by Amazon Books".

So, when you need a resource book or just feel like reading a good book (or listening to OTR audio tapes), please visit us at:

http://members.aol.com/wrldradio/bookstore/bookstor.html

<< "Amazon.com Associates" list selected books in an editorial context that helps you choose the right books. We encourage you to visit "The Antique Radio Collector" often to see what new books they've selected for you.

<< Thank you for shopping with an "Amazon.com Associate".

<< Sincerely,

<< Jeff Bezos

<< President, Amazon.com

5110. 2E26 TUBES 4- SALE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: JOSH KAYSON <jkmtl@total.net>
Message-ID: <337E1F92.102@total.net>
Source record: 94039

I HAVE A QUANTITY OF TUBE TYPE 2E26 FOR SALE. ALL BRAND NEW IN RCA
BOXES.

I WOULD LIKE TO SELL SAME SINCE I NO LONGER USE THESE.

I WOULD ENTERTAIN OFFERS. QUANTITY AVAILABLE COULD RUN TO 100 EACH.

JOSH KAYSON VE2JKK

5111. INFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: Don Crozier <ka9qjg@tsrcom.com>
Message-ID: <337E3C31.4D8@tsrcom.com>
Source record: 94040

Hi,My name is Don Ham Radio operator KA9QJG I picked up a MOTOROLA MOBILE DATA TERM # 9100-20 I would like to be able to use it for emergency pkt communications on 440 at 9600 baud has anyne had any experience doing this?and how would i get a ser man cables etc? any help would be greatly appreciated thanks DON KA9QJG

5112. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <337E781A.1F1C@pop.removethistomailme.net>
Source record: 94041

Sounds like a parasitic oscillation might be causing excessive current drain, which eventually alters the characteristics of the circuit enough to keep it from amplifying the desired signal at all.

Pitfall 1: a 2SC2092 transistor was subbed for an MRF 472/476. The 2SC2092's NTE equivalent (don't have the original data sheet handy) is specified with an ft of 300 MHz, while the 472/476's equivalent is spec'ed at 150 MHz. If the same is true of the OEM parts, that could be a problem. When it comes to transistor ft, more is NOT always better -- in this case, it will make the circuit much more prone to parasitic oscillation at some unknown VHF frequency. With a ground plane, this would be unlikely to occur, but...

Pitfall 2: I wouldn't build a code-practice oscillator, much less any type of RF circuit, without a good ground plane. :-) Do yourself a favor and throw away every scrap of "perfboard" you own, and give it another try with dead-bug construction on bare copper-clad board.

-- jm

Note: My E-mail address has been altered to avoid spam

5113. Internet for free worldwide

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: netfree@hotmail.com
Message-ID: <337e1a25.19958316@news.nasionet.net>
Source record: 94042

Free adult internet connection worldwide via our BBS.
Please visit as much as possible our sponsor pages,
it's how we are paid...
Follow the link and enjoy...

http://www.cybercity.hko.net/LA/interbbs/index.htm

5114. Re: Would like some suggestions about QRP rigs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-17 00:00:00 UTC
From: AC6V <ac6v@ix.netcom.com>
Message-ID: <337E62EE.5C50@ix.netcom.com>
Source record: 94043

QRP wrote:
>
> I am looking to buy a QRP rig. I would like it to cover at a minimum 80 and 40 but would prefer 10 - 160 cw and ssb. Does anyone have any opinions of what are the best radios and what I should be looking for
in a QRP rig? I am open for any help. Thanks!

QRP -- maybe take a look at the QRP links on the web if u haven't seen
them.

Go to INDEX below, click on QRP.

Good Luck
Rod in San Diego
--
AC6V's Ham & DX Reference Guide
With Over 1277 Links To DX And Ham Radio
MAIN PAGE: http://www.netcom.com/~ac6v/index.html
INDEX: http://pw2.netcom.com/~ac6v/pageas.html
E-Mail: ac6v@ix.netcom.com

5115. Transistor Theory: Seductive Fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <337f820b.8050576@news.erols.com>
Source record: 93906

Mark - You wrote: >
>It took longer than I thought but I did dig out the reference. Wonder
>of wonders -- it's an article in QST, appearing on page 59 of the
>November 1992 issue. Kenneth Macleish, W7TX, is the author, and the
>title is (appropriately enough) "Why an Antenna Radiates". Mebbe it's
>already old hat for you, but there it is.
>

>Macleish takes a microscopic view of radiation, at the "pithball"
>level. Hope you find it useful.

Mark: Thanks for digging up the article. I've read it MANY times.
In fact it was Macleish's article that really got me thinking about
the physics of radio.

I liked the article and it helped me a lot. But it really doesn't
provide that gut level understanding that we've been talking about.

Like many authors on this subject, Ken doesn't really point out that
there are limits to our understanding of these matters. When you get
right down to it, no one really understands what an electron IS, what
charge IS, what the magnetic force IS. Also (as far as I can tell) no
one REALLY can understand or explain the particle-wave duality. Just
ask a someone to explain how particles are generated by your 20 meter
dipole!

I've found that in this search, you have to consult lots of books. No
one author seems to have it all. Many seem to have big pieces of the
puzzle, but stumble in other areas. For example, I found one British
author who did a great job describing almost all aspects of EM
radiation. But then he wrote that the magnetic field is just a
relativistic effect caused by the motion of charged particles. That
little statment cost me months of confusion. Finally some of the
Physicists over in the COMPUSERVE Science Forum pointed out that while
relativistic effects are there, magnetism cannot be considered as
JUST a relativistic effect.

Another point: Many of the texts discourage efforts at understanding
by telling layman that unless they can master the calculus of
Maxwell's equations, they can't possibly REALLY understand what is
going on. I disagree strongly with this statement. I've learned
enough calculus to have an inkling of what is going on in the
equations, but I think the basic lessons of Maxwell CAN be explained
without the math. And I suspect it is possible to really master the
math without really knowing (at gut level) what is going on.

As for Nahin's statment about QM and transistor theory, I went back to the books and found a number of texts that I've used have quite a bit of not-too-mathematical QM theory sprinkled in there.

Good luck in your search for the gut level understanding!

73 de Bill N2CQR

5116. Ham Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: John Fleenor <johnf@mailhost.cyberramp.net>
Message-ID: <337F9138.6F1C@mailhost.cyberramp.net>
Source record: 93907

http://www.cyberramp.net/~johnf

5117. F.S. - Tubes, radios and publications...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970519012700.VAA19294@ladder02.news.aol.com>
Source record: 93908

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #514-T.

5118. CB2SIX, part 1 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc6329$87ce8980$LocalHost@anderskv>
Source record: 93909

CB TO SIX METRES Part1 - The Introduction

By Shawn Baris ZR1EV
PO BOX 212
Brackenfell
7561
Republic of South Africa

Anyone is free to use the following information for private use on the provision that it is not used for commercial purposes . Permission is granted by the author , ZR1EV , to publish and or distribute all or part of the following on the condition that recognition is given to the author .In the case of it being used in a newsletter or magazine , a copy of the aforementioned should be sent to the above adress.

Having allways had an interest in "band 1" propagation , and being spurred by reports of TV signals from the old Crystal Palace transmitter on or around 45Mc being recieved regularly down here in Cape Town during the Seventies , It was particularly frustrating not to be able to operate on the 50Mc band . This band was for exclusive use by ZS-call holders and as you can see by my call , I hold a "VHF-only , no-code" ZR-call .
Things changed in 1981 , when it was announced that the six metre band will be opened up for holders of the ZR-call on the 1st of January 1982 . I was extatic ! But elation was soon followed by disapointment when it became apparent that there were very few rigs to be had , and the prices of those available were way above what I could afford .
I was given an ex-military rig by OM Dave , ZS1SG , but soon realised that if I was to really exploit the amazing fare of different propagation modes possible on six metres , I would have to use SSB/CW and have more power at hand , when it was needed . A transverter seemed to be the obvious choice at the time , and I proceeded to aquire an SSB/AM CB rig , with the idea to convert it for operation on the 10 metre band , which I would then use to drive a transverter I was still going to construct .
After the mod to the rig , (which worked extremely well) , I proceeded to experiment to find the best circuit for a transmit converter that would eventually form part of my prototype . At this point , I realised that the whole idea is not going to be all that simple . The local oscillator would have to have a frequency of 22 Mc . (22 + 28 = 50) . Unwanted products from the mixer would be (28 x 2 = 56) and (22 x 2 = 44) These unwanted products from the mixer i.e. 56- and 44 Mc are only 6 Mc away from the wanted output and were going to be very difficult to attenuate to the required -50dB (min) level required and to have a consistant clean output across 50-52 Mc would be asking quite a lot from the mixer and filter stages . To cover from 50-54 would paint an even bleaker picture and would involve switching bandpass filters to enable the unit to stay within minimum spec .

At this point , something else dawned on me . For the rig to operate on 28 Mc , the local oscillator would have to be on (28.000 + 10.695 = 38.695) . The 10.695 is the IF frequency used on the rig I had and the local oscillator is injected on the "high side" of the desired operating frequency . It now becomes clear that if the Local oscillator signal could be treated as if it would be injecting on the "low side" of the desired operating frequency , the new frequency (image of 28.000 , with 10.695 IF) would be 38.695 (LO) + 10.695(IF) = 49.390!
If the Local oscillator signal could now be made to go up to 39.305 (rig operating on 28.610) we now have (39.305 + 10.695 = 50.000!) . This forms the basis of the modifications to follow . I part2 , I will discuss the frequency synthesizer , and how to actually go about moving the rig up to round 28.600 , which will be the first step in the mod . Also , bypassing the inherent problems when using a 40 CB channel switch in any mod , albeit to 10M or to 6M . (5 "gaps" where the frequency "jumps" 20kHz and the sequencing problems round ch23-25 , and the nuisance of having to have a typed piece of paper stuck to the rig to tell you what channel=what frequency) The conversion is well worth the effort and I have already done dozens of these mods . The bugs in the early prototypes have been fixed and due to presure from the local guys , I have decided to "put pen to paper" and share what I found from years of experimenting and perfecting .
Hope you will be able to enjoy it as much as I have . Please let me have your comments and input .

CU in part2

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

5119. CB2SIX, part 3 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc6329$b90bd2a0$LocalHost@anderskv>
Source record: 93910

CB TO SIX METRES Part3 - The PLL Frequency Synthesizer continued

By Shawn Baris ZR1EV
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In part2 , we had a brief look at the basic operation of the PLL frequency synthesizer (If you want a more detailed description , do drop me a line) and from that we can see how the channel frequency is generated . If now , for example , we change the binary input to the PLL chip to something else , say 234 , it would result in the phase detector generating an "error" , which will drive the VCO to the new frequency so that the loop will once again be in the locked state . As the VCO will now have moved 10kc , the resulting sum output will also have incremented by te same amount , resulting in the transceiver effectively having changed frequency by 10kc . This scheme is fine for changeing frequency round the design operating frequency of the radio , but to change "band" to a frequency more than 1MHz up , one has to watch out not to exceed the 3.5MHz maximum frequency input to the divide-by-N counter . It should be clear that the synthesizer frequency can be moved higher by changeing the 10.0525 Xtal to a new value. There should be no need to rush out and buy one , just have a look in your

"junkbox" for a Xtal with a fundamental frequency round 10.400 . After you have done the replacement the alignment is easy . Attach an RF voltmeter / 'scope / RF "sniffer" to test point3 (TP3) and , using the propper (!) trimming tool , adjust the core of T3 for max deflection . Then , connect a DC voltmeter to pin6 of the PLL02A chip (take care not to short any of the pins) and carefully adjust the core of the VCO "block" until you get a solid 5V in that pin . Flick the channel switch from CH1-CH40 while checking the voltage on pin6 of the PLL ic and confirm that it stays 5V . The PLL is now locked . Connect the RF Voltmeter/'scope/sniffer to pin4 of IC3 (C3001/TA7310P) and adjust T1 and T2 for maximum deflection on Channel20 . Remember that the rig will not transmit if the PLL is not locked . When pin6 of the PLL chip falls below 5V , it "switches off" Q7 in the transmitter predriver stage , rendering the transmitter inoperative . Set the rig in the transmit mode and realign the set as per the manual for

maximum output . Rig should now be transmitting somewhere around 28.600 and the exact frequency can be checked with a frequency counter .(Please remember to have the rig in the AM mode for measuring the frequency - sounds obvious , but easy to forget in the heat of the moment)
You will now most probably be on a somewhat "wierd" frequency like 28.7842 or suchlike . (At no time touch the 10.692MHz oscillator trimming caps , CT4 and CT5 - I will explain their function later . They should not be touched at all if your rig was operating 100 percent on 27Mc) . The easiest way to go about the following procedure , is to have an HF reciever on hand with SSB fascilities . In the previous example , say 28.7842 , tune your reciever to either 28.780 or 28.790(preffered) . Key up the rig again (in AM mode) and adjust CT1 for a zero beat on your reciever (Which should be set to USB) The rig should be keyed into a "Dummy load".
Now set your reciever to LSB and do likewise on your rig and while modulating , adjust CT2 for a natural sounding voice on your reciever . If necissary, experiment with the values of C20 and C21 to get the rig spot on frequency . You should get no less than 4W on AM and 12W on SSB after the mod , and if you want , you can realign the reciever strip now as well using an adjustable signal generator and use the set as a 10M rig , or get ready to continue the mod up to six metres . Good luck .

CU in Part4

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

5120. CB2SIX, part 4 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc6329$cde558e0$LocalHost@anderskv>
Source record: 93911

CB TO SIX METRES Part4 - The Reciever Section

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Now that the rig has been converted to 10 meters and it has been thoroughly tested there , we can proceed with the conversion to 50Mc . You may by now have noticed that the chassis of the rig is isolated from the earth-plane on the printed circuit board itself . This was done to enable the rig to be installed in either a positive- or negative earth vehicle .
The chassis must be at RF earth though , as the antenna socket must "see" the earth on the PCB . This is where a lot of "conversions" fall short in performance . So what needs to be done first is to replace all the disk ceramic capacitors that connect earth and ground together . All round the PCB where it is screwed to the metal chassis , you will see them . Don't forget the two caps on the DC connector ! Change all the capacitors with a value of 0.047�F (47nF) to 0.022�F (22nF) .
Now for the reciever section . Change C100 (33pF) to 18pF and remove T7 . Carefully disassemble T7 so you can get to the windings . Hold the coil former upright (pins facing down and the side with the 3 pins facing you) . CAREFULLY liberate the wire from the righthand pin and unwind the existing windings , taking care not to break the delicate strand . You'll see that the former has 4 "ribs" to hold the winding . Leave the wire attached to the leftmost pin and proceed to first wind 4 turns onto the second "rib" from the top in a clockwise direction . The "ribs" have a gap in the middle so cross over to the topmost "rib" and wind 4 more turns on there in the same direction , feed the wire down to the righthand pin and solder it onto the pin . The secondary winding stays as is . Carefully reassemble , not forgetting the green plastic spacer on top of the coil former , and solder back into the printed circuit board . T7 is a Mitsumi type ETR0333 .
Next , change C102 (47nF) to 22nF disk ceramic . Remove T8 and dismantle as with T7 and remove the small tubular ceramic cap . I found that a small surgical knife to be ideal here , as you can then just cut the leads of the capacitor , instead of battling to get them off the pins in an orderly

fashion . You will now notice that this time the winding has a tap that goes to the centre pin . In this rig the tap is not used , so we can just rewind as for T7, except this time it will be 1turn second rib from the top and 4turns on the topmost rib back to the righthand pin and solder . Assemble and solder back into the printed circuit board . This time you have to add a capacitor to the print side of the board . T8 has 5 pins , grouped 2 on the one side and 3 on the other : the side with the 3 pins is the primary in this case . Solder a 39pF ceramic capacitor accross the outermost 2 pins of the primary winding on the foil side of the board . T8 is a Mitsumi type 10CA006 .
Now remove T9 and strip down as before . This coil has a pink pot core and is a Mitsumi type 10CB001 . Wind 3turns onto the second rib from the top and 1turn on the topmost rib . Solder back into the printed circuit board and add a 39pF capacitor onto the primary as for T8 .
If your rig was operating for eg. on 28.790 on a specific channel , switch it back to that channel and calculate the new six metre frequency as follows : [10metre frequency] + 21.39 = [six metre frequency] . So in our example it would be : 28.79 + 21.39 = 50.180 . Set your RF generator to that frequency and (using the correct trimming tool) adjust the cores of T7 T8 and T9 for maximum "S"-meter reading . Do not be concerned at this point if the recieve sensitivety is not too good . We still need to change the Low Pass Filter on the transmitter section when we get to that stage .
You will also notice that USB and LSB have swapped around and dont seem to be on frequency ... more on that in part 5

CU in part5

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

5121. I need flavorings for liqueurs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Stephen Scarisbrick <stephen.scarisbrick@virgin.net>
Message-ID: <01bc63a7$fca82ee0$LocalHost@default>
Source record: 93912
Cross-posted to: rec.radio.amateur.homebrew,uiuc.org.homebrewers

Please can any one help me I have been trying to get flavoring for
liqueurs, but my local homebrew shop does sell some but they are complete
**** .

So I was wondering if any one knew where I could get them from as I live in
Runcorn Cheshire England.
May be mail order

Thank Stephen scarisbrick

stephen.scarisbrick@virgin.net

site at: http://freespace.virgin.net/stephen.scarisbrick/hom.htm

5122. come and visit my site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Stephen Scarisbrick <stephen.scarisbrick@virgin.net>
Message-ID: <01bc63a9$75feffc0$LocalHost@default>
Source record: 93913
Cross-posted to: rec.radio.amateur.homebrew,uiuc.org.homebrewers

Please come and visit my home brew page at:
http://freespace.virgin.net/stephen.scarisbrick/hom.htm

If you would like to join the mailing list then just send a message in
subject(subscribe to homebrew)

stephen.scarisbrick@virgin.net

and i shall add all your message automatically

1.we can except responsibility for any misuse of e-mail.
2.have any queries then contact the Stephen scarisbrick below.

stephen.scarisbrick@virgin.net

5123. I need to polish spirit (help)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Stephen Scarisbrick <stephen.scarisbrick@virgin.net>
Message-ID: <01bc63a9$b47f5d80$LocalHost@default>
Source record: 93914
Cross-posted to: rec.radio.amateur.homebrew,uiuc.org.homebrewers

Can you tell me were i can get polish spirit in the UK pref. mail-order

Thanks

stephen.scarisbrick@virgin.net

5124. Simple Tx/Rx circuit

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Hans Dirne <Dirne@dds.nl>
Message-ID: <337F599B.445@dds.nl>
Source record: 93915

Hello!

I am looking for a very simple and low cost ciruit of a Transmitter and
receiver, such as used in those radiographic controlled toy cars.
Frequency doesn't matter...

Thanks in advance,

Hans Dirne

PS. Please reply by E-mail aswell!

5125. Re: I need flavorings for liqueurs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: gmaddux!@mail.ptway.com
Message-ID: <337f602f.631707@news.ptway.com>
Source record: 93916
Cross-posted to: rec.radio.amateur.homebrew,uiuc.org.homebrewers

Well, Stephen,
This group is not dealing with homebrew beers or liquor, it deals with
homemade Amateur Radio Equipment. Tasting these might leave a bad
taste in your mouth :)

On 18 May 1997 17:25:03 GMT, "Stephen Scarisbrick"
<stephen.scarisbrick@virgin.net> wrote:

>Please can any one help me I have been trying to get flavoring for
>liqueurs, but my local homebrew shop does sell some but they are complete
>**** .
>
>So I was wondering if any one knew where I could get them from as I live in
>Runcorn Cheshire England.
>May be mail order
>
>Thank Stephen scarisbrick
>
>stephen.scarisbrick@virgin.net
>
>site at: http://freespace.virgin.net/stephen.scarisbrick/hom.htm

5126. Re: Jamboree On The Air - 1997?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: "Ronald D. Lucier" <optics3d@ix.netcom.com>
Message-ID: <337F6BC0.764D@ix.netcom.com>
Source record: 93917
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Jim wrote:
>
> Ronald D. Lucier wrote:
> >
> > I am looking for information on JOTA - the Scouting Jamboree on the Air
> > event. The local Girl Scout and Boy Scout troops want to participate
> > next Fall. Can anyone tell me when this is? We need a date for
> > planning purposes. Any help would be appreciated.
> >
> > 73 de Ron, WA1UWZ
> >
> > QCWA#28749 - FISTS #3099
> >
> > http://www.3doptics.com
> Ron,
>
> JOTA this year is on the 18th and 19th October.
>
> It is _ALWAYS_ on the third full weekend of October. Knowing this, you
> can plan your JOTA activities for any year
>
> I hope that you have a good time on it.
>
> 73,
>
> Jim, ZL2APE,
> New Zealand National Organiser for JOTA,
> jim.parnell@nzart.org.nz

Thanks to all who pointed me in the right direction on the JOTA. The
local scouts are really excited about this and we definitely will be on
the air in October.

73 de WA1UWZ

5127. Re: INFO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bc631f$4d2a8720$9a95f5ce@wa6vse.fast.net>
Source record: 93918

Don,
I don't have any info on this particular product, but would guess that
it runs proprietary software and may well only know how to talk to
"it's own kind."

Check www.mot.com and try to find your way through the maze.
(it's a BIG site, since Mot is a BIG company with lots of divisions
and lots of operations ... they do have a search engine though ...
that may help you a LOT ...

Good luck and 73,
Carl - wa6vse
wa6vse@fast.net

Don Crozier <ka9qjg@tsrcom.com> wrote in article
<337E3C31.4D8@tsrcom.com>...
> Hi,My name is Don Ham Radio operator KA9QJG I picked up a MOTOROLA
> MOBILE DATA TERM # 9100-20 I would like to be able to use it for
> emergency pkt communications on 440 at 9600 baud has anyne had any
> experience doing this?and how would i get a ser man cables etc?
> any help would be greatly appreciated thanks DON KA9QJG
>

5128. CB2SIX, part 2 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc6329$a5cb3be0$LocalHost@anderskv>
Source record: 94044

CB TO SIX METRES Part2 - The PLL Frequency Synthesizer

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For the purposes of this discussion , I will assume the following :(1)That you have a working knowlege of RF circuitry and techniques .(2)That you have the essential tools to do such a conversion . (3) Basic RF test equipment .(4) The set you plan to convert is fully functional .(5)The set is already fitted with a 40-channel selector switch .(6)That you have the service / workshop manual of your rig .

The chassis I will be discussing is the UNIDEN PTBM048AOX -chassis fitted to a number of CB rigs parading under different brand names . It is a single conversion radio on SSB and double conversion on AM , based on the popular PLL02A PLL chip , and has the Mitsubishi 2SC2166 and 2SC1969 in the TX lineup . Some versions of this rig operated in the "C" band (29MHz Marine) and had a diode matrix , six position channel switch , and could be set to step in 12.5 kHz increments . In addition , these units also had a "piggy-back" pcb fitted near the VCO , containing a 12.800 MHz oscillator . These sets should be changed back to the original 27 Mhz configuration and tested before any modifications are attempted .
The PLL02A(G) chip is quite remarkable in that it contains practically all the components needed for a Pll synthesizer, except the VCO , of course . The chip sports a 9-bit binary divide-by-N-counter , a phase comparator with lock detect o/p (pin6) , and a fixed divider of either "divide-by-1024 or divide-by-2048" , selectable at pin 4 . In this application , a 10.240 Mc oscillator feeds into this fixed divider at pin3 , and when pin4 is left o/c (logic1), will divide this signal by 1024 , resulting in 10kc , which will be your synthesizer "step" . (If pin4 is tied to ground -logic0- the fixed divider will now divide by 2048 , giving you a 5kc "step") DO NOT change the 10.240 frequency . The output of that oscillator is also used in the AM reciever section for the conversion of the 10.695 IF down to 455kc . (10.695 - 10.240 = 0.455) !
At first glance , it seems as if the chip might be able to cover over

5MHz in one go (512 binary combinations at 10kc cannel spacing),but when one has a good look at the spec sheet , the maximum frequency allowed into the divide-by-N counter is limited to 3.5 MHz . So , at 10kc channel spacing , the divide-N binary number of about 350 should not be exceeded to ensure that the chip runs within it's specs . This is the main reason that the mixer xtal (X1) 10.0525 MHz has to be changed .
IC2 functions as both the VCO and as a mixer (C3001/TA7310P) . The interesting thing about this mixer is that it has two inputs (f1 and f2) , and two outputs (f1+f2 and f1-f2) . The difference output is taken off pin9 and the sum output is taken from pin6 . The difference output is fed into the divide-by-N counter input , and the sum output is filtered and is used as the Local Oscillator signal . X1 (10.0525) and Q3 make up the oscillator and doubler stage .
As an example , channel 19 (27.185) , the VCO will run at 17.775 , mixed by the output of the doubler 20.105 by IC2 and will produce two outputs : the sum output, 37.880 and the difference output , 2.330 . The 2.330 goes into the divide-by-N counter , where it is divided according to the value in binary applied to pin7 (MSD) to pin15 (LSD) , in this case a value of divide by 233 . The result of this division is 10kc , where it gets "compared" to the 10kc "reference" frequency from the divide-by-1024 fixed divider chain by the Phase comparator . The output from this "charge pump" is fed to a LPF where the "error" is filtered to DC , so that it can be used to either force the VCO frequency up or down untill there is no error. The loop is now "locked" and pin6 will go to logic1 (5.4V) . The PLL (Phase Locked Loop) .

To be continued...

vy73 de Shawn ZR1EV JF96ic
SMIRK#5673

5129. CB2SIX, part 6 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc632a$0717ae60$LocalHost@anderskv>
Source record: 94045

CB TO SIX METRES Part6 - More on mods

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As probably expected , the story does not end there . If you look at the circuit diagram , it becomes clear that both the frequency synthesizer and the carrier oscillator gets pulled LOW on LSB , not the other way round as implied in Part5 of this series . How could this be ?
The answer lies in the mechanics of mixing . On 27Mc an inversion of the sidebands take place in the process of mixing the 10.695 DSB signal with the output from the frequency synthesizer (coming in from the "high side" of the wanted signal) . The result of the mixing process and the resulting inversion of the sidebands means that one has to generate a LSB signal at the IF frequency to realise an USB signal on 27Mc , Hence the "pulling" low of both signals on both LSB and AM .
When we now convert the set to 50Mc , an additive mixing scheme is employed , and the sidebands come out the "right way round" , with the result that the frequency shifting scheme would have to be reversed . In practice , this is quite a simple matter to accomplish . Some later articles on conversions like these in the Amateur press , circa 1985/6 , would have you believe that it is simply a matter of redoing the labels on the front panel . This will not work and you will have great difficulty in getting the rig lined up to be on frequency on all the modes (if at all) .
Do the following and all will be well . You will see a grey wire running from a point marked (T) next to Q4 in the synthesizer section to another point also marked (T) on the pcb , next to Q18 . Desolder this wire from the PCB where it enters the board next to Q18 . Pull it through toward the mode switch . Next we need to look at the switch itself . There are two sections to this switch . The one section applies full B+ to the final when the rig is either in USB or LSB mode and routes the B+ via a hefty 6 ohm wirewound variable resistor to the final when AM is selected (AM carrier power adjustment) . Leave this as is , and locate the second section of the switch which selects USB/LSB/AM . The wiring from this switch goes to points (30), (19), (21) and (18) on the main PCB respectively .

Point (30) selects AM , point (19) selects USB , point (21) selects LSB originally and point (18) is common . Swap the wires from points (19) and (21) on the switch itself . Take two small silicon diodes (1N4148 or eq.) and tie their cathodes together and solder the free end of the grey wire to this junction . Shrinkwrap or slide an insulating sleeve over the exposed sections of this connection . The two "free" ends of the two diodes (anodes) solder directly onto the tags of the mode switch now connected to point (19) and (30) respectively . For those who are not sure , the end of the diode with the thickest colour band will be the cathode (apologies to those who do know HI).
The modifications to the mode selector is now all done , and you can now proceed to "net" the transciever . Adjust CT1 to net LSB and AM (one adjustment for both modes) and CT2 for USB only . To enable the rig to shift frequency on transmit as well as recieve , using the clarifier as a RIT/TIT controll , remove D5 , and connect the unused end of the clarifier controll to the emitter terminal of Q44 . Be sure to check the settings of CT1 and CT2 after this mod as it will affect the 12'o'clock position on the clarifier . I will discuss mods to the frequency selecting circuitry in part7 ... see you then .

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

5130. CB2SIX, part 7 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc632a$189ab6a0$LocalHost@anderskv>
Source record: 94046

CB TO SIX METRES Part7 - The channel selector logic

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In my introduction to this series , in part1 , I mentioned the channel selector and touched on some of the difficulties encountered when using switches like these . This rig was designed for the American market and as a result are originally fitted with a switch that selects frequency according to the American 11M bandplan . This poses a few problems when any modifications are attempted to change the operating frequency .
For example , you will notice that there are five spots between channels where the frequency increments 20kc as the channel is incremented . Also , the frequency of channel 23 to 25 are not in sequence . Traditionally , mods involving a band change (say , to 10M) would require a piece of paper with a list of channel numbers with corrosponding frequencies typed on it attached to the rig , so one would be able to tell what frequency you are operating on .
In my mods , I inserted an EPROM between the channel selector and the PLL chip to "correct" all of these anomalies. It makes for a tidy, professional "feel" to the mod and makes checking your frequency as simple as looking at the LED readout . As the rig tunes in 10kc increments , one could program the eprom so that Channel 1 (readout 01) will put you on 50.010 , channel 10 on 50.100 , and channel 40 on 50.400 etc. This is how to go about it :
The output from the channel selector switch will be a 6-bit binary "word" that will be unique for each of the 40 channels . We will use each of these unique 6-bit words to adress a specific location in an EPROM where you can program the 8-bit code of your choice . The EPROM will output this 8-bit word to the PLL chip and , voila ! you are on your frequency .
First you need to draw up a truth table . Make a list of all the channel numbers and write down the binary from the channel selector down next to it (you will find it listed in your service manual , or you can read the value by measuring each bit directly off the PLL chip . The pins in question are pin 15 (LSD) down to pin 10 (MSD) , in that sequence) . Next , convert the binary words to HEX . All EPROM programmers I have seen work with HEX .

Select any channel above 27 (ch26-40 are all in sequence) . Read the full 9-bit binary off pins15-7 and write it down . Write down the frequency the rig is operating on next to it . Click one channel up and do the same . The binary should have changed by 1 .
Calculate all the binary codes for the range 50.010 up to 50.400 and when that is done convert them all to HEX . You now have all the information you need to program your EPROM . The eprom has an 8-bit output and the synthesizer chip requires a 9-bit word . In practice you will find that the state of the MSD pin stays the same throughout the 40 channels , with the result that pin7 can be wired permanently to either logic1 or 0 .
I use a single 27C64 eprom , as there are a lot of them floating around surplus . Remember to "pull down" the first six imputs with 1k resistors and tie all the unused inputs to GND . I used a seperate 7805 3-terminal voltage regulator IC to power te eprom and all these components can be mounted on a small pcb or perfboard . I used short sections of ribbon cable to carry the data from the switch and to the PLL chip . It is of course possible to extend the basic 400kc tuning by programming another set of codes for say,50.400 to 50.800 and then use one of the unused inputs to the EPROM to switch "bands" this way . See you in Part8 where we will start the mods to the transmitter .

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

5131. CB2SIX, part 8 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc632a$2fa74980$LocalHost@anderskv>
Source record: 94047

CB TO SIX METRES Part8 - The Transmitter section

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Whenever any modifications or repairs are done to any piece of equipment , capable of radiating RF energy , it is of paramount importance that the regulations concerning spurious and harmonic energy radiation are strictly adhered to . This neccesitates the use of a spectrum analizer to verify signal purity after these mods are done . I realize that a piece of test equipment in that class is not standard equipment in most "shacks" , but one would be able to most probably approach your local PMR company to check the unit for you to ensure that your output is "clean" before you transmit into your antenna .
The output from the frequency synthesizer is fed via a capacitive divider circuit to pin4 of IC3 , where the IF injection frequency (injected into pin1) is mixed with it to produce the 50Mc wanted output . There are what appears to be two small chokes feeding pin6 and pin8 . L23 is indeed an RF choke , but L3 is not .If you study the circuit carefully , it will become clear that C37 and C38 are in series and connected across L3 to form a parallel L-C Tuned circuit , which at the moment resonates at round 27Mc . C37 and C38 also form a capacitive divider to do the impedance transformation to the imput impedance of the cascode amplifier section of IC3 (input on pin7) . L3 is wound on a carbon resistor of round 400 ohms to lower the Q of this tuned circuit and thus improve stability and to increase the effective bandwidth .
Initially , I used to just take a few turns off the coil , but I have since decided to make a whole new coil instead and just replace the existing L3 with the new one . I used a slightly thicker wire , and wound exactly 15 turns onto a 470 ohm 0.5W carbon resistor . Cover the assembly with heat-shrink tubing , and apply moderate heat till the shrink-tube contracts and holds the windings in place . Remove C37 and C38 , and insert 47pF ceramic capacitor in C37 and a 27pF ceramic capacitor in C38 . I have found that changeing L23 there was no percievable improvement , so , you can leave L23 as is .

The output of the cascode buffer amplifier is fed into T4 and T5 which forms a bandpass filter . Remove T4 and T5 and dismantle as described in Part4 . T4 is a Mutsumi coil, part number 10CA006 and T5 is a Mitsumi , part number 10CB003 . Refer to part4 as to the orientation of the coils.
T4: Wind 1 turn onto the secon rib from the top starting at the leftmost pin . Feed the wire down the gap provided on the former down to the centre pin , form a pigtail , tin , and solder to the middle pin . Feed the wire back up through the gap in the former and wind an additional 4 turns on the topmost rib of the former . Feed the wire back down the gap , tin and solder onto the righthand pin . Remove the internal capacitor , reassemble and solder back into the PCB . Solder a 39pF miniature disk ceramic capacitor across the primary (Ref.Part4)on the foil side of the PCB .
T5:Starting at the leftmost pin , wind 1 turn onto the second rib from the top , crossover at the gap and continue to wind an additional 4 turns onto the topmost rib , feed the wire down through the gap and tin , solder onto the righthand pin . Remove the internal capacitor , replace the black potcore , reassemble and solder back into the PCB . Add a 27 pF miniature disk ceramic capacitor to the primary on the foil side of the PCB . All the secondary windings can stay as is . Remove C42 and replace with a 2.2pF ceramic capacitor . Remove C43 and replace with a 39pF . Remove C185 and replace with a 18pf Ceramic disk capacitor .
We will continue with the modifications to the transmitter in part9

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

5132. CB2SIX, part 10 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc632a$5eed0860$LocalHost@anderskv>
Source record: 94048

CB TO SIX METRES Part10 - The conclusion

By Shawn Baris ZR1EV
PO BOX 212
Brackenfell
7561
Republic of South Africa

The conversion I have described in Part1-9 has been in dayly use in my shack for many years , and is the only rig I use on the six metre band . I have done countless conversions like this for other enthusiasts and we have all had hours of enjoyment out of them . The rig performs well on most of the modes of propagation found on the six metre band , and with the addition of a couple of extras , produces a stasion that you do not have to apologise for .
I built up a push-pull linear amplifier using 2 x 6146B valves and my rig drives them to max output easily . In addition I constructed a masthead GaSFET preamplifier for that extra edge during weak openings . The antenna will be one of your most important additions (as is the case with any station , on any band) . It would be plain folly to expect "big" results from a "small" antenna .
For CW enthusiasts , the addition of an 800Hz audio phase shift oscillator feeding into the mic input would produce excellent results . I had a TONO 5000E connected to my rig for CW contacts with JA stations and had many QSO's on CW with compliments recieved on the "tone".
The reciever is sensitive enough for serious meteor scatter work , and had worked many stations on this mode . The rig lends itself well to mobile operation and I used to often sit in the early morning traffic chatting to the locals on 50.200 . You would be surprised at the excellent signals on 6M SSB when you are used to FM repeater operation .
Six metres is my favourite band and allways will be , and I hope you will share in the excitement and thrill in homebrewing your own rig and using it on your next DX contact . It was great fun for me and I hope it will be for you too . Finally , an extract from my log book , using this rig,to wet your appetite :
1991: FR5EL , JH6DFJ , TL8MB , JA6RJK , JK6PAC , JF6DEM , JE1BMJ , JR6WPT, JA1VOK , JR1VSP , CE8ABF , LU7VB , JF1IRW , JR6WPT , JS6CDB , JF1IRW JI1CQA , ZS6WB , FC1JG , LU8MBL , PY5CC , LU8AHW , LU6DLB , LU3DCA , LU8AJK , LU9AEA , ZP6XDW , LU1DMA , LU3EX , LU8DIO , ZP5ZR , CX8BE , OE4WHG , IK2GSO , LU7MEC , CX4HS , FC1GTU , IK8MKK , I0AMU , FC1JG , 9H1BT , 9H5EE , SV1EN , OE6LOG , YU3ZV , SV1DH , CN8ST , ZS9H , V51KC . etc.
1992: I7CSB , F6CER , 9H1GB , I4CIL , I4SJZ , IK4EWN , FC1JG , IK8DYD , G3KOX , G3VYF , GD3AHV , G3WOS , G0LCS , GW3LDH , GW8ZCP , G1ITE , G4ICO , G3OIL , G4GAI , DL7AV , G3APY , GW4LXO , CT3FT , SV1DH ,

SV1EN , 9H5EE , 9H1PA , 9H1CG , 9H1GB , 9H5BW , 9H5AZ , FC1JG , EA3VHF(BEACON) , LU8MBL , LU7MEC , LU9MA , JR6WPT , YU3ZV , JN1BPM , JH1ECU , ZR5ADQ , ZS5DW , etc etc .

Happy mods and I will be on the lookout for you the next time the band opens !

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673 (Six Metre International Radio Klub)

5133. Re: CB to 6 ??????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc632b$0dafcd60$LocalHost@anderskv>
Source record: 94049

I have an article series that was received via packet radio a while ago,
written by a ham from South Africa (ZR1EV, Shawn). I will be posting them
into this newsgroup, under the heading "CB2SIX, part # of 10"

73 de Anders / LC3HAT, anderskv@online.no

5134. CB2SIX, part 10 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc632b$c17bf080$LocalHost@anderskv>
Source record: 94050

CB TO SIX METRES Part10 - The conclusion

By Shawn Baris ZR1EV
PO BOX 212
Brackenfell
7561
Republic of South Africa

The conversion I have described in Part1-9 has been in dayly use in my shack for many years , and is the only rig I use on the six metre band . I have done countless conversions like this for other enthusiasts and we have all had hours of enjoyment out of them . The rig performs well on most of the modes of propagation found on the six metre band , and with the addition of a couple of extras , produces a stasion that you do not have to apologise for .
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For CW enthusiasts , the addition of an 800Hz audio phase shift oscillator feeding into the mic input would produce excellent results . I had a TONO 5000E connected to my rig for CW contacts with JA stations and had many QSO's on CW with compliments recieved on the "tone".
The reciever is sensitive enough for serious meteor scatter work , and had worked many stations on this mode . The rig lends itself well to mobile operation and I used to often sit in the early morning traffic chatting to the locals on 50.200 . You would be surprised at the excellent signals on 6M SSB when you are used to FM repeater operation .
Six metres is my favourite band and allways will be , and I hope you will share in the excitement and thrill in homebrewing your own rig and using it on your next DX contact . It was great fun for me and I hope it will be for you too . Finally , an extract from my log book , using this rig,to wet your appetite :
1991: FR5EL , JH6DFJ , TL8MB , JA6RJK , JK6PAC , JF6DEM , JE1BMJ , JR6WPT, JA1VOK , JR1VSP , CE8ABF , LU7VB , JF1IRW , JR6WPT , JS6CDB , JF1IRW JI1CQA , ZS6WB , FC1JG , LU8MBL , PY5CC , LU8AHW , LU6DLB , LU3DCA , LU8AJK , LU9AEA , ZP6XDW , LU1DMA , LU3EX , LU8DIO , ZP5ZR , CX8BE , OE4WHG , IK2GSO , LU7MEC , CX4HS , FC1GTU , IK8MKK , I0AMU , FC1JG , 9H1BT , 9H5EE , SV1EN , OE6LOG , YU3ZV , SV1DH , CN8ST , ZS9H , V51KC . etc.
1992: I7CSB , F6CER , 9H1GB , I4CIL , I4SJZ , IK4EWN , FC1JG , IK8DYD , G3KOX , G3VYF , GD3AHV , G3WOS , G0LCS , GW3LDH , GW8ZCP , G1ITE , G4ICO , G3OIL , G4GAI , DL7AV , G3APY , GW4LXO , CT3FT , SV1DH ,

SV1EN , 9H5EE , 9H1PA , 9H1CG , 9H1GB , 9H5BW , 9H5AZ , FC1JG , EA3VHF(BEACON) , LU8MBL , LU7MEC , LU9MA , JR6WPT , YU3ZV , JN1BPM , JH1ECU , ZR5ADQ , ZS5DW , etc etc .

Happy mods and I will be on the lookout for you the next time the band opens !

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673 (Six Metre International Radio Klub)

5135. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5llsrs$pte@cletus.bright.net>
Source record: 94051

The transistor should be operating class c...that is it should be off
when the key is up. Your circuit is oscillating or the bias on the
2N2222 is not turning it off.

Norman N8RGR

5136. Re: Would like some suggestions about QRP rigs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: wmeara@erols.com
Message-ID: <337ed92a.720396@news.erols.com>
Source record: 94052

On 17 May 1997 21:24:52 GMT, "QRP" <Indiana@CW.QRP> wrote:

>I am looking to buy a QRP rig. I would like it to cover at a minimum 80 and
>40 but would prefer 10 - 160 cw and ssb. Does anyone have any opinions of
>what are the best radios and what I should be looking for in a QRP rig? I
>am open for any help. Thanks!

IMHO the best part of QRP is homebrewing. I'd suggest starting out by
building a simple CW transmitter and maybe using your HF
transceiver's receiver. HB receiver can be tackled later. If you
don't want to go the full homebrew route, there are lots of nice kits
out there. Check out Ramsey and Kanga. Good Luck! 73 Bill
N2CQR>

5137. CB2SIX, part 5 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc6329$de881340$LocalHost@anderskv>
Source record: 94053

CB TO SIX METRES Part5 - Other mods

By Shawn Baris ZR1EV
PO BOX 212
Brackenfell
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Anyone is free to use the following information for private use on the provision that it is not used for commercial purposes . Permission is granted by the author , ZR1EV , to publish and or distribute all or part of the following on the condition that recognition is given to the author . In the case of it being used in a newsletter or magazine , a copy of the aforementioned should be sent to the above adress.

It is not my intention to provide lengthy and detailed explinations on the intricacies of SSB or bore those who know this subject well , but to point out some of the basics with particular refference to this particular chassis we are concerned with , and hopefully arm you with the neccissary basic understanding of what we are doing . This will be invaluable when fault finding needs to be undertaken at any stage .
I mentioned before that "USB and LSB have swapped around and dont seem to be on frequency " . To understand what has happened here we have to have a brief look at how SSB gets generated here . The "classic" method of generating SSB involves a carrier generator spot on the IF frequency feeding a balanced modulator of sorts . The resulting DSB signal is fed to switched crystal filters : one for USB , one for LSB , possibly one for CW and one for AM . As you can deduce from this , the manufacturing cost of this approach would result in quite high prices on the finished product being passed on to the consumer . This is probably one of the reasons that most dedicated Amateur Transcievers have the CW filter fitted as an option, rather than a standard fixture , in an attempt to keep the final cost to the consumer low and by implication competitive .
The designers of this (and other rigs) have cleverly sidestepped these problems with some ingeniuety . How AM is generated should be quite obvious so we will not dwell on that now but rather just focus on SSB . Inspect the innards of you rig . You will find only one large crystal filter located roughly in the middle of the PCB . This filter is about 3-2.7 kc wide and is a "LSB" filter centered round 10.6935 . (Some rigs are fitted with a smaller rectangular filter , taking up about half the space . These are "metal-oxide" filters , but for all intents and purposes can be treated the same).
Suppose our carrier generator is set to 10.695 (standard 1st IF frequency) . The 10.695 signal will pass through a balanced modulator chip, IC4 (AN612) , where it is modulated by the audio signal in such a way that

the original 10.695 is balanced out and you are left with a double sideband supressed carrier signal centered around 10.695 . This signal is now fed into the crystal filter where the USB signal is heavily attenuated and the LSB part of the signal is only slightly attenuated (filter insertion loss). We are now left with a LSB SSB signal centred on 10.695 .
What if we want an USB signal ? The answer is to lower the carrier frequency to below the filter passband : 10.692 is about right . The DSB signal will now be generated centered around 10.692 , and after passing through the Xtal filter , will only have the USB components remaining . Note though that the USB signal will be centered around 10.692 and the LSB and AM signals will be centered around 10.695 . Voila ! we generated both USB and LSB with the same filter !
Now you can see that if the frequency from the synthesizer stays constant between "mode" switching , The LSB and AM signals will appear on the band "on freqency" , while the USB will be 3kc "off" . The designers got round this "problem" by shifting the synthesizer output frequency by 3kc when the USB mode is selected , thereby making all of this transparrent to the final user , and all the "channels" RIT exactly at "12'o'clock irrespective of the mode you have selected .
More to follow on this in Part6

CU in Part6

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

5138. CB2SIX, part 9 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc632a$44f7d480$LocalHost@anderskv>
Source record: 94054

*CB TO SIX METRES * Part9 - The Transmitter section continued

Anyone is free to use the following information for private use on the provision that it is not used for commercial purposes . Permission is granted by the author , ZR1EV , to publish and or distribute all or part of the following on the condition that recognition is given to the author . In the case of it being used in a newsletter or magazine , a copy of the aforementioned should be sent to the above adress.

We are now done with the "encapsulated" small coil formers and the rest of the work can now be done without the aid of a magnifying glass (HI) .
Locate and remove T6 . This tuned interstage coupling transformer is wound on a white plastic former and a lot of care should be excercised not to overheat any of the pins , as the former may deform from the heat and render it useless . The tuned primary of the transformer , can easily be identified . The primary coil is wound from clear enamel coated copper wire and the 1 turn secondary winding is wound using green enamel coated copper wire .
Leaving the secondary winding as is , proceed to remove 2 turns from the "top" of the winding , untill you are left with 5 turns on the former . Form the free end of the wire with a small "longnose" pliers and feed it through the hole in the base of the former where the original lead was fed through . You will now notice thet the secondary and primary windings are spaced too far apart (by the thickness of about two windings). "Pull" the secondary winding lower down on the former (by pulling in the secondary pins with a small pair of pliers) until the two windings touch . Trim the pins to length and using a small hobby knife , scrape the insulation off the pins and tin . Reinsert the transformer , solder back into the PCB and replace C47 with a 27pF Disk ceramic capacitor .
Replace C49 with a 120pF disk ceramic capacitor . Replace L6 with a coil consisting of 13 Turns wound onto a 1.5M ohm 0.5W carbon resistor . Replace C52 with a 47pF 50V disc ceramic capacitor and C53 with a 120pF 50V disk ceramic capacitor . Remove L7 and remove turns until you have 1.5 turns on it . Prepare as with T6 and replace . Replace L9 with a coil made up as for L6 . Modify L11 for 2.5 turns , L13 for 3.5 turns and L201 for 1.5 turns . If you have difficulty locating L201 , you will find it (airwound coil) between point (31) on the main chassis and the inner conductor of the antenna socket . (some rigs have L201 and C201 omitted). Change C51 to 22nF Replace C54 with an 82pF 100V disc ceramic capacitor , C55 with a 330pF 100V capacitor , C184 with a 68pF 50V disc ceramic capacitor and C201 with an 18pF 100V disc ceramic capacitor . As "all coils are not wound equal", You could experiment with slight changes in capacitor values for maximum performance with minimum spurious output . C56 is fitted to some chassis , and can be removed in this mod . L13 is an air-spaced inductor with self supporting windings , and can be streched or compressed for maximum output

When you notice that the peak tuning on T4 and T5 occurs when the slugs are about the middle of the formers , you could INCREASE the capacitor value across the primary by a few pF . The correct point for the cores are about flush with the top of the screening cans . The same applies for the Reciever coils , T8 and T9 with the exception of T7 . T7 should be tuned for the loudest signal , not the loudest "hiss". This is important for a good s/n ratio , so you can dig out those really weak signals on the band . I have found that this occurs when the slug of T7 is a couple of turns from the "bottom" of the coil former . If you cannot get this condition , try changing the value of C100 by a couple of pF .
The rig should now "run up" smoothly . All of the rigs I have done so far, exceeded the original specs on 27Mc on the reciever and practically always got in excess of 10W PEP out of the transmitter (recomended PO) . If you have a "lazy" 2SC1969 (Did a conversion once where I could do what I liked, but could not get more than 8W PEP... Replacing the final did the trick), You could try replacing the final with a 2SC1307 . These devices seem to have more gain at 50Mc . See you in Part10 (final)

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

5139. AZ / EL ROTOR WANTED

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-18 00:00:00 UTC
From: norman <norsan@bright.net>
Message-ID: <5llslh$pte@cletus.bright.net>
Source record: 94055

Would like to buy an AZ / EL rotoe dead or alive. What have you.

Norman Hockler N8RGR

5140. Re: FT-901/902 22ways to improve - part one - (second try)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: bboone@mindspring.com
Message-ID: <5lok4g$jth@camel2.mindspring.com>
Source record: 93919

Thanks for posting the article, looking foward to seeing the other parts.
I have a 901 DM w/xverters attached and not found much info out there concerningmods for this rig. -- Bobby kr4bu

5141. Re: 5/8 up and 5/8 down antenna ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: bboone@mindspring.com
Message-ID: <5lok3p$jth@camel2.mindspring.com>
Source record: 93920

I don't know how it compares to the maico, but I have a mfj 5/8 up and down, works pretty well and works on 2m and 6m. Mounts on the side of a tower or push up pole. -- Bobby kr4bu

Kip Martin (sl0ym@cc.usu.edu) wrote:
: Hello all,

: I was wondering if a home made diepole of 5/8 length could be built and
: matched with a matching network ?
: I want to hang a diepole with the 5/8 elements instead of the 1/4.
: Theoreticaly, I have heard the 5/8 in a diepole has more gain than a
: ground plane configuration. So does this imply a 5/8 up and down
: diepole may out perform the maico ?
: --
: Kip Martin
: E-mail sl0ym@cc.usu.edu
: http://www.declab.usu.edu/~sl0ym/index.html

5142. 813 Linear With Screen Voltage ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: dsnowden@ncdc.noaa.gov
Message-ID: <864049139.8903@dejanews.com>
Source record: 93921

I was thinking about modifying a pair of 813's to use
screen voltage instead of grounded grid. If I do this
I know there is more chance of instability, but if I
do this, anybody got any experience as to typical
drive levels I can expexct for full output? With, say
600volts screen voltage, 2500volt plate voltage and
some value of grid bias... ???

Doug, N4IJ
dsnowden@ncdc.noaa.gov

----------==== Posted via Deja News ====----------
http://www.dejanews.com/ Search, Read, Post to Usenet

5143. Message too large for system (Max 30KBytes)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: postmaster@emarkt.COM
Message-ID: <1905971440092C83postmaster@emarkt.com>
Source record: 93922

```
Failed to deliver message for the following reason:
Message too large for system (Max 30KBytes)

Original message follows:

Received: from mailbox2.ucsd.edu by fmgateb.PhoneLink.COM id aa14773;
19 May 97 14:39 BST
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox2.ucsd.edu
(8.8.5/8.6.9) with ESMTP id EAA27097 for <ham-homebrew-list@mailbox.ucsd.edu>; Mon, 19 May
1997 04:52:19 -0700 (PDT)
Received: by noc.ucsd.edu; id EAA04189
sendmail 8.8.5/UCSD8.3
Mon, 19 May 1997 04:26:20 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id EAA04143
sendmail 8.8.5/UCSD8.3
Mon, 19 May 1997 04:26:10 -0700 (PDT)
Message-Id: <199705191126.EAA04143@noc.ucsd.edu>
Date: Mon, 19 May 97 04:26:09 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #312
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest

...rest of message truncated
```

5144. Re: 813 Linear With Screen Voltage ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <33807076.9539007@netnews.worldnet.att.net>
Source record: 93923

On Mon, 19 May 1997 08:41:13 -0600, dsnowden@ncdc.noaa.gov wrote:

>I was thinking about modifying a pair of 813's to use
>screen voltage instead of grounded grid. If I do this
>I know there is more chance of instability, but if I
>do this, anybody got any experience as to typical
>drive levels I can expexct for full output? With, say
>600volts screen voltage, 2500volt plate voltage and
>some value of grid bias... ???
>
>Doug, N4IJ
>dsnowden@ncdc.noaa.gov

Are you still going to drive the filament? If so, any gain change will likely be minor.

Grounded grid PA's are gain limited by negative feedback determined by the ratio of driving impedance to output impedance, since the input and output are in series. Lowering the driving impedance would have much more effect on gain than adding screen voltage.

73, Tom

5145. Brazing Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: ap309@freenet.buffalo.edu
Message-ID: <EAFqt7.AtH@freenet.buffalo.edu>
Source record: 93924

Need instruction on how to braze/solder plates in a variable capacitor. Need to join aluminum plates with brass support rod.
--

5146. Re: I need flavorings for liqueurs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: ah8341@eclipse.co.uk
Message-ID: <33809e3d.0@ispc-news.cableinet.net>
Source record: 93925
Cross-posted to: rec.radio.amateur.homebrew,uiuc.org.homebrewers

"Stephen Scarisbrick" <stephen.scarisbrick@virgin.net> wrote:

>Please can any one help me I have been trying to get flavoring for
>liqueurs, but my local homebrew shop does sell some but they are complete
>**** .

>So I was wondering if any one knew where I could get them from as I live in
>Runcorn Cheshire England.
>May be mail order

>Thank Stephen scarisbrick

>stephen.scarisbrick@virgin.net

>site at: http://freespace.virgin.net/stephen.scarisbrick/hom.htm

Stephen, This is an Amateur Radio Homebrew group, ie we build our own
gear.

5147. Re: QQV06-40A info please, anyone??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: Geoff Blake <geoff@palaemon.demon.co.uk>
Message-ID: <EAFwnw.MK9@palaemon.demon.co.uk>
Source record: 93926
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Frank Erskine (frank@g3wte.demon.co.uk) wrote:
: In article <7F39pDAc7DgzEwiy@chubs.demon.co.uk>, Steve Simpson
: <Steve@chubs.demon.co.uk> writes
: >Hi all, thanks for reading this.
: >
: >I purchased a QQV06/40A new at the Luton rally and I am aware that they
: >are used in various Pye rigs of yesteryear and I even have a W30 with
: >one in.
: >But this valve I believe isn't a quick heat version so I would like to
: >build it into a class C Amp for 4 Metres. What I would like is the
: >spec, P/Output, pin out, PSU requirements, even CCT's etc, can anyone
: >help me with this please?
: >
: Heater 6.3V @ 1.8A or 12.6V @ 0.9A
: 3W drive
: RF output 90W (Mullard)

: Pinout (clockwise from pip; looking at pins):
: 1) heater
: 2) g1 (2)
: 3) g2
: 4) cathode, beam plate
: 5) heater centre tap
: 6) g1 (1)
: 7) heater

: Top cap 1 - anode 1
: Top cap 2 - anode 2
: --

I hate to cross swords with you Frank, but the only "pip" I have seen on QQV06-40 is the one in the middle of the pins. IIRC, pin 4 in your notation is the BIG pin, the Cathode.

If you are building an amplifier, make sure that you set the valve base BELOW the level of the chassis so that the internal screening ring is on the same plane as the chassis. This improves stability no end. BTW the valves are (allegedly)internally neutralized.

Operating conditions (from memory):

Va 400 - 600
Vg2 200 - 250
Vg1 -70 ish The grid bias was frequently derived from grid current via a 10K resistor - destroys valves with

lack of drive...

Output - 50 watts was quite easy with 600V. not too much more though. Also use large connectors for the anodes, to dissapate heat. They form part of the tuned circuit so take that into account.

There were plenty of circuits in the old VHF manual and RSGB handbook c 1970 but not all were reproduceable though.

If you copy some of the Pye, Cossor or GEC designs, they worked. Beware of the 829/932 double tetrodes, they were NOT neutralised and were a bit hairy, particularly when used in AB1 linears.

73 de geoff
--
--
Geoff Blake geoff@palaemon.demon.co.uk linux 2.0.29
Chelmsford g8gnz@g8gnz.ampr.org i586
Intel create faster processors - Microsoft create slower processes

5148. 2.4GHz Part 15 devices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: stevem@w6yx.stanford.edu
Message-ID: <5lqj7cepv1@nntp.Stanford.EDU>
Source record: 93927

Recently, while trying to view the output from our local ATV
repeater on 2.4GHz, I noticed a herringbone pattern in
the received signal. Looking closely at the VSB signal
from the ATV repeater on a spectrum analyzer, I noticed
a reasonably strong CW carrier which was the cause of the
interferance.

Going mobile with a small dish and spectrum analyzer, a
friend of mine and I were able track down the source of the
carrier as a car parked on the street about a block
away from my house.

Based on subjective measurements, I suspect that the
device generating the interferance is putting out a
stronger signal level than is allowed under part 15
rules for a non-spread mode. This, in addition to
a violation due to the device causing interferance to
an established licensed service.

I am guessing that it is a wireless vehicle alarm system
of some kind. I'm not sure what the carrier is for.
Possibly the link from the car to a pocket beeper?
Possibly the 2.4GHz RF is used as part of a doppler
motion detector to detect movement within the cab.
In any case, I'm wondering if anyone is familiar with
these systems and knows what kind of options I may have
in dealing with the owner? If its just a matter of
getting him to put the unit of a different channel,
that would be the easiest solution. I'd rather deal
with the problem diplomatically rather than quote rules
and regs telling the owner he has to shut down his
expensive alarm system.

Any reasonable opinions?

Thanks

Steve Muther WF6R

5149. looking for plans or info to obtain listening device/microphone that works thru windows/walls.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: "John K." <johnk@gj.net>
Message-ID: <337FF35A.38F1@gj.net>
Source record: 93928
Cross-posted to: alt.private.investigator,rec.radio.amateur.homebrew

I wanted to do a little testing of equipment and was hoping to find plans or a place for a kit to create a mic that allows listening thru windows/wall. I have heard of laser mics and parabolic mics, anyone have any info on these?

If so please email me directly. Thank you.

5150. Re: Etching Panels

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <3380A0FA.6B9A@kfa-juelich.de>
Source record: 93929

Barry L. Ornitz wrote:
>
> Geoffrey Schecht <geoffs@onr.com> replied to an original post by Bob
> Duckworth, WB4MNF, about panel engraving:
>
> > Save your money; photoengraving is a lot simpler. You'll go broke
> > stocking all of the bits that one of those CNC engravers uses and the
> > hold-down jigs required for the various panels you'll be doing is
> > gonna run into a lot of money, too.
>
> He then wrote some useful, but very outdated, information about
> photoengraving and photoresists.
>
> Most "photoengraving" of electronic panels today is really a photo-
> anodizing process. Either the colored anodizing on an aluminum panel
> is dissolved away, or in high-production runs is applied to a blank
> panel. The deep engraving of the past has almost disappeared in
> todays modern world.
>
> The idea of using a CAD program to generate an original panel layout
> is certainly a good one. A Gerber file is rarely necessary as todays
> inkjet and laser printers usually have quite adequate resolution for
> most panels. Negatives can be shot directly from your original on
> paper, and you can often print directly on transparencies.
>
> Using printed-circuit photoresists is possible IF you know what you
> are doing. Not all photoresists are capable of withstanding both acid
> and caustic baths. The modern dry-film photoresists typically develop
> in mild caustic and dissolve in strong caustic baths.
>
> KPR (originally Kodak photoresist) has not been made by Kodak for
> years. I believe they may have sold the rights to Shipley. It seems
> to keep extremely well as I have three bottles of the concentrate from
> back in the days when Eastman Chemical was part of Kodak. KPR can
> achieve really fine details but I STRONGLY suggest the amateur stay
> away from it. The material is extremely toxic and it contains known
> carcinogens both in the resist itself and in the developer (mainly
> monochlorobenzene). Unless you have the proper safety equipment
> including respiratory protection - stay away from it.
>
> If you have access to a laminator, the dry-film resist is easy to work
> with. The developer is safe and relatively mild. I suspect some of
> the "iron-on" resists for home use would work well too. I have used
> the dry-film resist and mild hydrochloric acid to etch lettering into

> a brass plate successfully. I used an acetate transparency in a laser
> printer to expose the dry-film photoresist. You often need to play
> with the font styles and sizes as the etching can undercut the resist.
>
> Remember when etching metal to not use the same etchant as you do for
> copper circuit boards. Also remember that acid etching releases
> extremely flammable hydrogen gas. Strong caustic etching of aluminum
> is possible but you have to have a resist that can handle the caustic.
> Agitation of the bath during etching is important.
>
> 73, Barry L. Ornitz WA4VZQ ornitz@tricon.net, ornitz@eastman.com

One further note, I have never had trouble using the normal Ferric Cloride etchant on AL, though it works rather fast and you may want to dilute it for more control. Doing it this way removes the worry about attacking the resist with different chemicals.

Bob

5151. WINRADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: Luciano Marrocco <mluciano@pe.abol.it>
Message-ID: <01bc6477$c5c8faa0$1bfdb8c2@mluciano.abol.it>
Source record: 93930

You know this product (www.winradio.com)?

5152. Re: NN1G's QRP SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: rheiss@tuba.aix.calpoly.edu
Message-ID: <5lq7ge$18he@tuba.aix.calpoly.edu>
Source record: 93931

In article <338040ba.2761134@news.mnsinc.com>,
Bry C <no.spam@emails.org> wrote:
>HERE IS AN IMPORTANT addition to the QRP-L information request!
>
>One slip and you're OFF! There is no exception.

[...]

>It is an elite club maintained by one of the hams who in my opinion is
>NOT working in the spirit of amateur radio as we know it.
>
>I was banned from his little group for responding to one flame-bait
>there after I unknowingly posted some text files of useful data to
>help the QRP community.

As I recall, Brian, you were the bandwidth king on rec.radio.amateur.* back then, posting and reposting your megabyte MEGALIST for our "benefit" but the trickle of positive feedback dried up so like many of the news-group big shots you joined QRP-L mailing list. After all they are such a warm and friendly bunch, generous with compliments after any meager accomplishment. Soon a list member asked a question and you could "helpfully" respond with your encyclopedic list of commercial references. Surely they would welcome your major compilation. Not so. Besides being arid in the extreme, the enormous length of your e-mail overflowed many mailboxes, mine included. Others, particularly list members outside north america, paid costly incremental charges for your mammoth files. YOUR PRESENCE ON QRP-L INDUCED MANY TO UNSUBSCRIBE. But to be boring and off topic at length is not sufficient to get booted from the list. The moderator wants a civilized atmosphere with a sense of community, which you damaged with each abusive, hostile response to criticism.

You still have net news for your flames, and the web site is perfect for your information. I see you use the GIF format for paragraphs of text, hey, you're still the bandwidth king!

73, Rob KO6KA
rheiss@polymail.calpoly.edu

5153. LowFER Scrapbook

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: craigivey@aol.com
Message-ID: <19970519223500.SAA05426@ladder02.news.aol.com>
Source record: 93932

Where can I get a copy of Ken Cornell's book "The Low and Medium Frequency Radio Scrapbook"? Ken (W2IMB) passed away a few months ago, and he was the only person I know of that sold the book.

Craig
KC5UMA

5154. Re: Message too large for system (Max 30KBytes)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: la8ak@online.NO
Message-ID: <3380d66f.1823839@mail.online.no>
Source record: 93933

On 19 May 97 13:42:03 GMT, in rec.radio.amateur.homebrew you wrote:

>
>Precedence: List
>Subject: Ham-Homebrew Digest V97 #312
>To: Ham-Homebrew@ucsd.edu
>
>
>Ham-Homebrew Digest
>
>...rest of message truncated
>

perhaps you will repeat it into smaller parts? I haven't seen any
parts so far

73 de Jan-Martin
LA8AK

5155. Re: Brazing Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-19 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5lq9o0$q7@news1.zippo.com>
Source record: 93934

ap309@freenet.buffalo.edu (Stephen B. Voigt) wrote:

>Need instruction on how to braze/solder plates in a variable capacitor. Need to join aluminum plates with brass support rod.
>--

I think that if you look carefully, you will see that the plates are swaged into place. The brass shaft is cut, the plates set in place, and a tool deforms the brass slightly to hold the plates. Although there are techniques availabe to braze brass, I don't ever remember seeing a cap put together this way. Cutting the slots on a lathe and fastening the plates in place with locktight would probally work. The tough thing would be to make the plates.

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

5156. FS: New 4CX3000A, Socket, & Fil XMFR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: w6tg@aol.com
Message-ID: <19970521022800.WAA08032@ladder02.news.aol.com>
Source record: 93856

Also have chimney... $ 1000.00 shipped USA.
Terry Gaiser - W6TG

5157. Re: Good 100w Pin Diode ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33822001.3088377@news.online.no>
Source record: 93857

I did not read the news.
I have used Unitrode UM9401 for 2m and 70cm linear 100W solidstate PA,
price in norway 3 years ago was $4 each, and $2.- %. I prefer the
latter price when buying a quantity of 25!
hi
73 de jan-martin
LA8AK

5158. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: tonyz@rose.hp.com
Message-ID: <5lt9m8$9dv@rosenews.rose.hp.com>
Source record: 93858

Richard Karlquist (rick@area.com) wrote:
: In article <33722027.5E75@flash.net.no-spam>, <hynde@flash.net.no-spam> wrote:
: >While trying to understand what is REALLY happening with AM I of course
: >refered to the handbook. All the examples I've found show a modulated AM
: >
: >73, Tim, ka8ddz

: I don't know which edition of the handbook you are reading, but
: I worked on the chapter on modulation used in the 1995-1997 books
: along with Dave Newkirk. This question prompted more discussion
: than anything else in the chapter. I don't think there is any
: really good way to explain this intuitively. You can, of course,
: define everthing rigorously in mathematics and prove it. But as
: Dave N. used to say "equations don't teach". So you may find
: what we wrote to be unsatisfactory as well. However it was not
: for lack of awareness. If anyone feels they have a really good
: explanation, submit it to the ARRL and maybe it will be in the
: next handbook!

: Rick Karlquist N6RK
: rkarlqu@scd.hp.com

Actually, I find that equations DO teach, but the student must
be able to understand. In the case of modulation, all one needs
is a grasp of algebra and trig. Many high school and college
texts will explain in detail the difference between mixing
two sine waves thru a linear and then non-linear element.
The difference being whether the output is just an algebraic
addition of the two signals, or the intended product of the
two when true modulation occurs. Although the mathematical
description gets tangled when laid out, it is really just
use of algebra and trig identities. I never really had an
appreciation of modulation and what was happening by reading
any ARRL handbook until I found standard college texts that
discussed modulation in detail this way. The elegant beauty
of the mathematics is what I love and is what got me interested
in RF.

I'm sorry I dont have any references at hand, but the better
ones will also give simple test set-ups to show the student
how to achieve true modulation using simple rf generators and
signal diodes.

5159. CB to Six Missing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Frank Scaraglino <^fas@rtp.ericsson.se>
Message-ID: <3381FB1F.12D2@rtp.ericsson.se>
Source record: 93859

Pert 2 of 10 Is missing??

5160. Re: Etching Panels

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Zack Lau <zlau@arrl.org>
Message-ID: <3381CB82.387D@arrl.org>
Source record: 93860

Bob Mueller wrote:

According to the Rogers WWW page, you can etch aluminum backed
circuit board in ammonium persulfate without masking off the
aluminum. This common etchant removes the copper but not the
aluminum. (Rogers make Duroid and other microwave substrates)

Zack W1VT
> > Remember when etching metal to not use the same etchant as you do for
> > copper circuit boards. Also remember that acid etching releases
> > extremely flammable hydrogen gas. Strong caustic etching of aluminum
> > is possible but you have to have a resist that can handle the caustic.
> > Agitation of the bath during etching is important.
> >
> > 73, Barry L. Ornitz WA4VZQ ornitz@tricon.net, ornitz@eastman.com
> One further note, I have never had trouble using the normal Ferric
> Cloride etchant on AL, though it works rather fast and you may want to
> dilute it for more control. Doing it this way removes the worry about
> attacking the resist with different chemicals.
>
> Bob

5161. Re: 2.4GHz Part 15 devices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5ls5r8$rr7@news2.zippo.com>
Source record: 93861

stevem@w6yx.stanford.edu (Steve Muther) wrote:

>Recently, while trying to view the output from our local ATV
>repeater on 2.4GHz, I noticed a herringbone pattern in
>the received signal. Looking closely at the VSB signal
>from the ATV repeater on a spectrum analyzer, I noticed
>a reasonably strong CW carrier which was the cause of the
>interferance.

>Going mobile with a small dish and spectrum analyzer, a
>friend of mine and I were able track down the source of the
>carrier as a car parked on the street about a block
>away from my house.

>Based on subjective measurements, I suspect that the
>device generating the interferance is putting out a
>stronger signal level than is allowed under part 15
>rules for a non-spread mode. This, in addition to
>a violation due to the device causing interferance to
>an established licensed service.

>I am guessing that it is a wireless vehicle alarm system
>of some kind. I'm not sure what the carrier is for.
>Possibly the link from the car to a pocket beeper?
>Possibly the 2.4GHz RF is used as part of a doppler
>motion detector to detect movement within the cab.
.....

Part 15.245 (field disturbance devices) allows 500mV/m at 3 meters in
this band. This is a pretty hefty signal. It works out to about
100mW EIRP. This is the average value. The peak value can be as high
as much as 20dB hotter.

George Carlson KC5RCC
Geotek Design Services, Houston,TX
geotek@comwerx.net

5162. Re: Transistor Theory: Seductive Fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: wrt@eskimo.com
Message-ID: <3383eeaf.4851339@eskinews.eskimo.com>
Source record: 93862

wmeara@erols.com (Bill Meara) wrote:
<snip>
>Mark: Thanks for digging up the article. I've read it MANY times.
>In fact it was Macleish's article that really got me thinking about
>the physics of radio.
>
>I liked the article and it helped me a lot. But it really doesn't
>provide that gut level understanding that we've been talking about.
>
>Like many authors on this subject, Ken doesn't really point out that
>there are limits to our understanding of these matters. When you get
>right down to it, no one really understands what an electron IS, what
>charge IS, what the magnetic force IS. Also (as far as I can tell) no
>one REALLY can understand or explain the particle-wave duality. Just
>ask a someone to explain how particles are generated by your 20 meter
>dipole!
>

Well said! So many scientists think because they can MEASURE
something, they UNDERSTAND it. Not so. For example, I have yet to
hear an explanation of why a spinning gyroscope can be balanced off
of one's finger, with it's entire mass off to the side and not fall.
Why does rotation apparently counteract gravity? I sent that question
into Marilyn Vos Savant, the self-proclaimed holder of the world's
highest IQ and never got a reply. Anyone know?

73, Bill W7TI

5163. Re: Bogen JO-100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: jln2@cornell.edu
Message-ID: <jln2-2005971255410001@132.236.146.34>
Source record: 93863
Cross-posted to:
rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.antiques.radio+phono

I think that this was one of Bogen's "booster amplifiers" for distributed sound systems. These systems used (and still use) a costant voltage scheme, where each speaker has a transformer with a 70 volt primary and a tappable secondary rated in watts, so you could adjust the output of each speaker for local conditions. A typical distributed system would be the hotel conference room with twenty 8" speakers in the ceiling. If you had this amplifier (we're assuming a pretty old hotel) you might have each speaker tapped at 5 watts (20x5=100). You might also tap the speakers closest to the microphone position at a lower wattage to lower their output and improve gain before feedback. I think the rule was the wattage was supposed to add up to no more than the rated output of the amp, but it could be less than the rated output without problem without problem.

In article <33803950.863860@news.mnsinc.com>, no.spam@emails.org wrote:

> x-no-archive: yes
>
> Can anyone tell me what you know about a Bogen JO-100 amplifier?
>
> It uses two 807s for 100 watts out. The outut transformer appears to
> be unsuitable for driving the typical 4, 8, 16 ohm load. Rather it has
> outputs for 70V, 100 V, 120V etc.
>
> I am thinking about either using this as a modulator or sellling it.
> Either way it will need some fixing up, and thus I will need a
> schematic diagram.
>
> Anybody have one I could get a photocopy from? I will gladly pay the
> copying and postage cost.
>
> Regards - Bry
>
> *** DO NOT HIT "REPLY" to respond to this message via e-mail! ***
>
> *** REPLY *ONLY* to: bry "AT" mnsinc 'dot' com ***
>
> Thanks!

--
Opinions (if detectable) are my own.

Jim Novack
jln2@cornell.edu
607-255-6528

607-539-6277

5164. Motorola "MOTRAC" repeater conversion?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Robert Mathis <RCMathis@worldnet.att.net>
Message-ID: <5lquh9$ir3@mtinsc04.worldnet.att.net>
Source record: 93935

Can anyone give me some information or guidance for the procedure of modifying the Motorola "MOTRAC" series of radios into repeater service? The unit I have is a UHF model #U64LHT-3100A. Surely this has been done by someone with these fine quality units. Thanks, Robert KO6WK rcmathis@worldnet.att.net

5165. atv amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: darrylb@iglou.com
Message-ID: <3381039c.1366385@news.iglou.com>
Source record: 93936

Our local club is building an ATV repeater with an output frequency of 932.25 Mhz, and we are looking for an amplifier with 200 to 300 watts output. For high power we had in mind a pair of of 2C39 type tubes (7289s?) in cavities configured in grounded grid linear service. We can't find a source for such an amplifier except Eimac at a HUGE price.

A company in Jupiter, Florida named High Spec (not sure spelling is right) has been recommended to us, but we can't find any record of this company.

Two questions:

1. Does anyone know how to get hold of High Spec?

2. Can anyone recommend another source for such an amplifier.

Please respond directly to one of the following addresses

darrylb@iglou.com

gacross@pop.uky.edu

73 and tnx

5166. IC-2700H Mod

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: rdgrantii@aol.com
Message-ID: <19970520040400.AAA07439@ladder02.news.aol.com>
Source record: 93937

Is there a modification for the IC-2700H to receive 800 MHZ???

Please e-mail me at RDGRANTII@AOL.COM with a reply.. THANKS!!

KC5CYQ

5167. Re: Low noise FET?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: i3683@csc.dk
Message-ID: <5lrj6a$4ul$1@news.uni-c.dk>
Source record: 93938

In article <19970512111101.HAA20858@ladder02.news.aol.com>,
johnsonhe@aol.com says...
>
>Try the 2SK369. Two in parallel are sub-nanovolt at 10 Hz.
>
>Available from MCM Electronics, A dollar and change qty 1, $0.80 each 10
>quantity.
>
>W4ZCB

Does anyone have an address or telephonenumber for MCM Electronics?

Regards, Anders

5168. Re: Would like some suggestions about QRP rigs

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <33815f1a.0@cheese.pcug.org.au>
Source record: 93939

"QRP" <Indiana@CW.QRP> wrote:
>I am looking to buy a QRP rig. I would like it to cover at a minimum 80 and
>40 but would prefer 10 - 160 cw and ssb. Does anyone have any opinions of
>what are the best radios and what I should be looking for in a QRP rig? I
>am open for any help. Thanks!
>

Have a look at the Australian QRP Home Page (accessible via URL below).
There's a long discussion about what to look for in a QRP rig (either
homebrew or commercial) and plenty of links to QRP pages around the
world (including commercial suppliers of QRP gear).

73,

Peter VK1PK

--

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

5169. SB-220 Band Switch Upgrade to 160 meters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: "Terry G. Glagowski" <GlagowskiT@acm.org>
Message-ID: <3381B0FA.66C9@acm.org>
Source record: 93940

I'm looking for some bandswitch wafers to put in an SB-220
which has been converted to 160 meters.

Specifically I need
1) a 6 position ceramic progressive shorting wafer
to progressively short the plate tank coil,
2) Another wafer to add extra loading capacitance for 80 and 160 meters,
only 2 of the 6 positions need to be present on THIS wafer.
3) still another wafer to add extra tuning capacitance on 160 meters,
only 1 of the 6 positions needs to be present here.

I would appreciate hearing from anyone who can help.

--

Terry G. Glagowski, PhD. EMAIL: mailto:GlagowskiT@acm.org
Electronic Products Dev. WWW: http://spookey.sirti.org/~glagowsk
Bose Corporation, MS 15E LOCATION: Lightning Offices, near left corner
The Mountain PHONE: (508) 766-6979 FAX: (508) 879-3711
Framingham, MA 01701 AMATEUR: W1TR USAF MARS: AFA1DI, former
AFA5BP

5170. Simplex Repeater Help

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Jason's News <jasong@bim.com>
Message-ID: <864138924.233537@virtual.icr.com.au>
Source record: 93941

Has anyone tried building the simplex repeater as shown in '73 magazine? I'm looking for ways to enhance the one that I built.(extended record, phone patch,ctcss, dtmf decoder, etc). The base configuration works very well, but I feel that this circuit has a lot of potential in the way of expansion.

Any info would be appreciated.

Please email to jasong@bim.com

Thanks!

5171. petition

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: KA8YKK <KA8YKK@concentric.net>
Message-ID: <3381B934.210E@concentric.net>
Source record: 93942

Amateur Radio Operators
From the State of Michigan

We the Amateur Radio operators from the State of Michigan do hereby agree to continue to abide by all the rules of Amateur Radio. We pledge to improve the amateur radio bands, and teach new hams joining the hobby the correct operating procedures which should be followed on the amateur bands. By doing this, we are petitioning the American Radio Relay League in our fight to help clean up the language on the Amateur bands, and are looking for civility/politeness in conversations. By showing our support in this petition, we are hoping that the American Radio Relay League can help us fight the language that we are hearing on these bands.

We are asking the American Radio Relay League to help in this clean up by: Hosting several national forums on this problem, and how it can be addressed, We are looking for a promise from the ARRL to report on how enforcement is currently done. We are also looking for a promise from the ARRL to create a sort of self enforcement mechanism, and possibly create a large fine mechanism that will generate enough money to help correct this problem. We realize there is such a thing as freedom of speech but, there are also the words such as civility, and politeness.

I Deborah K. Kirkbride KA8YKK am asking all amateurs in the State of Michigan to please sign this petition, and send it to me at the following address: 1315 Center Avenue, Apartment #1 Bay City, MI 48708. I will in turn when enough signatures are gathered be sending all petitions received to the ARRL.

Please make copies of this petition and pass it along to other clubs, and Amateurs in you area. Please help me in this fight to get the Amateur Bands back on the right track and keep them there.

If you are not from the State of Michigan please feel free to download this off my web page http://www.concentric.net/~ka8ykk change the state name to fit your own and get this started in your own state. You can forward them to me and I would be more than happy to submit them to the ARRL with the State of Michigan.

Thanks
Debbie Kirkbride KA8YKK

ka8ykk@concentric.net

5172. Re: CB to 6 ??????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: dickrb@lsid.hp.com
Message-ID: <5lsfe3$lot@hpcvsnz.cv.hp.com>
Source record: 93943

The old Sears Roadtalker converts nicely to six. Appended are some thoughts...

Dick - w7wkr

Greetings

Well, what you do is obtain a schematic for the radio you choose to buy and then look at the sections that are specifically tuned to the original "use" band (e.g. those circuits that are tuned to 27.xMHz).

All you have to do is change the L's and C's in those circuits to resonate at 50.1MHz. To do this you can scale the reactances so they are the same at 50.1MHz as they are at 27MHz. All of the I.F. circuitry remains UNCHANGED.

For example, if the Xc for a capacitor (1/(2*PI*F*C)) is -J100 ohms at 27 MHz then you need to make -J100 = (1/(2*PI*51.1E6*C) and solve for "C" (change the -J100 to 100 and solve for "C"). Do the same for the inductors Xl = 2*PI*F*L - determine what the reactance is at 27MHz and use an "L" that provides the same reactance at 50.1MHz.

Once you have changed the appropriate input/output RF stages, then all you have to do is determine the NEW crystal frequency required to get 50.1MHz +or- LO = I.F. In many cases, the L.O. freq involves a freq synthesizer output that is mixed to another frequency and THAT freq is the actual L.O. freq.

I was fortunate in that the Sears Roadtalker 40 allowed me to use the original crystal and all that was required was to use the PLL freq + the crystal freq instead of the PLL freq - the crystal freq to generate the final L.O. needed to get on 50.1MHz.

Good luck,

Dick Bingham, W7WKR ms/10 Production Engineer
Lake Stevens Instrument Division (A1) Tele: (206)335-2391
Hewlett-Packard Company FAX: (206)335-2828
8600 Soper Hill Road
Everett, WA 98205-1298 E-mail: dickrb@lsid.hp.com

5173. 2m Beacon Circuit Needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Jason's News <jasong@bim.com>
Message-ID: <864138728.557472@virtual.icr.com.au>
Source record: 93944

I would like to know if anyone has or knows of a simple circuit that will transmit briefly in the 2 meter band at a specified interval (in other words, a beacon.)

I would love to use the Ramsey Kit but I need a far cheaper alternative.

Any info would be appreciated!
Please email to jasong@bim.com

5174. Re: 813 Linear With Screen Voltage ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Len <ln@hagagymnasiet.norrkoping.se>
Message-ID: <338252F2.4637@hagagymnasiet.norrkoping.se>
Source record: 93945

dsnowden@ncdc.noaa.gov wrote:
>
> I was thinking about modifying a pair of 813's to use
> screen voltage instead of grounded grid. If I do this
> I know there is more chance of instability, but if I
> do this, anybody got any experience as to typical
> drive levels I can expexct for full output? With, say
> 600volts screen voltage, 2500volt plate voltage and
> some value of grid bias... ???
> Doug, N4IJ

I have three tubes in parallel, cathode driven with a silicon diode voltage doubler from the cathodes to feed the screens with about 240 volts under full drive. This is similar to the classic G2DAF circuit, but sticking to cathode drive gives better linearity. Control grid bias is obtained with a 1 kohm resistor to ground.
Ua: 2,3 kV, Ia: 0,66 A Ig: 0,1 A. Output is 750-1000 W depending on band with 100 W drive. IMD is -34 db or better below PEP. The bias resistor increases efficiency 7 percent.
When time permits I will change the doubler to a tripler, but I doubt that it will make much difference.
If your problem is a lack of driving power this information won't help you, however. Look in e. g. 1967 Handbook.
73 de Len SM5DFF

5175. Re: Brazing Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: tomb@lsid.hp.com
Message-ID: <5lsnm1$r1d@hpcvsnz.cv.hp.com>
Source record: 93946

George Carlson (geotek@comwerx.net) wrote:
(In response to a question about brazing aluminum capacitor plates to
a brass shaft:)

: Although
: there are techniques availabe to braze brass, I don't ever remember
: seeing a cap put together this way. Cutting the slots on a lathe and
: fastening the plates in place with locktight would probally work. The
: tough thing would be to make the plates.

I recall seeing some old caps with _brass_ plates, not aluminum, which
were soldered or brazed to the shaft. Been a _very_ long time ago, and
they were old then.

If the original poster has access to a lathe, the easiest answer may be to
simply turn the whole rotor out of a solid block of brass (or possibly
aluminum). Another way I've seen it done is to stack plates on a shaft
with alternating spacers and plates. Then threads on an end of the shaft
allow a nut to clamp it all together.

As for making the plates, it might be best to contract with a sheet metal
shop to do it for you...some with NC equipment can set up for small runs
pretty economically. But it's still likely to be in the hundreds of
dollars for a minimum run.

--
Cheers,
Tom
tomb@lsid.hp.com

5176. Re: CB2SIX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc653f$c7a29fc0$1e058d2c@anders>
Source record: 93947

>sir, as this is a quite complicated modification, and I would love to
>find one of those radios...would it be possible to tell me a few
>models that I could use??? I am definatly interested in trying
>this one out, however, here in the US, it is getting increasingly
>hard to find older ssb rigs based on the pll02a chassis.

Well, I don't know if I can help you too much, since I haven't tried it myself yet... The article is written by a ham from South Africa, and I just picked it up on the packet-radio network, and so I really don't know too much about the background of the article.

In part 2 of the article it is mentioned that the modifications was performed on a UNIDEN PTBM048AOX chassis (in a book I have, it says that PTBM048AOX is actually a CYBERNET chassis), and as far as I can find out, that includes the following radio makes:

AWA/Thorn 1503
Boman CB950
Colt 480, 485DX, 1000, 1200 (Excalibur)
Gemtronics GTX77
G.E. 3-5825A
JC Penney 981-6247
JIL MPL-5, SSB-M6
Lafayette Telsat SSB140
Midland 78-976, 79-892
Palomar 2900
RCA 14T302
HyGain 2705 (V), 2785, 3108 (VIII)
Truetone CYJ4837A-87

The above list of radio makes is taken from the "Cybernet Export Service Manual", by Lou Franklin, and so it seems like they belong to the Cybernet family, rather than Uniden.

That same manual also refers to something called "SAMS Fotofacts" for pictures/layout of these radios, but I am not sure where of what that is.

It should also be noted that there is a whole range of CB radios that are using the PLL02A chip, and the list is far to long to include here.

Hope this info may be of some help...

I will also be posting some last comments from the author of the article, under the heading "CB2SIX extra info" , which may be of some help.

73 de Anders / LC3HAT, Email: anderskv@online.no

5177. CB2SIX extra info

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc6540$a3dccc40$1e058d2c@anders>
Source record: 93948

The following is written by ZR1EV, Shawn:

Hi all
I have recieved quite a lot of mail re the CB to six metre conversions described in the 10 parts of an article recently . Instead of replying to each one individually , I will reply in a bullitin , as everyone basically wanted to know the same thing .
The reason I mentioned a particular chassis part number and not the rig(s) by name , was that the bullitin went out to SIX@WW , and the same rig will go under different names in as many countries . The Uniden chassis under discussion is fitted to a number of local rigs . These include :
Major MSB6205
General Electric 3-5825A (A-model)
Tedelex 6000 ("old" model , pre-1985)
Tedelex 7000
etc
There were also a couple of rigs (the so-called "B"-models) that use the same synthesizer configuration and similar circuitry , but have the IF/audio and the synthesizer/switching/RF sections on two separate boards . These are also good candidates for conversion . The difference is that the bandpass filter is switched between the RX and TX , opposed to each circuit having its own tuned circuits as found in the Major chassis . (T204/T205 in the "B" models , and T8/T9 - T4/T5 in the "A" models . So if you want to try ane of the "B" model rigs , you will end up winding 2 coils instead of 4 ! The part numbers are even the same , so you can wind them the same way. T204 is part number 10CA006 and T205 is part number 10CB003 .
The "B" models include:
All of the Midland base stations("old type",PLL02A(G) based synthesizer)
Midland 79-891
Genaral Electric 3-5825(B)
General Electric "Super Base"
etc
I have also done a few so-called "export" rigs ...120 channel all mode (FM/
AM/USB/LSB) . The sections needing modifications were for all intents and purposes the same , but the synthesizer used a bank of 20 Mc Xtals (3 in all) in place of the 10.0525 & doubler configuration used in the Uniden Chassis .
The rigs I had done were the Lafayette 1200FM (also goes under a number of different brand names)

vy 73 de Shawn ZR1EV JF96ic
SMIRK#5673

5178. Re: Transistor Theory: Seductive Fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: novatech@eskimo.com
Message-ID: <EAHu07.CI7@eskimo.com>
Source record: 93949

wrt@eskimo.com (Bill Turner) writes:

>---
>Well said! So many scientists think because they can MEASURE
>something, they UNDERSTAND it. Not so. For example, I have yet to
>hear an explanation of why a spinning gyroscope can be balanced off
>of one's finger, with it's entire mass off to the side and not fall.
>Why does rotation apparently counteract gravity? I sent that question
>into Marilyn Vos Savant, the self-proclaimed holder of the world's
>highest IQ and never got a reply. Anyone know?

>73, Bill W7TI

Strange, but it seems to me that every High School physics book explains
how this works. The equations are pretty simple-- just algebra.

Steve.
--
--
Steven D. Swift, novatech@eskimo.com, http://www.eskimo.com/~ntsales
NOVATECH INSTRUMENTS, INC. 601 Valley Street, Suite 310
206.301.8986, fax 206.363.4367 Seattle, Washington 98109 USA

5179. Want to build microstrip power meter...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Ken KC6TEU <Ken_R_Mason@ccm.fm.intel.com>
Message-ID: <3381EC1D.28C8@ccm.fm.intel.com>
Source record: 93950

Hello Fellow Hams,

I have built a 8877 2M amplifier. Now I need a relative output power indicator for tune up purposes. I have been thinking of a microstrip design. The problem is what dimensions are recommended to be used with a 1500 watt amplifier? Will G10 epoxy board with 1 oz copper good enough? 108 mill trace will produce a 50 ohm impedance. What spacing do I need for the detector loop? What length do I need for the 50 ohm microstrip and detector? I expect to see somewhere like 275 volts or more at 5.5 amps or better going through the microstrip. I was considering the spacing to be around 200 mils but I don't know if the detector voltage will be too high. I would like it to stay under 25 volts if possible.

Regards,

Ken Mason
KC6TEU

http://www.earthlink.net/~kmcm
http://www.inreach/com/bestinfo/kc6teu.htm
http://www.qsl.net/kc6teu

5180. Good 100w Pin Diode ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: dsnowden@ncdc.noaa.gov
Message-ID: <864158786.1869@dejanews.com>
Source record: 93951

What would be some good PIN diodes that would be usable in
an HF (up to 30mhz) pin diode tr switch? I have a crude
design in my mind but don't even know who makes them now days.
I am looking to experiment with a switch for my 100w exciter
and rx combo.

Doug, N4IJ
dsnowden@ncdc.noaa.gov

----------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

5181. Re: 813 Linear With Screen Voltage ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: W8JItom@worldnet.att.net
Message-ID: <3381e1b1.19911600@netnews.worldnet.att.net>
Source record: 93952

On Tue, 20 May 1997 18:42:10 -0700, Len
<ln@hagagymnasiet.norrkoping.se> wrote:

>I have three tubes in parallel, cathode driven with a silicon diode
>voltage doubler from the cathodes to feed the screens with about 240
>volts under full drive. This is similar to the classic G2DAF circuit,
>but sticking to cathode drive gives better linearity. Control grid bias
>is obtained with a 1 kohm resistor to ground.
>Ua: 2,3 kV, Ia: 0,66 A Ig: 0,1 A. Output is 750-1000 W depending on
>band with 100 W drive. IMD is -34 db or better below PEP. The bias
>resistor increases efficiency 7 percent.
>When time permits I will change the doubler to a tripler, but I doubt
>that it will make much difference.
>If your problem is a lack of driving power this information won't help
>you, however. Look in e. g. 1967 Handbook.
>73 de Len SM5DFF

Hi Len,

Don't ever do an three tone IMD test on that circuit. The G2DAF
circuit is a very poor IMD performer if the input level is
time-varying in amplitude, like voice modulation.

Screen voltage needs to be held constant, and the eciter needs to see
a constant load. Systems like the G2DAF load the exciter most at
peaks, and not at all at low levels.

The only thing that saves the G2DAF circuit is the heavy negative
feedback from the use of cathode drive. It tends to counteract the
distortion and swamp out the varying load offered by trying to
extract dc bias voltages from the exciters output.

The G2DAF system has NEVER been popular with amateurs, and never used
in a commercial PA. There are no benefits to offset the increase in
distortion.

73 Tom

5182. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Ed Loranger <we6w@qsl.net>
Message-ID: <338219FA.63EC@qsl.net>
Source record: 93953

jmiles wrote:
>Pitfall 2: I wouldn't build a code-practice oscillator, much less >any
>type of RF circuit, without a good ground plane. :-) Do yourself >a
>favor and throw away every scrap of "perfboard" you own, and give >it
>another try with dead-bug construction on bare copper-clad board.

!!!!! AMEN !!!! Never found a perfboard that worked
better than Ground Plane construction.
--
72/73 de WE6W QRP .3W QSX 7040 KHz SK ee (First and Last callsign!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
mailto:we6w@qsl.net QRP-L member #1068.
http://www.qsl.net/we6w

5183. Optimist-80! A QRP rig for 80m DSB

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: Johan Bodin <sm6lkm.jbeab@swipnet.se>
Message-ID: <01bc6574$e7a39380$905ff482@win95.swipnet.se>
Source record: 93954

Hello homebrewers!

I have designed a small DSB rig for 80 meters. Three rigs have been built so far and all are working UFB. If you are interested, have a look at my homepage at:

http://home4.swipnet.se/~w-41522/

Look for SM6LKM's DIY QRP Corner. The name of the rig is Optimist-80. Schematics, PCB layout and building instructions are available for download. Free of charge, of course.

You won't believe how much fun a single watt P.E.P. is able to produce until you have tried it yourself!

Email: sm6lkm.jbeab@swipnet.se

72/73 de Johan / SM6LKM

5184. Re: atv amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-20 00:00:00 UTC
From: "Dale R. Parfitt" <par@magg.net>
Message-ID: <33824A8E.3E6A@magg.net>
Source record: 93955

darrylb@iglou.com wrote:
>
> Our local club is building an ATV repeater with an output frequency of
> 932.25 Mhz, and we are looking for an amplifier with 200 to 300 watts
> output. For high power we had in mind a pair of of 2C39 type tubes
> (7289s?) in cavities configured in grounded grid linear service. We
> can't find a source for such an amplifier except Eimac at a HUGE
> price.
>
> A company in Jupiter, Florida named High Spec (not sure spelling is
> right) has been recommended to us, but we can't find any record of
> this company.
>
> Two questions:
>
> 1. Does anyone know how to get hold of High Spec?
>
> 2. Can anyone recommend another source for such an amplifier.
>
> Please respond directly to one of the following addresses
>
> darrylb@iglou.com
>
> gacross@pop.uky.edu
>
> 73 and tnxFor ATV I suspect you would need 6 2C39's water cooled. I can get 240W
out of my 2 cavity 2C39 amp but key down more than 5-6 seconds and the
water begins boiling. My 4 tube single cavity amp will make 500W out but
again, for only a few seconds before water boils.

Dale
W4OP

5185. Wanted: parts for IBMjr

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: OSTERTAGK@SNYCORVA.CORTLAND.EDU
Message-ID: <01IJ3UQOBSXE0034DP@SNYCORVA.CORTLAND.EDU>
Source record: 93864

For fun, I recently bought an old IBM PCjr at a yard sale. I thought I might use it for packet, or maybe to fool around with some assembly language programming (trying to learn some things about microprocessors).

I want to see if any of you have the following parts for an IBM PCjr for sale:

IBM PCjr original keyboard with cable and working infrared
IBM PCjr connector for TV
IBM's adapter cable for the IBM PCjr Color Display
IBM PCjr serial adapter cable
IBM PCjr joystick
IBM PCjr adapter cable for cassette
any cartridges
lightpen?
books for the IBM PCjr, especially any discussing assembly language programming

I'm not a collector, just wanting to find some of these things to play with.

Anyone know of a minimal telecommunications program I can use with packet that comes with the assembly language or Basic code?

Thanks,

Keith, N3KXZ
ostertagk@snycorva.cortland.edu

5186. Re: CB2SIX

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: hduff@ica.net
Message-ID: <33824ea8.0@lightning.ica.net>
Source record: 93865

"Anders Kvalvaag" <anderskv@online.no> wrote:

>>sir, as this is a quite complicated modification, and I would love to
>>find one of those radios...would it be possible to tell me a few
>>models that I could use??? I am definatly interested in trying
>>this one out, however, here in the US, it is getting increasingly
>>hard to find older ssb rigs based on the pll02a chassis.

>Well, I don't know if I can help you too much, since I haven't tried it
>myself yet... The article is written by a ham from South Africa, and I just
>picked it up on the packet-radio network, and so I really don't know too
>much about the background of the article.

>In part 2 of the article it is mentioned that the modifications was
>performed on a UNIDEN PTBM048AOX chassis (in a book I have, it says that
>PTBM048AOX is actually a CYBERNET chassis), and as far as I can find out,
>that includes the following radio makes:

>AWA/Thorn 1503
>Boman CB950
>Colt 480, 485DX, 1000, 1200 (Excalibur)
>Gemtronics GTX77
>G.E. 3-5825A
>JC Penney 981-6247
>JIL MPL-5, SSB-M6
>Lafayette Telsat SSB140
>Midland 78-976, 79-892
>Palomar 2900
>RCA 14T302
>HyGain 2705 (V), 2785, 3108 (VIII)
>Truetone CYJ4837A-87

>The above list of radio makes is taken from the "Cybernet Export Service
>Manual", by Lou Franklin, and so it seems like they belong to the Cybernet
>family, rather than Uniden.

>That same manual also refers to something called "SAMS Fotofacts" for
>pictures/layout of these radios, but I am not sure where of what that is.

>It should also be noted that there is a whole range of CB radios that are
>using the PLL02A chip, and the list is far to long to include here.

>Hope this info may be of some help...

>I will also be posting some last comments from the author of the article,
>under the heading "CB2SIX extra info" , which may be of some help.

>73 de Anders / LC3HAT, Email: anderskv@online.no

I have performed the mod twice...It really does work (why shouldn't it
!)
The first was a Colt 485 Black Shadow, the second a Citizen MPL-5.
I would say that the mod is not for the faint-hearted
tinkerer...better left for a seasoned experimenter.

Cheers, Hugh VA3TO

5187. Need info for Palomar 225 mobile amp w/auto side band

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: boggess@mail.feist.com
Message-ID: <33848ad8.1948171@news.fn.net>
Source record: 93866

I am looking for info on a palomar 225 mobile amp , Basicly what type of amp is it ?, how many watts, what band (freq) is for???

Thanks in advance

Jeff

5188. fs: 3M solid dish ku-band with mount $50,--

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: "petersmt@worldaccees.nl" <petersmt@worldaccees.nl>
Message-ID: <33822C00.B19@worldaccees.nl>
Source record: 93867

fs: 3M solid dish ku-band with mount $50,--

Almost for free....

The dish is from a dutch cable station,
it must be gone at the end of the month.
The dish is a R.O.V.E.R. sat 3M in 2 Parts,
the mount have a weight of about 80 Kg.
If you be interested in the dish

Please e-mail me.

Peter Smit PE1CQS The Netherlands

5189. Writers Seeking Publication

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Bob@ibm.net
Message-ID: <5luaap$35n$1406@news.internetmci.com>
Source record: 93868

We are the International Literary Agency of New York. We also have 2
other branches, one in the Lake George region of New York and the
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Fiction: Brief synopsis, first chapter, self-addressed, stamped envelope (S.A.S.E.)
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Screenplays: (for TV & Movies) Brief synopsis, first 20 pages, S.A.S.E.
Short Stories: Brief synopsis, first 3 pages, S.A.S.E.
Poetry: Send in 3 of your best poems only, S.A.S.E.

Woodside International Literary Agency
1190 North Collier Blvd.
Marco Island, Florida 34145
(941) 642-9660

Please do not send in complete manuscript unless invited.

5190. looking for AVANTEC microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Javier <javiers@ntserver.codeinf.com>
Message-ID: <33823307.5AD3@ntserver.codeinf.com>
Source record: 93869

Hi! I�m lookin for the address of Avantec microwave components!
Thank you for your help!!

5191. LOOKING for EASY Schematic of a 4CX250 2Meter Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: jorgenj@uddeholm.se
Message-ID: <3382bc45.0@d2o61.telia.com>
Source record: 93870

Is there anyone ho have a easy built poweramp for 2 meter with a
4CX250 pse send it in a file for me

regards SM4WDQ J�rgen

5192. Plessey PLL Eprom Generator for Win95(10k !)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Philipp Graupeter <philipp@rhrk.uni-kl.de>
Message-ID: <3382CECB.30C@rhrk.uni-kl.de>
Source record: 93871

```
This is a multi-part message in MIME format.

--------------74A7129233DD
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

This is a prg written by me for generating EProm Data for
Plessey PLL Ic 8820. It generates Data for Frequency Range 50 - 500 MHz
with diff. prescalers and Channel Spacing 5-10-25-100 kHz. It works with
Xtal's 4-5-6-10 MHz.
For WIN95 or NT only...

philipp@rhrk.uni-kl.de ( DD0UO )

--------------74A7129233DD
Content-Type: application/x-zip-compressed; name="pll.zip"
Content-Transfer-Encoding: base64
Content-Disposition: inline; filename="pll.zip"

<encoded_portion_removed>
MC5leGVQSwUGAAAAAAEAAQBYAAAAiSMAAAAA
--------------74A7129233DD--
```

5193. vhf amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: on1dan@boomer.digibel.be
Message-ID: <3376116d.2802670@NEWS.DMA.BE>
Source record: 93872

Hi OM,

looking for vhf high power amplifier schematics and tubes ?

Power have to be 400 ÷ 1500 Watt.

Who can help me? Contribution not a problem.

Please complete schematics.

send e-mail, thanks and 73's de on1dan

5194. power amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: on1dan@boomer.digibel.be
Message-ID: <3380eb7f.18031120@NEWS.DMA.BE>
Source record: 93873

Hi there,

ho have schematics for my about VHF power amplifiers.
There have to be from tubes with power of 400 -1500 watts.
Have already schematics from ARRL.
Contribution not a problem
73

5195. Re: Brazing Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <3382DB92.1ABF@kfa-juelich.de>
Source record: 93874

George Carlson wrote:
>
> ap309@freenet.buffalo.edu (Stephen B. Voigt) wrote:
>
> >Need instruction on how to braze/solder plates in a variable capacitor. Need to join aluminum plates with brass support rod.
> >--
>
> I think that if you look carefully, you will see that the plates are
> swaged into place. The brass shaft is cut, the plates set in place,
> and a tool deforms the brass slightly to hold the plates. Although
> there are techniques availabe to braze brass, I don't ever remember
> seeing a cap put together this way. Cutting the slots on a lathe and
> fastening the plates in place with locktight would probally work. The
> tough thing would be to make the plates.
>
> George Carlson KC5RCC
>
> Houston Home Metal Shop Club
> http://www.comwerx.net/biz/geotek/hmsc/index.htm

They are not common, but I have a variable capacitor with nicely brazed plates. With brass it should not be too hard, though I would seriously consider using 95% tin 5% silver alloy. It is strong and you won't have much annealing or distortion (the latter you can beat by doing the job in a furnace, to a large extent.)
Because I wanted to make a special, very low inductance capacitor I have though a little about making plates and the easiest way was either to make a bunch of disks by first making the holes and then roughing out the disks, followed by turning the whole batch in a stack on a lathe. Finally, cut them in half, carefully!
It would be only slighty harder to make a punch and die to cut the disks practically to finished size. Probably making full disks is less work unless we are talking about several capacitors. Such a punch and die set is then just lathe work, with the force to work it made with the bench vise.
Quite frankly, I would probably select copper instead of brass. It is a predjudice but there would seem to be no trouble with zinc in a slow brazing process.
I did not receive the original posting so I don't know the purpose of this capacitor but in a high current application like transmitting or rf-induction heating the brazed capacitor is probably worth the effort.

Bob

5196. Re: 2.4GHz Part 15 devices

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: frussle@erols.com
Message-ID: <3385ed8b.3716929@news.erols.com>
Source record: 93875

On 19 May 1997 22:11:56 GMT, stevem@w6yx.stanford.edu (Steve Muther)
wrote:

>
>Recently, while trying to view the output from our local ATV
>repeater on 2.4GHz, I noticed a herringbone pattern in
>the received signal. Looking closely at the VSB signal
>from the ATV repeater on a spectrum analyzer, I noticed
>a reasonably strong CW carrier which was the cause of the
>interferance.
>
>Going mobile with a small dish and spectrum analyzer, a
>friend of mine and I were able track down the source of the
>carrier as a car parked on the street about a block
>away from my house.
>
>Based on subjective measurements, I suspect that the
>device generating the interferance is putting out a
>stronger signal level than is allowed under part 15
>rules for a non-spread mode. This, in addition to
>a violation due to the device causing interferance to
>an established licensed service.
>
>I am guessing that it is a wireless vehicle alarm system
>of some kind. I'm not sure what the carrier is for.
>Possibly the link from the car to a pocket beeper?
>Possibly the 2.4GHz RF is used as part of a doppler
>motion detector to detect movement within the cab.
>In any case, I'm wondering if anyone is familiar with
>these systems and knows what kind of options I may have
>in dealing with the owner? If its just a matter of
>getting him to put the unit of a different channel,
>that would be the easiest solution. I'd rather deal
>with the problem diplomatically rather than quote rules
>and regs telling the owner he has to shut down his
>expensive alarm system.
>
>Any reasonable opinions?

If I'm not mistaken, microwave ovens work on or near this band. You
may be picking up leaking radiation. If they are using this band for
industrial heating, you may actually be doing them a big favor by
informing them that their shielding leaking. I would tread cautiously,
though. The source may be the primary user of the band and Ham Radio
is secondary.

73,

Jake Brodsky, AB3A mailto:frussle@erols.com
"Beware of the massive impossible!"

5197. Re: NN1G's QRP SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: rohrwerk@pconline.com
Message-ID: <rohrwerk-2105970840440001@tsc-p10.pconline.com>
Source record: 93876

In article <338040ba.2761134@news.mnsinc.com>, no.spam@emails.org wrote:

> HERE IS AN IMPORTANT addition to the QRP-L information request!
>
[snip]
> BUT WATCH HOW YOU BEHAVE THERE!!
>
> One slip and you're OFF! There is no exception.
>
> K5FO runs it with an iron rod and those who JOIN IN and support it,
> support HIS ogre-like tactics!

[diatribe and vitriol snipped]

QRP-L is a fine list, frequented by a good bunch. Join and see for yourself.

John K0JD

5198. Telephone number for International Crystal Mfg?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: k5dh@qsl.net
Message-ID: <5luvsf$7v4@sf18.dseg.ti.com>
Source record: 93877
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Anyone have International Crystal's telephone number?

73,
Dean K5DH

5199. data sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Brian Marshall <brian.marshall@zetnet.co.uk>
Message-ID: <19970521174506704 69@zetnet.co.uk>
Source record: 93878

does anyone have any data sheets on a CA3189 FM IF subsystem

5200. Homebrew Crystal Headphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Jonathan Adair <adair@csee.usf.edu>
Message-ID: <01bc6609$cea83440$e0a6f783@pokey.usf.edu>
Source record: 93879

I've seen a mention of homebrewing/improvising high impedance headphones for crystal receivers. Any pointers? I already know about using a pair of older telephone earpieces. I was hoping to come up with something even more scratch-built.

kf4lfg

5201. Re: Plessey PLL Eprom Generator for Win95(10k !)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: the@primenet.com
Message-ID: <the-ya023580002105971044330001@news.primenet.com>
Source record: 93880

Is there any interest in starting a rec.radio.amateur.binaries group?

People could post programs, pictures of projects or gear, eprom data, etc.

Rob.

5202. Re: NN1G's QRP SSB rig

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: no.spam@emails.org
Message-ID: <33833755.23804110@news.mnsinc.com>
Source record: 93881

On 19 May 1997 11:51:58 -0700, rheiss@tuba.aix.calpoly.edu (Robert
Everitt Heiss) wrote:

>
>As I recall, Brian, you were the bandwidth king on rec.radio.amateur.*
>back then, posting and reposting your megabyte MEGALIST for our "benefit"
>but the trickle of positive feedback dried up

Rob, your memory is failig you. Must be senility :-).
We were not even talking about rec.radio.amateur.*.anything
but rather QRP-L

Never mind, I'm going back to enjoying a QSO here...

Cheers to all and 73 de G3XLQ, a POSITIVE radio amateur. (grin!)

5203. SL6270 VOGAD cct WANTED for Hands Free Mic'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: "Alan Wanford.(G6LTN),Cambridgeshire,UK." <alan@wanelec.demon.co.uk>
Message-ID: <dF9XZHAftzgzEwmG@wanelec.demon.co.uk>
Source record: 93882

Hi folks,can anyone help me locate a circuit for a "Hands Free" Mic
using an SL6270 VOGAD Chip,or any suitable circuit using a two pin
electret mic insert.I'm sure that there was one published sometime ago
in one of the Radio Mag's,maybe if you have it you might send me a
copy??.
Thankyou very much for reading this.
--
Alan Wanford.(G6LTN),Cambridgeshire,UK.

5204. Re: Galena crystal??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: johnossi@aol.com
Message-ID: <19970521183001.OAA29154@ladder02.news.aol.com>
Source record: 93883

Any rock shop should have some. Pyrite (fools gold) works well too.
John Ossi
N3DRH
LEICA Microscopes and Imaging Systems

5205. Re: looking for AVANTEC microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <QQjgiNAJA1gzEwmH@lfheller.demon.co.uk>
Source record: 93884

In article <33823307.5AD3@ntserver.codeinf.com>, Javier
<javiers@ntserver.codeinf.com> writes
>Hi! I m lookin for the address of Avantec microwave components!
>Thank you for your help!!

Avantek is now owned by HP.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

5206. Re: looking for AVANTEC microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: "D. J. Wang (KE3ZB)" <ddw2@lehigh.edu>
Message-ID: <338342BA.418B@lehigh.edu>
Source record: 93885

Javier wrote:
>
> Hi! I&#65533;m lookin for the address of Avantec microwave components!
> Thank you for your help!!

I believe they are sold to HP now. Check out HP's web site.

DJ Wang/ KE3ZB

5207. Re: SL6270 VOGAD cct WANTED for Hands Free Mic'

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Dave Lee <dave.lee@zetnet.co.uk>
Message-ID: <19970521205527707 65@zetnet.co.uk>
Source record: 93886

In message <dF9XZHAftzgzEwmG@wanelec.demon.co.uk>
"Alan Wanford.(G6LTN),Cambridgeshire,UK."
<alan@wanelec.demon.co.uk> writes:

> Hi folks,can anyone help me locate a circuit for a "Hands Free" Mic
> using an SL6270 VOGAD Chip,or any suitable circuit using a two pin
> electret mic insert.I'm sure that there was one published sometime ago
> in one of the Radio Mag's,maybe if you have it you might send me a
> copy??.
> Thankyou very much for reading this.
> --
> Alan Wanford.(G6LTN),Cambridgeshire,UK.

Maplin do a kit for 10.99 A photocopy of their magazine article
comes with the kit and is available separately.
I have not tried the electret version, but the dynamic is excelent
when you find the correct RC values (all explained in th text).
My copy is safely filed. So safe I can't find it.:(
Dave
--
Dave Lee. Weymouth. Dorset. UK.
Tel. 01305 787842 Packet G0ROX@GB7BNM

5208. help pse: CTCSS tone on FT690r Mk1

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Chris Philpot <Chris.Philpot@btinternet.com>
Message-ID: <01bc6634$6d1422e0$LocalHost@fred>
Source record: 93887

Hi fellow 690 owner,

This is a repeat of a previous posting, there were no replies to the first request for help!!!!

Thanks for taking the time to read this message, and if you are able to help me, please take the time to do so, I will acknowledge all replies.

Close to where I live, a new 6Mtr. repeater has just started up....GB3RR

I have the desire to work the repeater, but have an aging FT690r, and the repeater requires a CTCSS tone at 71.9 Hz.

Okay, so I have a CTCSS board, and fitted it to the rig. It works!!, but where does the tone need to be injected to the TX chain?? If you have worked on this job, I would be very pleased if you would share the information with me.

Also just one niggling doubt in my mind....my freq. counter can only go to 1Hz resolution, and I have set up the tone to just "flicker" between 71 & 72 Hz, how accurately does the tone need to be set?

I shall look forward to receiving, your replies to my plea for help, and also to getting the rig working on the repeater.

If you are outside the UK and want info. re British 6Mtr. repeaters, feel free to E-mail me for details.

73 for now,

de Chris G6KBC

chris.philpot@btinternet.com

g6kbc@amsat.org

5209. Re: data sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Steve Simpson <Steve@chubs.demon.co.uk>
Message-ID: <OSUYdKAx33gzEwkg@chubs.demon.co.uk>
Source record: 93888

In article <19970521174506704 69@zetnet.co.uk>, Brian Marshall
<brian.marshall@zetnet.co.uk> writes
>does anyone have any data sheets on a CA3189 FM IF subsystem
>
Hi Brian,
I know it sounds silly but have you tried one of the search engines?
Sometimes you can be lucky and get a pointer straight to it.

--
Steve "Chubby" Simpson
Radio/Night Club D.J.
Steve@chubs.demon.co.uk
G-QRP Club Member 9631
Visit Radio World -
HTTP://www.chubs.demon.co.uk

5210. Re: looking for AVANTEC microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: stevem@vax.area.com
Message-ID: <5lvuvs$g6b$1@nixon.area.com>
Source record: 93889

In article <338342BA.418B@lehigh.edu>,
D. J. Wang (KE3ZB) <ddw2@lehigh.edu> wrote:
>Javier wrote:
>>
>> Hi! I m lookin for the address of Avantec microwave components!
>> Thank you for your help!!
>
>I believe they are sold to HP now. Check out HP's web site.
>
>DJ Wang/ KE3ZB

Actually, it looks like most of the discrete semiconductors from
Avantek went to HP, the modular products went to PSElect (a division
of Penstock - 800-736-7862

Many of the amplifier lines have been discontinued.

Steve M. WF6R

5211. Wanted: Plans for Shortwave Converter for Car Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: mpitcock@edtech.cebs.wku.edu
Message-ID: <5lv39b$ojl@drn.zippo.com>
Source record: 93890

Can anyone point me to any plans for converting an auto radio to
receive shortwave by converting SW signals down to MW? Thanx in advance.

5212. FS: 5U4GB tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Michael Feldt <feldtm@iquest.net>
Message-ID: <01bc6603$c30a52e0$6fec35ce@feldtm.iquest.net>
Source record: 93891
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

12 new in the box 5U4GB tubes new in the box. 9 RCAs, 1 GE, 1 Tung-Sol
and 1 Raytheon. $45 for all which includes shipping within the 48 states.

Happy Listening
Michael Feldt

5213. Re: looking for AVANTEC microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5m02jd$rmp@mtinsc03.worldnet.att.net>
Source record: 93892

If you are looking for a distributer for Avantec, check:

http://www.penstock.avnet.com/

They also have some data sheets online. 73, Woody

Javier wrote:
>
> Hi! I m lookin for the address of Avantec microwave components!
> Thank you for your help!!

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

5214. helpful new florida website

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: htreetrunk@hotmail.com
Message-ID: <5m01v3$mpa@tesla.netline.net>
Source record: 93893

organizations or business trips, meetings plans, family vacations, etc. in Florida are well handled by the people at www.floridatime.com check out and bookmark this site for future reference.

5215. Re: Wanted: Plans for Shortwave Converter for Car Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Woody White <"eMail "@my.www.page.Mailto>
Message-ID: <5m033s$6go@mtinsc03.worldnet.att.net>
Source record: 93894

mpitcock@edtech.cebs.wku.edu wrote:
>
> Can anyone point me to any plans for converting an auto radio to
> receive shortwave by converting SW signals down to MW? Thanx in advance.

FWIW...The principle is the same as the 50 mhz to 14 mhz (6 Meter
Transverter) receive section schematic at my www page. Filters need to
be at the frequency of interest (or span of frequencies) rather than
where they are. Also, depending on the receiver used, you may want a
vfo for more tuning range (in place of the crystal local osc).
Food for thought anyway...
73, Woody

--
de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
Work: Electron Microscopist/Microanalysist
Balance: Ham radio "homebrewer", shade tree mechanic,
'90 Nissan 240SX, wish still had my Mcycle too!
http://www.geocities.com/capecanaveral/3722
.

5216. Re: Telephone number for International Crystal Mfg?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Bob Doyle <doyle@DELETE_THIS.primenet.com>
Message-ID: <3383C6F6.7CA5B616@DELETE_THIS.primenet.com>
Source record: 93895
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.equipment

Dean Hemphill K5DH wrote:
>
> Anyone have International Crystal's telephone number?
>
> 73,
> Dean K5DH

See:

http://www.icmfg.com/

73,
Bob WA3TGF

5217. Re: Wanted: Plans for Shortwave Converter for Car Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: "Ron, N7TAW" <ronh@chatlink.com>
Message-ID: <3383C622.7007@chatlink.com>
Source record: 93896

Woody,

Somewhere in this stack I've got an article that I clipped from Popular Electronics in the late 80's or early 90's. If you can't find it from that (addmittedly scant info), e-mail me and I'll dig it up and scan it for you.

Ron, N7TAW

Woody White wrote:
>
> mpitcock@edtech.cebs.wku.edu wrote:
> >
> > Can anyone point me to any plans for converting an auto radio to
> > receive shortwave by converting SW signals down to MW? Thanx in advance.
>
> FWIW...The principle is the same as the 50 mhz to 14 mhz (6 Meter
> Transverter) receive section schematic at my www page. Filters need to
> be at the frequency of interest (or span of frequencies) rather than
> where they are. Also, depending on the receiver used, you may want a
> vfo for more tuning range (in place of the crystal local osc).
> Food for thought anyway...
> 73, Woody
>
> --
> de Woody, WB4QXE, woody_white@worldnet_att_net (_=. No AutoMail)
> Work: Electron Microscopist/Microanalysist
> Balance: Ham radio "homebrewer", shade tree mechanic,
> '90 Nissan 240SX, wish still had my Mcycle too!
> http://www.geocities.com/capecanaveral/3722
> .

5218. Re: Slovenian High Speed Packet Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Message-ID: <33834948.694DF180@juts.ccc.amdahl.com>
Source record: 93897
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

```
Sid Boyce wrote:
>
> Attached here as mail failed.
> .....73....G3VBV........
Message-ID: <338343EA.330FB96A@juts.ccc.amdahl.com>
Date: Wed, 21 May 1997 19:50:18 +0100
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Organization: amdahl.com
X-Mailer: Mozilla 3.01 (X11; I; Linux 2.1.29 i486)
MIME-Version: 1.0
To: alan@g3kfm.ndirect.co.ok
Subject: Slovenian site
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I found the floppies, it's http://www.hamradio.si, it's a bit funny,
the netscape screen goes blank and eventually the transfer rate starts
to decrease, at that point hit STOP and it displays the info, click on
the Hardware line and it takes you on etc. When downloading the files,
use SHIFT Right mouse button and it downloads it at a more normal rate.
-rw-rw-r-- 1 root root 70264 May 21 19:14 23CM01.JPG
-rw-rw-r-- 1 root root 91605 May 21 19:14 23CM02.JPG
-rw-rw-r-- 1 root root 76791 May 21 19:14 23CM03.JPG
-rw-rw-r-- 1 root root 32577 May 21 19:14 23CM04.JPG
-rw-rw-r-- 1 root root 37335 May 21 19:14 23CM05.JPG
-rw-rw-r-- 1 root root 76346 May 21 19:14 23CM06.JPG
-rw-rw-r-- 1 root root 33530 May 21 19:14 23CM07.JPG
-rw-rw-r-- 1 root root 46795 May 21 19:14 23CM08.JPG
-rw-rw-r-- 1 root root 67071 May 21 19:14 23CM09.JPG
-rw-rw-r-- 1 root root 32705 May 21 19:14 23CM10.JPG
-rw-rw-r-- 1 root root 45253 May 21 19:14 23CM11.JPG
-rw-rw-r-- 1 root root 88871 May 21 19:14 23CM12.JPG
-rw-rw-r-- 1 root root 42483 May 21 19:14 23CM13.JPG
-rw-rw-r-- 1 root root 63272 May 21 19:14 23CM14.JPG
-rw-rw-r-- 1 root root 130882 May 21 19:14 23CM15.JPG
-rw-rw-r-- 1 root root 68476 May 21 19:14 23CM16.JPG
-rw-rw-r-- 1 root root 73890 May 21 19:14 23CM17A.JPG
-rw-rw-r-- 1 root root 147010 May 21 19:14 23CM18.JPG
-rw-rw-r-- 1 root root 95658 May 21 19:14 23CM19.JPG
-rw-rw-r-- 1 root root 55475 May 21 19:14 23CM20.JPG
-rw-rw-r-- 1 root root 62475 May 21 19:14 23CM21.JPG
-rw-rw-r-- 1 root root 33501 May 21 19:14 23CM22.JPG
-rw-rw-r-- 1 root root 38828 May 21 19:14 23CM23.JPG
```

```
-rw-rw-r-- 1 root root 79614 May 21 19:14 23CM24.JPG
-rw-rw-r-- 1 root root 63782 May 21 19:14 23CM25.JPG
-rw-rw-r-- 1 root root 101389 May 21 19:14 23CM26.JPG
-rw-rw-r-- 1 root root 109214 May 21 19:14 SV10.GIF
-rw-rw-r-- 1 root root 24373 May 21 19:14 SV11.GIF
-rw-rw-r-- 1 root root 19244 May 21 19:14 SV12.GIF
-rw-rw-r-- 1 root root 23071 May 21 19:14 psk23cm.html
Works out 1930K bytes, it looks a very good project. Pete G6NJR
was
looking up all the devices and there was only one he couldn't find in
his books, but thought there was a near equivalent one, think it was a
RF amplifier block.
Please let me know what you think.
---------73--------- G3VBV.

--
... Sid Boyce...Amdahl(UK)...44-121 422 0375
-----------------------------------
Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.
```

5219. Re: Galena crystal??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: chrisl@netdoor.com
Message-ID: <5lvh7h$lh7$1@axe.netdoor.com>
Source record: 93898

johnossi@aol.com (JohnOssi) wrote:

>Any rock shop should have some. Pyrite (fools gold) works well too.
>John Ossi
>N3DRH
>LEICA Microscopes and Imaging Systems
You can also get them at Antique Electronic Supply for $2.10.

5220. Re: Homebrew Crystal Headphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <Uwih6RAPD1gzEwEA@lfheller.demon.co.uk>
Source record: 93899

In article <01bc6609$cea83440$e0a6f783@pokey.usf.edu>, Jonathan Adair
<adair@csee.usf.edu> writes
>I've seen a mention of homebrewing/improvising high impedance headphones
>for crystal receivers. Any pointers? I already know about using a pair of
>older telephone earpieces. I was hoping to come up with something even more
>scratch-built.
>
>kf4lfg

How about using a transistor AF amp. output transformer to convert the
impedance of a low-impedance pair of headphones.

Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

5221. Re: looking for AVANTEC microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: netking@dircon.co.uk
Message-ID: <5lvlls$3n6$1@newsserver.dircon.co.uk>
Source record: 93900

In article <33823307.5AD3@ntserver.codeinf.com>,
Javier <javiers@ntserver.codeinf.com> wrote:
>Hi! I m lookin for the address of Avantec microwave components!
>Thank you for your help!!
Avantek were bought by Hewlett Packard.
Some of their products were absorbed into the HP line,
but many were discontinued. Transistors
may be found in the HP microwave components catalogue,
particularly GaAs FETs which seem to have kept their
Avantek prefix (e.g. AT...).
HP has numerous distributors.
Have a look at http://www.hp.com/HP-COMP/
==========
Colin Seymour G4NNA
1Mb/s 2.45 GHz spread spectrum radio modems & digital video:
http://www.he.net/~netking/index.html
http://www.users.dircon.co.uk/~netking/

5222. Re: data sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: "D. J. Wang (KE3ZB)" <ddw2@lehigh.edu>
Message-ID: <33834270.750E@lehigh.edu>
Source record: 93901

Brian Marshall wrote:
>
> does anyone have any data sheets on a CA3189 FM IF subsystem

I believ it is the same as NS's LM3189.
Check out National Semiconductors web site to download the pdf file.
http://www.national.com/pf/LM/LM3189.html
DJ Wang/ KE3ZB

5223. Re: Bogen JO-100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Stuart Cohen <stucohen@gte.net>
Message-ID: <5lvmvn$r02$1@news2.gte.net>
Source record: 93902
Cross-posted to:
rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.antiques.radio+phono

Bry C wrote:
>
> x-no-archive: yes
>
> OK, this thing has 70 Volt, 100 Volt and 120V outputs for the
> speakers.
>
> Can anyone tell me how to figure out what the IMPEDANCE is for a
> 120V output with this 100 watt amplifier?
>
> Can someone help me figure out what the impedance transformation ratio
> of such a transformer might be?
>
> There was some great discussion about this topic (with 70 volt line
> xfmrs) some time ago on one of the NGs.
>
> If it is appropriate, then I can use it as a modulation transformer
> for a transmitter. Otherwise I will be hunting a good 100W output
> transformer for two 807s to voice-coil impedance (8 ohm)
>
> Anyone got one??
>
> I could also sell this amplifier as-is if anyone wants it.
>
> >Can anyone tell me what you know about a Bogen JO-100 amplifier?
> >
> >It uses two 807s for 100 watts out. The outut transformer appears to
> >be unsuitable for driving the typical 4, 8, 16 ohm load. Rather it has
> >outputs for 70V, 100 V, 120V etc.
> >
>
> (Note - it also uses three 6SN7s and a 6SL7 to drive the 807 final PA
> valves/tubes.) The rectifiers are 5Y3 and 5RY4
>
> >I am thinking about either using this as a modulator or sellling it.
> >Either way it will need some fixing up, and thus I will need a
> >schematic diagram.
> >
> >Anybody have one I could get a photocopy from? I will gladly pay the
> >copying and postage cost.
> >
> >Regards - Bry

>
> >*** DO NOT HIT "REPLY" to respond to this message via e-mail! ***
> >
> >*** REPLY *ONLY* to: bry "AT" mnsinc 'dot' com ***
>
> p.s. I am also needing an EM80 / 6BR5 tube if anyone has one extra.
>
> Regards - Bry

The ouput impedance will nominally be 144 ohms @ 100 watts and 120 volts output. It was probably meant to drive a 150 ohm line, with line to voice-coil transformers at each PA location.
To use as a modulator you would need to match the plate impedance of the amplifier you are modulating. As an example, if the transmitter ran 126 watts input and drew 180 Ma. at 700 VDC, the nominal plate impedance would be 3900 ohms. You would thus need a 150 ohm / 4K ohm transformer capable of handling at least 65 watts for 100% modulation.
--
Stu Cohen (Oregon)
----------END OF MESSAGE----------

5224. Re: ADI AT-600I am considering for purchasing ADI AT-600.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: wdr@world.std.com
Message-ID: <EAJwEF.4z3@world.std.com>
Source record: 93903
Cross-posted to: rec.radio.amateur.equipment,rec.radio.amateur.homebrew

Gary Coffman <ke4zv@bellsouth.net> wrote:
> On 12 May 1997 04:29:18 GMT, Gary Moore <76170.1701@CompuServe.COM> wrote:
> >>>Why do you ask? Do you hold MARS or CAP authorizations?

> >How are YOU being harmed by people who transmit out of band? How is

> Because of lawbreakers like that, we have a ban on 10m amplifiers. Because

I'll agree lawbreakers should be thrown in jail or at least regularly
repeatably predictably have their gear confiscated early and often
enough that there would be some disincentives.

However.

One does not need MARS/CAP authorizations to use the AT-600's
keyboard mod. There are several good and lawful reasons for owning a
transceiver with wide-open TX/RX.

One is as a cheap signal generator for test equipment that is always
in Coax, never in an antenna. (This is how Cable companies get away
with using "our" frequencies, remember?)

The more relevant one to Hams is building transverters to bands one is
licensed on. Wide open from 100-200 and 400-500 gives rather more
flexibility in picking up-converter LO frequencies than that which
is required of matching the narrow range of a type-accepted transceiver.

[NOTE: Follow-up-to: set to r.r.a.equipment; if commenting on this
paragraph or below, please redirect to r.r.a.homebrew which I've
cross-posted. -- n1vux]

Both of these require a low-power setting or an attenuator. If the
manufacturer wants to justify legal use of this keyboard mode, a keyboard
setting for 50uW output (exciter only) would be a good one.

If I was optimistic about having time to get into uWave bands anytime soon,
I'd be rushing out to buy one of these (and would have grabbed that HP
signal generator for 7-11GHz at the last MIT :-)...

I'm wondering if a really wide open transceiver like this would make a
multi-band transverter possible, using band-switched resonators like
are used on multi-band HF rigs? I'm guess the reason this wasn't done
in the past was the switch leads would have too much stray reactance,
but with microwave switching diodes perhaps all the band modules could
be laid out together? Probably wouldn't fit ... [see r.r.a.h note above!]

73 de N1VUX BPL with Tech-No-Code
QST TO ALL NO-CODERS: Subscribe to QST and let your ARRL elected officials
know you'll be voting in the next division and section elections.
--
Bill Ricker N1VUX wdr@world.std.com "The freedom of the press belongs
http://world.std.com/~wdr to those who own one."--A.J.Liebling

5225. Slovenian High Speed Packet Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Message-ID: <33834729.1B1E8ACD@juts.ccc.amdahl.com>
Source record: 93904
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc
Body handling: HTML body converted to readable text

```
This is a multi-part message in MIME format.

Attached here as mail failed.
.....73....G3VBV........
--
... Sid Boyce...Amdahl(UK)...44-121 422 0375

Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

Content-Disposition: inline; filename="slov"

Fatal Error 500

Can't Access Document: ftp://news.amdahl.com/may97/slov.

Reason: FTP-server replies: may97: No such file or directory..

Amdahl A+SecureGateway HTTPD 1.0beta3
```

5226. FS: 211 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-21 00:00:00 UTC
From: Michael Feldt <feldtm@iquest.net>
Message-ID: <01bc659b$346e2060$cfec35ce@feldtm.iquest.net>
Source record: 93905
Cross-posted to: rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

I have a pair of used 211 triode tubes for sale. Both are RCA and one is dated 1942. The filaments are good and there is no visible carbonization inside the glass envelopes or wear on the plates. They look as though they have been used very little but I have no means to really test them. Both tubes come with unused Johnson 211 ceramic tube sockets. $75 each which includes shipping within the 48 states.

Michael Feldt

5227. Re: Brazing Techniques

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Peter Gottlieb <peter_gottlieb@msn.com>
Message-ID: <01bc665e$0da1d580$fe0d2399@peter->
Source record: 93806

Stephen B. Voigt <ap309@freenet.buffalo.edu> wrote in article
<EAFqt7.AtH@freenet.buffalo.edu>...
> Need instruction on how to braze/solder plates in a variable capacitor.
Need to join aluminum plates with brass support rod.

Not impossible if you:

Make the parts a good mechanical fit before soldering.
File, form, tweak the parts until they are just exactly right. No gaps,
please!

Set up a jig to hold the parts to be soldered.
So when you solder, they will be correct when done! Holding the parts by
hand
is NOT good enough.

Clean parts.
No oxide on surfaces. Use very fine #00 steel wool as last step, but
don't
leave any strands!

Degrease parts.
Use a solvent like isopropanol (rubbing alcohol) or pure acetone.

Use the aluminum solder paste that guy always hawks at hamfests.
It's one of the few real appropriate uses I can think of for the stuff.
You will need
a small torch, and MOVE IT AROUND the workpiece a lot so you don'e melt
the
aluminum plates. Practice first on some scrap pieces so you can see what
it
takes - aluminum heats slowly because you are heating the whole piece due
to
the very good thermal conductivity while with brass the heating is more
localized
to where the flame is. Thicker parts will require that you have the flame
spend more
time with than the thin parts (thermal mass again). BE CAREFUL TO NOT
OVER
HEAT ANY PARTS. The object is to raise the entire piece to soldering
temperature
at about the same time, then if the thing is clean, the whole thing should
just about
solder itself together all at once, almost magically.

Soldering a complex piece is an art and a science and is difficult, but not impossible, to do
without some practice. Once you can do it, it's wonderful, though!

5228. Message too large for system (Max 30KBytes)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: postmaster@emarkt.COM
Message-ID: <22059706060879C8postmaster@emarkt.com>
Source record: 93807

```
Failed to deliver message for the following reason:
Message too large for system (Max 30KBytes)

Original message follows:

Received: from mailbox1.ucsd.edu by fmgateb.PhoneLink.COM id aa02354;
22 May 97 6:05 BST
Received: from noc.ucsd.edu (mail.ucsd.edu [132.239.1.1]) by mailbox1.ucsd.edu
(8.8.5/8.6.9) with ESMTP id UAA17842 for <ham-homebrew-list@mailbox.ucsd.edu>; Wed, 21 May
1997 20:52:09 -0700 (PDT)
Received: by noc.ucsd.edu; id QAA27632
sendmail 8.8.5/UCSD8.3
Wed, 21 May 1997 16:18:21 -0700 (PDT)
Errors-To: owner-ham-homebrew@ucsd.edu
Sender: owner-ham-homebrew@ucsd.edu
Precedence: List
X-Reminder: to unsubscribe, send UNSUB ham-homebrew to LISTSERVER@UCSD.EDU
Received: by noc.ucsd.edu; id QAA27467
sendmail 8.8.5/UCSD8.3
Wed, 21 May 1997 16:17:49 -0700 (PDT)
Message-Id: <199705212317.QAA27467@noc.ucsd.edu>
Date: Wed, 21 May 97 16:17:47 PDT
From: Ham-Homebrew Mailing List and Newsgroup <Ham-Homebrew@ucsd.edu>
Errors-To: Owner-Ham-Homebrew@ucsd.edu
Reply-To: Ham-Homebrew@ucsd.edu
Precedence: List
Subject: Ham-Homebrew Digest V97 #317
To: Ham-Homebrew@ucsd.edu

Ham-Homebrew Digest

...rest of message truncated
```

5229. Re: Looking for Amp Plate Choke

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Phil Clements <philk5pc@connect.net>
Message-ID: <3383EEDE.5A8B@connect.net>
Source record: 93808

Paul Kluwe wrote:
>
> Anyone know of a good high voltage (4KV or better), high current (1 amp or
> better) plate choke for the ham bands 1.8 to 30 MHZ? I've found them for
> the ham bands 3.5 to 30 MHZ, but the 1.8 end seems to be the hang-up.
>
> Thanks & 73, Paul Kluwe, W8ZO

Hi, Paul!
There is no longer such thing as an effective plate choke that covers all 9 bands. What most quality amplifier makers (Creative, Alpha, Henry, et al) are doing is using two chokes; shorting one out for 80-10m. The B&W 800 and 802 have their resonances "parked" between bands, and have enough inductance to be effective on the 8 higher bands, but the amount of 160 meter RF current that gets by the choke is very great. This allows the RF to wreak havoc on the bypass capacitors and electrolytic caps in the power supply filter. (if used) In some cases, the RF makes it all the way out the back of the amp, and radiates through the a.c. power lines all over the building!

Just mount a second choke of 130-200uh at a right angle to the 60-90uh choke and switch it in/out with a spst vacuum relay across its terminals. The Alpha 77DX/SX amps have an unused position on the input band switch (160 meter position) that can be used to ground one end of the coil on the vacuum relay. Other amps can be adapted with micro switches etc. that make when the band switch is positioned to 160m. I always add a .01 ceramic disk H.V. bypass cap to all the ones that are already there to complete the mod.

A very good choke can be easily wound with H.V. magnet wire around a G-10 fiberglass tube of convenient diameter. #24 wire is good for several amps. Most modern magnet wire used by motor rewinding shops is coated with a silicon varnish that is good for 6000v + without having to space-wind the turns.

There are lots of compromises that can be used, but the circuit I described is the only effective way I know of to cover all 9 bands without a choke fire or RF where you don't want it!

(((73)))
Phil, K5PC

5230. Re: Wanted: Plans for Shortwave Converter for Car Radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <338402f4.0@cheese.pcug.org.au>
Source record: 93809

mpitcock@edtech.cebs.wku.edu wrote:
>Can anyone point me to any plans for converting an auto radio to
>receive shortwave by converting SW signals down to MW? Thanx in advance.

Should be fairly simple. A single NE602 chip (which contains an oscillator and a mixer) would be a reasonable starting point. I would favour crystal control for best stability.

Another option is to use a NPN transistor xtal osc and a dual gate mosfet mixer in a normal converter circuit. The ARRL Handbook may have a suitable circuit that could be modified.

I built a SW receiver using a car radio. If you are willing to put up with backwards tuning on the lower ranges, you can cover 3.5-7.5 MHz with a 5 MHz and a 6 MHz xtal (both fairly cheap). Make sure your front end preselection is OK though - use two or more tuned circuits before the mixer for best image rejection. With care you should be able to eliminate coil switching if your front end can tune 3.5-7.5 MHZ in one sweep and you are using an untuned output to the car radio.

You may also want to check out SM0VPO's Home Page - I think this has a circuit for a converter. You can get to this page through the Australian QRP Home Page (URL below).

73, Peter VK1PK
--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

_____

5231. Re: Jennings vacuum variable data; where?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: claude@bauv.unibw-muenchen.de
Message-ID: <claude.864290765@bauv111>
Source record: 93810

Bill Schaff <schaff@iiiv.tn.cornell.edu> writes:

> >7705 CVCA-2000-5S 20-2000 PF

> > I could assume a 20-2000 PF variable with a 2000 wvdc rating,

>This is a 5KV (tested at 60Hz) cap.

An additional question:
how can I test a vacuum variable offered at at flea market ?
I have heard that there is a way to estimate the vacuum quality.
--
Claude
(claude@bauv106.bauv.unibw-muenchen.de)
The opinions expressed above represent those of the writer
and not necessarily those of her employer.

5232. 2 meter amp

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: "S. J. Swanson" <swanson@execpc.com>
Message-ID: <01bc66a0$ed135940$3044cfa9@default>
Source record: 93811

I'm looking for an amplifier design for 2 meters using an Eimac
3CX400A/8874.

73 Sherm, KB9Q
<swanson@execpc.com>

5233. Re: Radio Question

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: CBS5LD@leeds.ac.uk
Message-ID: <5m1cgb$8l8_001@leeds.ac.uk>
Source record: 93812

In article <33767ED2.2C73@sympatico.ca>,
Chatburn <chatburn@sympatico.ca> wrote:
>Hi,
> When I am my local mcdonalds drive-thru, if I set my car radio
>to 92.5
>fm I can hear what the employees are saying on the headsets or what the
>car behind me is ordering. I was wondering if there was some way I could
>inexpensively get hold of something so that I could chat along with
>these people. Or, a friend told me that you can make something which
>blocks out all radio signals and transmits something you say into a
>microphone on them. This would be good as I could then listen with my
>radio what people order then inform them not to because it is crap!
>
>Thanks
>
>DC

Although I, personally, would find your idea quite amusing, I (nor anyone
else in this newsgroup) could condone it. If you really want to do this then
I would suggest getting a good book on the practical aspects of radio (such
as the ARRL Handbook) and reading it. I have to say that I'm quite surprised
that you can hear the McDonalds transmissions on your radio, as I would think
that they weren't allowed to xmit in Band II FM but it might be a 2nd
harmonic of their xmitter (in which case you xmitting on 92MHz would not
affect them, (unless you overloaded their rcvr's frontend)).

Laurens RS171840 (just done the RAE)

5234. shortwave radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: "M.S" <polgron@pi.net>
Message-ID: <3384990E.66B8@pi.net>
Source record: 93813

dear reader,

Im looking for drawing of a shortwave radio circuit, to build one of my own. Could anyone tell me where I can find such a plan or maybe mail it as an attached file

M.S.

polgron@pi.net

5235. Re: Slovenian High Speed Packet Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33838e10.7366266@news.online.no>
Source record: 93814
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

it would be a great idea if you edit your .htm files into .txt format
before you post them into a newsgroup...
thanks
LA8AK Jan-Martin

On Wed, 21 May 1997 19:13:12 GMT, Sid Boyce
<szb50@juts.ccc.amdahl.com> wrote:

>Sid Boyce wrote:
>>
>> Attached here as mail failed.
>> .....73....G3VBV........
>Message-ID: <338343EA.330FB96A@juts.ccc.amdahl.com>
>Date: Wed, 21 May 1997 19:50:18 +0100
>From: Sid Boyce <szb50@juts.ccc.amdahl.com>
>Organization: amdahl.com
>X-Mailer: Mozilla 3.01 (X11; I; Linux 2.1.29 i486)
>MIME-Version: 1.0
>To: alan@g3kfm.ndirect.co.ok
>Subject: Slovenian site
>Content-Type: text/plain; charset=us-ascii
>Content-Transfer-Encoding: 7bit
>
>I found the floppies, it's http://www.hamradio.si, it's a bit funny,
>the netscape screen goes blank and eventually the transfer rate starts
>to decrease, at that point hit STOP and it displays the info, click on
>the Hardware line and it takes you on etc. When downloading the files,
>use SHIFT Right mouse button and it downloads it at a more normal rate.
>-rw-rw-r-- 1 root root 70264 May 21 19:14 23CM01.JPG
>-rw-rw-r-- 1 root root 91605 May 21 19:14 23CM02.JPG
>-rw-rw-r-- 1 root root 76791 May 21 19:14 23CM03.JPG
>-rw-rw-r-- 1 root root 32577 May 21 19:14 23CM04.JPG
>-rw-rw-r-- 1 root root 37335 May 21 19:14 23CM05.JPG
>-rw-rw-r-- 1 root root 76346 May 21 19:14 23CM06.JPG
>-rw-rw-r-- 1 root root 33530 May 21 19:14 23CM07.JPG
>-rw-rw-r-- 1 root root 46795 May 21 19:14 23CM08.JPG
>-rw-rw-r-- 1 root root 67071 May 21 19:14 23CM09.JPG
>-rw-rw-r-- 1 root root 32705 May 21 19:14 23CM10.JPG
>-rw-rw-r-- 1 root root 45253 May 21 19:14 23CM11.JPG
>-rw-rw-r-- 1 root root 88871 May 21 19:14 23CM12.JPG
>-rw-rw-r-- 1 root root 42483 May 21 19:14 23CM13.JPG
>-rw-rw-r-- 1 root root 63272 May 21 19:14 23CM14.JPG
>-rw-rw-r-- 1 root root 130882 May 21 19:14 23CM15.JPG
>-rw-rw-r-- 1 root root 68476 May 21 19:14 23CM16.JPG

>-rw-rw-r-- 1 root root 73890 May 21 19:14 23CM17A.JPG
>-rw-rw-r-- 1 root root 147010 May 21 19:14 23CM18.JPG
>-rw-rw-r-- 1 root root 95658 May 21 19:14 23CM19.JPG
>-rw-rw-r-- 1 root root 55475 May 21 19:14 23CM20.JPG
>-rw-rw-r-- 1 root root 62475 May 21 19:14 23CM21.JPG
>-rw-rw-r-- 1 root root 33501 May 21 19:14 23CM22.JPG
>-rw-rw-r-- 1 root root 38828 May 21 19:14 23CM23.JPG
>-rw-rw-r-- 1 root root 79614 May 21 19:14 23CM24.JPG
>-rw-rw-r-- 1 root root 63782 May 21 19:14 23CM25.JPG
>-rw-rw-r-- 1 root root 101389 May 21 19:14 23CM26.JPG
>-rw-rw-r-- 1 root root 109214 May 21 19:14 SV10.GIF
>-rw-rw-r-- 1 root root 24373 May 21 19:14 SV11.GIF
>-rw-rw-r-- 1 root root 19244 May 21 19:14 SV12.GIF
>-rw-rw-r-- 1 root root 23071 May 21 19:14 psk23cm.html
> Works out 1930K bytes, it looks a very good project. Pete G6NJR
>was
>looking up all the devices and there was only one he couldn't find in
>his books, but thought there was a near equivalent one, think it was a
>RF amplifier block.
> Please let me know what you think.
>---------73--------- G3VBV.
>
>--
>... Sid Boyce...Amdahl(UK)...44-121 422 0375
> ----------------------------------
>Any opinions expressed above are mine and do not necessarily represent
> the opinions or policies of Amdahl Corporation.
>

5236. Looking for Mod xfmr or output xfmr for 2 X 807

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33844d67.12355268@news.mnsinc.com>
Source record: 93815
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap

Hello, I'm looking for Mod xfmr or output xfmr for 2 X 807 at 100 watts.

I think this would require 12000 ohms on the primary side.

For a speaker tranny I need one to go to voicecoil, i.e. 8 ohms.

For a mod tranny I need one that would feed something like a pair of 807s or a pair of 6146s in the RF final.

Also need larger mod trannies of lower primary Z. 5K - 8K or so. Even better if you know what B+ and tube compliments they were designed for.

What do you have?

73 de AF4K, Bry

5237. CIRKIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: nc-bolchpe@netcologne.de
Message-ID: <5m2k8l$8i3@news.netcologne.de>
Source record: 93816

Hi,

does the UK based distributor CIRKIT still exist? I haven't seen their ads for quite some time.

What kind of components does CIRKIT sell? And does CIRKIT provide private and foreign customers as well?

Peter

5238. Re: Regen Reciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3384ab84.0@cheese.pcug.org.au>
Source record: 93817

chrisl@netdoor.com (Chris Lamousin) wrote:
>Hi all,
>I'm trying to build a regenerative reciever kit that I got from
>Antique Electronics supply. I'm still new to this, but after I
>soldered it together I can't get squelch or stations. It will crackle
>when I connect the coil and the filaments are glowing. I checked the
>soldering with a multimeter and they look good. Any suggestions?
>Thanks
>
>
Are you sure the regeneration 'tickler' coil is connrcted the right way
around?

73, Peter

--

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

5239. Re: CIRKIT

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Leon Heller <leon@lfheller.demon.co.uk>
Message-ID: <K$JWJHAkYKhzEwe5@lfheller.demon.co.uk>
Source record: 93818

In article <5m2k8l$8i3@news.netcologne.de>, Peter Bolch <nc-
bolchpe@netcologne.de> writes
>Hi,
>
>does the UK based distributor CIRKIT still exist? I haven't seen their
>ads for quite some time.
>
>What kind of components does CIRKIT sell? And does CIRKIT provide
>private and foreign customers as well?

Yes, they are still going strong. They publish a catalogue every six
months that is available from newsagents like Smiths. I think their new
one has just come out, although I haven't got it yet. They still sell RF
stuff, including MCL DBMs, and lots of kits.

They have an email address: mailorder@cirkit.co.uk

73, Leon
--
Leon Heller
Amateur radio callsign: G1HSM
Email: leon@lfheller.demon.co.uk http://www.lfheller.demon.co.uk
Tel: +44 (0) 118 947 1424 (home) +44 (0) 1344 385556 (work)

5240. 4 ft solid alumn. dish free

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: bondsg@ohsu.edu
Message-ID: <bondsg.148.33848D34@ohsu.edu>
Source record: 93819

I have a solid 4 ft. dish that you can haul away e-mail me and we get together Portland, Or area. bondsg@ohsu.edu

5241. Re: Good 100w Pin Diode ? - pin-sw.txt (0/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33849657.1384000@news.online.no>
Source record: 93820

Is this good ?

5242. Re: Good 100w Pin Diode ? - pin-sw.txt (1/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: la8ak@online.no
Message-ID: <33849676.1416460@mail.online.no>
Source record: 93821
Body handling: Inline uuencoded payload not displayed: pin-sw.txt

[Inline uuencoded payload not displayed: pin-sw.txt]

5243. Re: Good 100w Pin Diode ? - pin-sw.txt (1/1)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bc6706$e9572b40$b395f5ce@wa6vse.fast.net>
Source record: 93822

The UM9401 is a pretty good PIN diode for HF .. but the
parasitic capacitance may be higher than you'd like for
2m/70cm ... I don't have the data sheet in front of me, but
I know it's a good HF device for up to at least 100W, with
a minority carrier lifetime of (I believe) about 2 usec.

I would also suggest that you look thoughtfully at the
circuit diagram and the line lengths ... I believe you need
to rethink things just a bit there in terms of a 1/4 wave section
inverting the impedance at the other end and 1/2 wave section
repeating that impedance ... 33cm doesn't seem quite right,
nor does 1/3 of that, as the diagram seems to indicate.
Or am I interpreting your instructions incorrectly?

73,
Carl - wa6vse
wa6vse@fast.net

5244. Re: Regen Reciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: gc@universe.digex.net
Message-ID: <5m31h3$kns@universe.digex.net>
Source record: 93823

In article <5lv4gm$ij6$1@axe.netdoor.com>,
Chris Lamousin <chrisl@netdoor.com> wrote:
>Hi all,
>I'm trying to build a regenerative reciever kit that I got from
>Antique Electronics supply. I'm still new to this, but after I
>soldered it together I can't get squelch or stations. It will crackle
>when I connect the coil and the filaments are glowing. I checked the
>soldering with a multimeter and they look good. Any suggestions?
>Thanks

This sounds like a fun project. I'll guess that you are building
AES's model K-405 one tube regen receiver. It's the only one
in their 1996 catalog. Maybe they have more models now.

What do you hear?
If you are not tuned to a station you should hear a continuous
hissing noise that will change as you adjust the regeneration control.
At some point in the adjustment the circuit goes into oscillation
and the sound will change abruptly. There is no squelch on a
receiver this simple, so you should hear something all the time.

What are you using for audio output? If you are using headphones
this circuit requires high impedence headphones. Typical
hi-fi stereo headphones are quite low impedence and will effectively
short out the audio.

Since you have a multimeter try checking some voltages and currents.
Check the voltage across the filament and from a common/ground point
to the plate. Also try checking current drawn from your "A" (filament)
supply (1.5volt battery) and from the "B" (plate) supply (45 v battery).
The filament will draw a few tens of milliamps (maybe as much
as 100 ma) and the plate a few milliamps (maybe less than 1ma).

What tube are you using? The catalog lists several options
for the K-406.

How much of an antenna do you have? You will probably need
several tens of feet of wire.

What frequency range is it set up to tune over? The catalog
listing doesn't say.

Hope this helps a little. There are some real experts on
regenerative receivers somewhere around the net. Maybe one
of them will have some comments.

73,
Gary

5245. Power Sup. FS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: "Rudolf H. Salomon" <rhs@pacbell.net>
Message-ID: <33851CA6.201E@pacbell.net>
Source record: 93824

This is a multi-part message in MIME format.

--------------144779F43328
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I have the following (in attached .TXT file) modular, regulated, power
supplies for sale. All are in as new condition, having been removed from
new or near new test gear. Prices do not include shipping, which would
be from 93065 ZIP code.

I can be reached at rhs@pacbell.net

Regards, Rudy Salomon

--------------144779F43328
Content-Type: text/plain; charset=us-ascii; name="Powsup.txt"
Content-Transfer-Encoding: 7bit
Content-Disposition: inline; filename="Powsup.txt"

Power One Model D5-12 5VDC @ 12 A Ship Wt. 8lbs $15
Power One Model BB15-1.5 +/- 12VDC @ 1.5A Ship Wt. 5lbs $16
Power One Model HD48-3- 48VDC @ 3A Ship Wt. 8lbs $20
Power One Model HD12-6.8-A 12VDC @ 6.8A Ship Wt 8lbs $20
Power One Model CP323-A +5VDC @ 2A (W/OVP) Ship Wt 7lbs $20
+12VDC @ 4A (W/OVP)
Condor Model FBB512 +5VDC @ 2A (W/OVP) Ship Wt 7lbs $20
+12VDC @ 4A (W/OVP)
Condor Model B48-.5 48VDC @ .5A $15
Power One Model SPL130-1005 (Switcher) 5VDC @ 26A Ship Wt 4 lbs $27

--------------144779F43328--

5246. FS: Twelve 35W4 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Michael Feldt <feldtm@iquest.net>
Message-ID: <01bc66f2$2f066bc0$4bec35ce@feldtm.iquest.net>
Source record: 93825
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Twelve N.I.B 35W4s and six N.I.B. 50C5s for $20 which includes shipping
within the 48 states.

Regards
Michael Feldt

5247. FS: 35Z5 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Michael Feldt <feldtm@iquest.net>
Message-ID: <01bc66f7$a61e7360$4bec35ce@feldtm.iquest.net>
Source record: 93826
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Fifteen "United" 35Z5 tubes new in the box. $20 which includes shipping
within the 48 states.

Regards
Michael Feldt

5248. Re: looking for AVANTEC microwave components

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <3384F4D4.7DA2@cam.org>
Source record: 93827

Javier wrote:
> =

> Hi! I=B4m lookin for the address of Avantec microwave components!
> Thank you for your help!!

Distributor in Spain is: =

Richardson Electronics Inc * =

Madrid =

Phone: +34-1-528-3700 =

Fax: +34-1-467-5468 =

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

5249. shortwave radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: "M.S" <polgron@pi.net>
Message-ID: <3384B09E.2DF0@pi.net>
Source record: 93828

Can anyone send me a circuit for a shortwave radio ,please

M.S.
polgron@pi.net

5250. kl/

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: "M.S" <polgron@pi.net>
Message-ID: <3384B19D.3C8A@pi.net>
Source record: 93829

```
kl;
```

5251. Re: FS: Several Vector-2XG Digital Compass Units

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: "Richard White (CS)" <white@csee.usf.edu>
Message-ID: <Pine.SOL.3.95.970522074005.1884B-100000@grad>
Source record: 93830
Cross-posted to: comp.robotics.misc,rec.radio.amateur.homebrew

Gary Herbst wrote:

> I have just aquired 2 Vector-2XG Digital Compass Units which are brand new
> and still in the box. Originally I was going to uses these in robotics, but
> have recently obtain a GPS unit to use instead.

What GPS unit did you get? How will you be using it?
Does this GPS unit give heading information also?

Happy times upon you, Richard.

5252. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: rick@area.com
Message-ID: <5m1l5q$r7g$1@nixon.area.com>
Source record: 93831

In article <5lt9m8$9dv@rosenews.rose.hp.com>,
Tony Zugec <tonyz@rose.hp.com> wrote:
>>Richard Karlquist (rick@area.com) wrote:
>
>>: I worked on the chapter on modulation used in the 1995-1997 books

>Actually, I find that equations DO teach, but the student must
>be able to understand. In the case of modulation, all one needs
>is a grasp of algebra and trig. Many high school and college
>texts will explain in detail the difference between mixing
>two sine waves thru a linear and then non-linear element.

It's new to me that modulation is taught in high school.

>The difference being whether the output is just an algebraic
>addition of the two signals, or the intended product of the
>two when true modulation occurs. Although the mathematical

That was another critical issue that I tried to address.

>description gets tangled when laid out, it is really just
>use of algebra and trig identities. I never really had an
>appreciation of modulation and what was happening by reading
>any ARRL handbook until I found standard college texts that
>discussed modulation in detail this way. The elegant beauty
>of the mathematics is what I love and is what got me interested
>in RF.

I think the handbook accomplished its mission for you: it got you
interested enough to go learn the rest of the story.

According to Dave N., the handbook is supposed to be written
at a 10th grade level. That probably rules out trig.
Dave watered down a lot of what I wrote because of this
constraint. So basically, the answer is that the handbook,
as the ARRL defines it, is that wrong venue for what you
want. Is it the ARRL's mission to duplicate college textbooks?
I don't think so. In fact, after realizing this, I gave up
writing for the ARRL and instead now write for the IEEE, so I
can do my own thing.

Perhaps there should be a mission statement at the beginning
of the handbook to properly calibrate the reader's expectations.
The fact that the handbook is not of engineering caliber doesn't
mean it doesn't have a lot of useful ideas in it. Maybe it
should be called "Yet another handbook, FWIW" instead of "THE
Handbook":-)

>I'm sorry I dont have any references at hand, but the better
>ones will also give simple test set-ups to show the student
>how to achieve true modulation using simple rf generators and
>signal diodes.

As Heathkit proved, the mere fact that you can build a working
circuit doesn't prove that you understand *why* it works.
OTOH, there are professors who know why things work, but
don't know how to solder.

Rick Karlquist, N6RK
former ARRL Handbook author
rick@area.com

5253. Re: 211 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Michael Feldt <feldtm@iquest.net>
Message-ID: <01bc66cc$d3435ca0$7dabf6ce@feldtm.iquest.net>
Source record: 93832
Cross-posted to: rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

The 211 tubes have been sold.

Michael Feldt

5254. WTB: Plate caps for 3-500Z's

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: bryan@prodistributors.com
Message-ID: <5m2ctv$1cp$1@news.nts-online.net>
Source record: 93833

I need a couple of the heat caps that will fit the tops of Eimac
3-500 tubes. Anyone have a couple of extras in the goodie box?

Bryan

5255. Sweep tubes for sale.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: Michael Feldt <feldtm@iquest.net>
Message-ID: <01bc66f6$72168e00$4bec35ce@feldtm.iquest.net>
Source record: 93834
Cross-posted to: rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

Selling the following N.I.B. sweep tubes for $5 each plus $2 shipping with each order within the 48 states.

(3) 6KM6
(2) 6JF6
(2) 6CD6GA
(1) 6JE6
(1) 6BK4
(4) 6GJ5
(1) 6JF5
(2) 6KN6
(1) 6FM8
(2) 6BG6G
(1) 6HF5
(1) 6HB5
(1) 6LB6
(1) 6LR6
(1) 6EM7
(1) 6FY7
(4) 12DQ6
(1) 12GC6

Michael Feldt

5256. Larry Wollken

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <3384d25f.7921448@news.mnsinc.com>
Source record: 93835
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

Does anyone know the correct e-mail address for
Larry Wollken ??

He lives in the Maryland / DC area and may be reading this, but I am not sure where we met up on the Internet exactly and I wanted to contact him again.

Thanks!

73 de AF4K / G3XLQ, Bry

5257. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: keinanen@sci.fi
Message-ID: <33a06d31.206822094@news.sci.fi>
Source record: 93836

rick@area.com (Richard Karlquist) wrote:

[clip]
[About the ARRL handbook]

>According to Dave N., the handbook is supposed to be written
>at a 10th grade level. That probably rules out trig.
>Dave watered down a lot of what I wrote because of this
>constraint.

While looking through the U.S. question pools a few years ago, it appeared to me that all questions are not answerable at a 10th grade level. So I find it a little strange _if_ the question pools contain technical questions that the answers can not be understood by reading the handbook.

Does the question pool committee check if all the technical questions can be found in the handbook ?

Paul OH3LWR

5258. FT-101EX Schematic needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-22 00:00:00 UTC
From: KB4AEP <crsdan@galileo.mis.net>
Message-ID: <33848130.2261@galileo.mis.net>
Source record: 93837

I'm looking for a schematic of Yaesu FT-101EX Transceiver (or 101EE,

101E). Photocopy, Fax or E-mailed Graphic file O.K.

E-Mail me at crsdan@mis.net

Call me (Mark, KB4AEP) at (606) 238-0029 days or (502)863-0500 nights.

Or fax me at (606) 238-0065

Thanks for your help, I need to get this thing fixed and get back on

the air. Mark, KB4AEP

5259. Johnson CB schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: jrv <jvaldes@whoi.edu>
Message-ID: <33860D47.3060A3B7@whoi.edu>
Source record: 93756

I have a Johnson model 4740 SSB CB Xcvr which I would like to convert to either 10 or 6 meters. I'm looking for a schematic or any other info on the radio.

Thanks, Jim, WA1GPO

5260. REPEATER MAILING LIST

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: Major Domo Daemon <majordom@jerrys.rogerswave.ca>
Message-ID: <5m4h7k$4hr@news.bc>
Source record: 93757

```
**************************
* REPEATER Mailing List *
**************************

This is a mailing list for exchanging ideas and information about any
Repeater and Repeater Controllers (HAM or COMMERCIAL).

If your interested in Repeaters and/or Controllers and would like to
be added to the REPEATER Mailing List, send an email message to:

To: repeater-request@jerrys.rogerswave.ca
Subject: (leave this blank)

subscribe

***********************
* Posting a message *
***********************

To post a message for others to read simply send an email message to:

To: repeater@jerrys.rogerswave.ca
Subject: (put anything that you want here)

and here too. :-)
```

5261. Re: shortwave radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: doll@centuryinter.net
Message-ID: <N.052297.200820.55@anxp15.ld.centuryinter.net>
Source record: 93838

On 5/22/97 2:05PM, in message <3384990E.66B8@pi.net>, "M.S" <polgron@pi.net>
wrote:

> dear reader,
>
> Im looking for drawing of a shortwave radio circuit, to build one of my
> own. Could anyone tell me where I can find such a plan or maybe mail it
> as an attached file
>
> M.S.
>
> polgron@pi.net

Purchase from Radio Shack the mini-engineers book of communication projects. This book runs about $2.00 and includes several fun radios to build. These little radios can be built from things most of us have hanging around in less than half an hour. They are all AM and don't have the sensitivity of $1000.00 radios, but I think you will be surprised at the performance. Let me know how things turn out.

Ken
KK5JD

5262. Wanted: 810 modulator tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: w5kft@nts-online.net
Message-ID: <5m2stk$975$1@news.nts-online.net>
Source record: 93839
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.swap,rec.radio.amateur.homebrew

I need a pair of 810 tubes for an AM modulator. Anyone have any
to sell or swap.

Bryan W5KFT

5263. Re: 5U4GB tubes sold

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: Michael Feldt <feldtm@iquest.net>
Message-ID: <01bc673d$5228c1c0$2aec35ce@feldtm.iquest.net>
Source record: 93840
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew

The 5U4GB tubes are sold.

Michael Feldt

5264. Re: Slovenian High Speed Packet Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: pavel.reberc@guest.arnes.si
Message-ID: <5m3cavhjp1@kanja.arnes.si>
Source record: 93841
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

Sid Boyce <szb50@juts.ccc.amdahl.com> wrote:
....

Hello,
I am using (and also do maintanance on some nodes, have built many of hardware..) and it works. The result is, that 1/2 users of packet radio users in s5 are using at least 38k4 user access with simple WBFM radios. Most of them are built by the users themselves, and that's what HAMRADIO should be, isn't it?
At the moment, there is at least 6 links in S5 on 1.2 Mbit (PSK radios for 23 and 13cm) and we also already have users on 1.2MBit 23cm.
The main problem is - if you are used to 'normal' PR, that the network in other parts of Europe is still at rates 9k6, somewhwre there are few 19k2, but much more under those antique rates. I tried some times to go through the network to reach for example northern part of the Germany, but you get old before you reach it...
What's the reason? Did HAMs become lasy? Or the only way to get a RIG is to go to the shop and simply buy it, and if the far-east toys are not capable of handling more than 9k6, than stay there....
73, Pavle, s57ra

5265. Re: CB to Six Missing

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: Paul Jordan <jordan@santanet.com>
Message-ID: <01bc6759$845451c0$482977cc@default>
Source record: 93842

Sorry for butting in Frank but, have you found a way to convert old CB's to six meters?? If so, I'd like to know how myself...

Frank Scaraglino <^fas@rtp.ericsson.se> wrote in article <3381FB1F.12D2@rtp.ericsson.se>...
> Pert 2 of 10 Is missing??
>
>

5266. CB to 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: Paul Jordan <jordan@santanet.com>
Message-ID: <01bc675b$99674ca0$482977cc@default>
Source record: 93843

Does anyone know how to convert old CB radios to 6 meters? I've seen it talked about a few times but, never heard any tech data on actually doing it.
Any help would be appreciated...

Paul Jordan
KL0AN
Fairbanks, AK

5267. Re: Larry Wollken

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33858837.6248213@news.mnsinc.com>
Source record: 93844
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.swap

On Thu, 22 May 1997 23:11:02 GMT, bry@mnsinc.com (Bry Carling, AF4K)
wrote:

>Does anyone know the correct e-mail address for
>Larry Wollken ??

Thank you everyone who responded. I have contacted Larry OK!

Bry

5268. --Antenna Web Site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: Aaron Schmitz <aschmitz@mail.earthlink.net>
Message-ID: <33859692.72B8@mail.earthlink.net>
Source record: 93845

Attention fellow amateurs:
I am proud to announce the recent update made on my page. I have added numerous antenna construction plans to my collection. The types of antennas covered include Yagi, Quads, Collinear, and J poles. Stop by also and design your own Yagi and Super J Pole(Collinear version) online with my Javascript page. If you like it, fill out the form on the first page. It automatically emails me. 73

Aaron KB0YKI

--

Aaron Schmitz KB0YKI
Route 1 Box 31 -- --- \ / | / -------
Ewing, MO 63440 | / | \ | | \ / | / |
Email: |/ | / | /| \/ |/ |
aschmitz@earthlink.net |\ |-- | / | {} | \ |
aschmitz@culver.edu | \ | \ |/ | {} | \ |
World Wide Web: | \ |__/ |___| {} | \ -------
http://home.earthlink.net/~aschmitz/home.html

"Specializing in support for Macintosh and IBM compatible Computers"
"Real Hams use verticals, but smart ones use Yagis!"

5269. Re: www.hamradio-online.com: FCC Allows High Gain Unlicensed Tx in Amateur UHF Bands

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: "Adam (George) Lottes" <lottes@gte.net>
Message-ID: <5m4a72sgl1@news5.gte.net>
Source record: 93846
Cross-posted to: rec.radio.amateur.misc,rec.radio.amateur.digital.misc,rec.radio.amateur.policy,rec.radio.amateur.homebrew

Julian Frost wrote:
>
> On 15 May 1997, Rick Pemble wrote:
>
> > I am sorry, Can't help adding to the age old argument with the same old *&$
> >
> > but, if someone is too lazy or too stupid to learn something as simple as
> > code, what possible contribution can the make in any field.
>
> You're kidding, right? Yeah, you *must* be! No one would state that in all
> seriousness.
>
> > Your argument is the same as "Why learn to add and subtract? calculators
> > are less than 5 dollars, why learn to read, everyone has a TV"
>
> It can be argued that knowing how to add and subtract, and read, is
> somewhat of a necessity in order to be able to live in today's society.
> Knowing CW certainly isn't. Neither does knowing the code make one a "good
> amateur radio operator" -- listen in to the crap on 75m phone once in a
> while for evidence of this, only "know coders" there! CW is but *one* mode
> of operation, and one mode whose use is declining the world over because
> better modes are taking over. It makes no sense whatsoever to judge an
> applicant's ability to contribute to the Amateur Service, via their
> technological know-how, or other people-oriented service, based soley on
> his/her ability to use one particular (outdated) mode!
>
> > Sorry everyone, don't want to start a flame war -- forget what I said- just
> > dinosaur talk.
>
> Dinosaur talk indeed. Consider it forgotten.
>
> Julian
> [Someone who *has* passed the 20wpm code test]
> --
> INET: jmfrost@uci.edu - Public Key for Encrypted Mail available.
> ** Irvine Aikikai (USAF Western Region) Home Page --
> ** http://odaiko.ss.uci.edu/Aikido/Aikido.html
> ## The Unofficial SIG-Sauer Home Page --
> ## http://odaiko.ss.uci.edu/sig/sig.html

Why does every one pick on the phone section of 75 to make their point.
If you knew CW and listened on from 3.5 - 3.7 you would find a

completely different attitude. It's why I like CW.

5270. Re: 35Z5 tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: Michael Feldt <feldtm@iquest.net>
Message-ID: <01bc679d$b5e150a0$98aaf6ce@feldtm.iquest.net>
Source record: 93847
Cross-posted to: rec.antiques.radio+phono,rec.audio.tubes,rec.radio.amateur.homebrew,rec.radio.amateur.misc

The tubes are sold.

Regards
Michael Feldt

Michael Feldt <feldtm@iquest.net> wrote in article
<01bc66f7$a61e7360$4bec35ce@feldtm.iquest.net>...
> Fifteen "United" 35Z5 tubes new in the box. $20 which includes shipping
> within the 48 states.
>
> Regards
> Michael Feldt
>

5271. Light-Control Interference

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: tsimonds@icanect.net
Message-ID: <5m4i2kiis1@news.icanect.net>
Source record: 93848
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

This may not be the proper group, but here goes anyway. No flames, please! Just guidance....

This concerns interference TO a light control, not the more common interference BY a light control.

The device is Radio Shack Cat. No. 81-2771 Touch Control. It gives you dim, mid, bright, and off control of a lamp by successive touches of any metallic part of the lamp or its cord.

It works just fine as long as I am not on 40 or 80! On those bands (SSB or CW), the lamp cycles though various stages of on and off in step with wither my voice or CW. Most annoying to the XYL who is trying to watch the tube in the same room with the lamp!! No problems on 20 up.

I'm running a clean TS440 barefoot through a tuner and LPF on 40 and 80 to a dipole with a feed point at about 50 ft. on a tower about 25 feet from where the affected device is located. The other three bands (20, 15, and 10) are through a tribander at 52 ft on the same tower.

It's probably just a case of fundamental overload in the circuits of the device, but has anyone had this trouble and found a fix?

A neighbor called early on and said she had seen our lights flashing on and off. Was there anything wrong? Most embarrassing. I could just reach over and turn off the lamp at its switch, but that's not the way a ham solves a problem like this!!

Thanks for any help--

73--Terry/WB4FXD in Ft. Lauderdale, FL
***Use this for reply: fsimonds@icanect.net
Address in header is SPAM filter

5272. Re: Slovenian High Speed Packet Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: Alexander Kurpiers <kurpiers@zeus.uet.e-technik.th-darmstadt.de>
Message-ID: <3385D1FF.1BB4DD4D@zeus.uet.e-technik.th-darmstadt.de>
Source record: 93849
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.digital.misc

pavel.reberc@guest.arnes.si wrote:
>
> Sid Boyce <szb50@juts.ccc.amdahl.com> wrote:
> ....
>
> Hello,
> I am using (and also do maintanance on some nodes, have built many of
> hardware..) and it works. The result is, that 1/2 users of packet
> radio users in s5 are using at least 38k4 user access with simple WBFM
> radios. Most of them are built by the users themselves, and that's
> what HAMRADIO should be, isn't it?

No, this is not true. HAMRADIO is also about using the latest technology. Using WBFM on 70cm is not what I consider the best possible solution. The transceivers you are refering to need at least 200kHz of valuable bandwith.
Here in Germany we try to setup some 200kHz wide user access points (76k8 FSK). The transceivers are already developed but what is missing is the permission to use them. Currently there are some ATV guys who think that AM-ATV is still state of the art :-(So it may be a problem to get 2 200kHz wide channels (for duplex) on our 70cm band here (remember: we only have 430-440MHz).

> At the moment, there is at least 6 links in S5 on 1.2 Mbit (PSK radios
> for 23 and 13cm) and we also already have users on 1.2MBit 23cm.
> The main problem is - if you are used to 'normal' PR, that the network
> in other parts of Europe is still at rates 9k6, somewhwre there are
> few 19k2, but much more under those antique rates. I tried some
> times to go through the network to reach for example northern part of
> the Germany, but you get old before you reach it...
> What's the reason? Did HAMs become lasy? Or the only way to
> get a RIG is to go to the shop and simply buy it, and if the
> far-east toys are not capable of handling more than 9k6, than stay
> there....
> 73, Pavle, s57ra
>

Same problem on 23cm. We have 2 segments for packet radio - each 2 MHz wide at the corner of the 23cm band. 2 MHz is not enough for a single 1.2MBit BPSK signal! And what we want (and what we actually achieved here in Germany) is a *network*, so we really need more than 1 channel :-(Given the 50kHz wide channels 19k2 is not too bad. Using 4FSK 38k4 should be possible. Of course we want and we need higher data rates for our interlinks and our access points. But with our frequency allocation

scheme here this is possible only on 6cm or 3cm. 13cm may be used in some areas (we have a special license for 13cm), but may be a problem where 13cm is used by the primary user of this band (amateur radio service may not cause interference).

To put it into a nutshell: give us bandwidth and we provide you with a network like the on you have in S5. It is not a technical problem it is more or less a "political" one. The HAMs here are not lazy and 99% of the equipment used in the digipeaters is homemade (mainly RMNC hardware and "Interlink" TRX I und III for FSK on 23cm).

73' Alexander

--

------------------------------+--------------------------------------
| Alexander F. Kurpiers |
|
| Institut fuer Uebertragungs- | Voice: +49-6151-162369
|
| u. Elektroakustik | Fax : +49-6151-165545
|
| Merckstrasse 25 | EMail: a.kurpiers@uet.th-darmstadt.de
|
| D-64283 Darmstadt (Germany) | Hamradio: dl8aau@db0zdf.#rpl.deu.eu
|
------------------------------+--------------------------------------

5273. fs - POWER SUPPLY MODULES.... MISC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: deli-bear@worldnet.att.net
Message-ID: <33861ACB.6AEB@worldnet.att.net>
Source record: 93850

```
...... FOR SALE....:

PCMCIA Sound Card --- by AMP. Includes software,
cables, microphone.
V-Synth wavetable synthesizer
Wave SE sound editor
Stratos MIDI software
MIDI Tune-Up
Windows Sound System software
Cardsoft Card and Socket Services
Traveler adapter module
Microphone
Compliant with PCMCIA Release 2.1
12-bit recording and playback
5 sampling rates
Turtle Beach Hurricane architecture
Thin-profile Type II card

requires:
Type II or III PCMCIA socket
386, 486, or Pentium processor
4MB of Ram
$65 + shipping..

.............MODEMS..............
2400 baud external modem with power supply. The easy way to
add a modem, since you don't have to open your computer to
install it! Only $ 9.
.
2400 baud internal modem card. Only $ 5
.
2400 baud PCMCIA fax/modem card (9600 fax). Only $17
(only 2 available)

14.4K baud PCMCIA fax/modem card. Only $29
. (only 1 available)

14.4Kbaud internal fax/modem card. Only $25

IDE hard drives:
Seagate 341 meg ........$ 99
Seagate 428 meg ........ 119
Seagate 120 meg ......... 79.
Maxtor 120meg ............ 79.
IBM 256 meg ............... 89.
Western Digital 540 meg. 135
```

IDE laptop drive: 4" x 2.75" x .75" with mini IDE connector
Seagate ST9546A 540meg $149

COLORADO 250meg backup tape drive with tapes. $55
(includes Arcada software for 350meg tapes)
.
MAINBOARDS WITH CPU CHIP: Tested with Dos and Windows
(these boards use 30pin memory simms)
386sx 16Mhz $10
486sx 25mHz $30
386DX 40mHz..... $30

MEMORY SIMMS: (specify parity or not)
4 meg 72pin non-parity .... $ 25
4 meg 72pin parity ..... $ 25
30-pin memory SIMMS: 256K 60 or 70ns ($4)
80ns ($3)
100ns ($2)

---------- P O W E R S U P P L Y M O D U L E S ------
I have several power supply modules available. These are complete, requiring only the DC input voltage. The modules contain the necessary IC regulator and caps or coils as needed. These are new, never used. The boards have the input and output terminals marked.☐

1.) 2" x 2" PCB with regulator, transformer, etc, installed.
8V to 16VDC input, +12V / 1A out.
6 units available at $8 each, plus shipping.

2.) 24pin DIP regulator-on-a-chip. No external components
are needed! Up to 40VDC input, +5V/1A out.
3 available at $5 each, plus shipping.

.....CPU CHIPS.....
AMD 386DX40mHz. A great way to speed up those older boards!
Only $ 8
.
add postage to listed price.
e-mail me if interested...

5274. Regen. Recievers-Thanks

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: chrisl@netdoor.com
Message-ID: <5m4ilh$667$1@axe.netdoor.com>
Source record: 93851

Thanks for all of the help on the reciever. I learned something basic from this. Just because the battery is bought new doesn't mean it's not dead. I'm picking up AM and will be fiddling with different coils to get SW freq. I got a number of responses and learned al much from them as I did from the instructions.
Chris

5275. Re: Regen Reciever

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: chrisl@netdoor.com
Message-ID: <5m4ivo$6a8$1@axe.netdoor.com>
Source record: 93852

Thanks for the info. I learned something basic. Just because you get a battery new from the electronics store doesn't mean it's not dead. (grin). I was suprised that I didn't get a howl from the set with the regen pot on full though.

5276. TV 75/300 ohm balun for 3W transmitting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: cromwell@sclera.ecn.purdue.edu
Message-ID: <5m51at$k0e@mozo.cc.purdue.edu>
Source record: 93853
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

I'm planning to build the dual rhombic antenna for 1296 MHz, described in a recent "QST", and am considering how to transform its 300 ohm to (roughly) 50 ohms.

What's the current thought on using television VHF/UHF baluns for low-power use at amateur UHF frequencies? My transverter will have 3W PEP, which I *think* may be adequately handled by the little handy easy-to-replace TV units.

Bob Cromwell KC9RG
cromwell@ecn.purdue.edu

5277. Re: Light-Control Interference

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: unit77 <unit77@concentric.net>
Message-ID: <3386231E.6BFC@concentric.net>
Source record: 93854
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Terry Simonds wrote:
>
> This may not be the proper group, but here goes anyway. No flames,
> please! Just guidance....
>
> This concerns interference TO a light control, not the more common
> interference BY a light control.
>
> The device is Radio Shack Cat. No. 81-2771 Touch Control. It gives
> you dim, mid, bright, and off control of a lamp by successive touches
> of any metallic part of the lamp or its cord.
>
> It works just fine as long as I am not on 40 or 80! On those bands
> (SSB or CW), the lamp cycles though various stages of on and off in
> step with wither my voice or CW. Most annoying to the XYL who is
> trying to watch the tube in the same room with the lamp!! No problems
> on 20 up.
>
> I'm running a clean TS440 barefoot through a tuner and LPF on 40 and
> 80 to a dipole with a feed point at about 50 ft. on a tower about 25
> feet from where the affected device is located. The other three bands
> (20, 15, and 10) are through a tribander at 52 ft on the same tower.
>
> It's probably just a case of fundamental overload in the circuits of
> the device, but has anyone had this trouble and found a fix?
>
> A neighbor called early on and said she had seen our lights flashing
> on and off. Was there anything wrong? Most embarrassing. I could just
> reach over and turn off the lamp at its switch, but that's not the way
> a ham solves a problem like this!!
>
> Thanks for any help--
>
> 73--Terry/WB4FXD in Ft. Lauderdale, FL
> ***Use this for reply: fsimonds@icanect.net
> Address in header is SPAM filter
The best solution I know of,at least the one 2 or 3 of my friends
used,is to disconnect the device,open the door and throw the thing as
far away as possible.Your troubles will suddenly be over:<)
One friend of mine wrestled with this problem for a month or so before
he used the above solution.
If you come up with an alternative solution let us know.
Good luck!!!

5278. Tubes and Test equipment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-23 00:00:00 UTC
From: sales@emodus.com
Message-ID: <33864aa0.0@news.cyberannex.com>
Source record: 93855

If you are interested in purchasing ELECTRON TUBES (both new and/or used),
various ANTIQUE RADIO COMPONENTS or ELECTRONIC TEST EQUIPMENT,
please see:
www.emodus.com

Special: TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned,
calibrated, 120 day warranty shipping free in the USA, $465.00 each!

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin miniature
made by Philips in the USA 1986, NOS, individual boxes, 8000 available,
$0.10 each, shipping in the USA: 1 to to 199 $3.00, 200 or more shipping free!

Thank you! Dealer inquiries welcome!

5279. Need SONY 2010 rxcvr SCHEMATIC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5m5el0$c0c@camel4.mindspring.com>
Source record: 93758

Hi, I need the 2010 schematic to find the best pll vfo tap-off point
to feed a buffer that will mix with a crystal to provide a transmit
frequency equal to the receive frquency displayed.
I dont know how bad the phase noise is but the CW notes
received sound steady enough to me.
This will be homebrewed to TX CW on either 40, 20 or both.
the mixing crystal can be set up to provide an RIT function as well
if done with care when ordering the crystal frequency.
Tell me if I am crazy. Tell me if I am not.
I guess I just need the schematic not the whole manual.
I do have use of a 100mhz 2246 Textronix scope to work from there.
Thanks, Tony - WW2W (not a vanity call: I ain't that vain.)

See my page at:
http://www.pipeline.com/~acatalan/

5280. HF Filter Kit ...Got the Info!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: Sid Boyce <szb50@juts.ccc.amdahl.com>
Message-ID: <33864696.4534116D@juts.ccc.amdahl.com>
Source record: 93759

Thanks to a grubby piece of paper in the shack found it......
http://users.aol.com/rfelectron/rfelect.htm
.......73......G3vbv....
--
... Sid Boyce...Amdahl(UK)...44-121 422 0375

Any opinions expressed above are mine and do not necessarily represent
the opinions or policies of Amdahl Corporation.

5281. Re: Homebrew Crystal Headphones

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: Thomas Mahanna <tmahanna@zip1.ziplink.net>
Message-ID: <5m5urm$ja9$1@kayrad.ziplink.net>
Source record: 93760

Leon Heller <leon@lfheller.demon.co.uk> wrote:

: How about using a transistor AF amp. output transformer to convert the
: impedance of a low-impedance pair of headphones.

Even better, how about putting a 1000 ohm : 8 ohm transformer in front of a set of nice 8 ohm dynamic 'phones. You could get one out of and old pocket transistor radio.

-Tom

5282. Help 4127J log amps.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: gsargent@gil.COM.AU
Message-ID: <199705240633.QAA29258@iccu6.ipswich.gil.com.au>
Source record: 93761

Can anyone advise where Burr-Brown (4127J log amp chips) products in 1 to 2
piece lots can be obtained.
HELP...Anyone had experience with this device who can assist in de-bugging a
ver simple prototype design ? thanks in anticipation Gerald VK4ZSG.

5283. fs - MOTOROLA HT .... COBRA CB .... PCMCIA SOUND CARD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: deli-bear@worldnet.att.net
Message-ID: <33870419.38D5@worldnet.att.net>
Source record: 93762

F O R S A L E

MOTOROLA MTX9000 fm handi-talkie radio,
model H01WCF4DB5AN NX type WCMA.
900mHz range. With charger and info.
Only $699.

PCMCIA Sound Card --- by AMP. Includes software,
cables, microphone.
V-Synth wavetable synthesizer
Wave SE sound editor
Stratos MIDI software
MIDI Tune-Up
Windows Sound System software
Cardsoft Card and Socket Services
Traveler adapter module
Microphone
Compliant with PCMCIA Release 2.1
12-bit recording and playback☐
5 sampling rates
Turtle Beach Hurricane architecture
Thin-profile Type II card
requires:
Type II or III PCMCIA socket
386, 486, or Pentium processor
4MB of Ram
$65 + shipping..

------------------- F L A S H L I G H T S ---------------------

4-D cell (2x2 style), krypton bulb. In box, never used.
$5 + shipping.

6-D cell multifunction lantern. Sleek tubular style with
bright incandescent light at end, 6W fluorescent bulb
along bottom, and flashing red and yellow on top. Also
has electronic sonic alarm that can be switched on with
the flashing lights. In box, never used. $12 + shipping

3-C cell Eveready worklight-style. Bright yellow with
hook for hanging, frosted bulb to diffuse light over area.
Unused, but no box. $5 + shipping

Batteries NOT included.....

COCA-COLA caps. Red cloth, white lettering. New.
$8 each + shipping. Only 9 available.

..... FOR YOUR DRIVING PLEASURE .....
1929 Mercedes SSK kitcar on VW chassis. Just completed, never titled.
Yellow, with brown fenders and running board, tan convertible top, side
curtains, and tonneau cover. Gold trim instruments.

COBRA 18-ULTRA CB ---- 40 channel, pushbutton tuning, with 3
NOAA weather channels. Includes microphone, but no mounting
hardware. $ 39.

LEXMARK/IBM PORTABLE PRINTER 5183 ---- powered by rechargable
battery or AC wall adaptor (included), this printer is only
11.5" x 3.5" x 2", and weighs about 2.5 pounds with battery
in place. Using silent thermal print head, it will print on
either thermal fax paper or on regular paper using the enclosed
thermal transfer ribbons. Very quiet in operation, and because
it runs on a battery, it is completely portable, for use with
laptop computers anywhere. Includes parallel port cable. $89.
.
ANADEX WORD-SCRIBE PRINTER ---- heavy duty dot matrix printer.
Multiple ports, but no literature so only parallel port in use
now. Tractor or friction feed. Fast, good quality; 17-inch
platten. $ 15
.
add shipping to all prices.
if interested, leave e-mail...

5284. Re: TV 75/300 ohm balun for 3W transmitting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: "Dale R. Parfitt" <par@magg.net>
Message-ID: <3386E11C.6720@magg.net>
Source record: 93763
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Bob Cromwell wrote:
>
> I'm planning to build the dual rhombic antenna for 1296 MHz, described
> in a recent "QST", and am considering how to transform its 300 ohm
> to (roughly) 50 ohms.
>
> What's the current thought on using television VHF/UHF baluns for
> low-power use at amateur UHF frequencies? My transverter will have
> 3W PEP, which I *think* may be adequately handled by the little
> handy easy-to-replace TV units.
>
> Bob Cromwell KC9RG
> cromwell@ecn.purdue.eduHi Bob,

The V/U baluns become quite lossy at YHF TV freqs- Winegards is one of the best however. The real problem will be its balancing properties- I suspect they will leave a lot to be desired. At TV freqs you can put a balun on the input of a FSM with the twin lead legs spread. Then short them together and notice how far down the common mode currents are reduced- it gets worse and worse as freq increases.
You are probably better off building a 4:1 coaxial balun out of a short length of 141 semi rigid coax and living with the theoretical 1.5:1 V.S.W.R. (75/50). At least all will be balanced.

Dale
W4OP

5285. L4B Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: kk4tl@aol.com
Message-ID: <19970524131800.JAA20509@ladder01.news.aol.com>
Source record: 93764

We are looking for an on-off switch for the L4B.

Anyone know where we might find one?

Pls email me direct at:

KK4TL@AOL.COM

Thanx.

5286. Re: Transistor Theory: Seductive Fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: acatalan@pipeline.com
Message-ID: <5m6uld$f05@camel1.mindspring.com>
Source record: 93765

wrt@eskimo.com (Bill Turner) wrote:

>wmeara@erols.com (Bill Meara) wrote:
><snip>
>>Mark: Thanks for digging up the article. I've read it MANY times.
>>In fact it was Macleish's article that really got me thinking about
>>the physics of radio.
>>
>>I liked the article and it helped me a lot. But it really doesn't
>>provide that gut level understanding that we've been talking about.
>>
>>Like many authors on this subject, Ken doesn't really point out that
>>there are limits to our understanding of these matters. When you get
>>right down to it, no one really understands what an electron IS, what
>>charge IS, what the magnetic force IS. Also (as far as I can tell) no
>>one REALLY can understand or explain the particle-wave duality. Just
>>ask a someone to explain how particles are generated by your 20 meter
>>dipole!
>>
>----------
>Well said! So many scientists think because they can MEASURE
>something, they UNDERSTAND it. Not so. For example, I have yet to
>hear an explanation of why a spinning gyroscope can be balanced off
>of one's finger, with it's entire mass off to the side and not fall.
>Why does rotation apparently counteract gravity? I sent that question
>into Marilyn Vos Savant, the self-proclaimed holder of the world's
>highest IQ and never got a reply. Anyone know?

>73, Bill W7TI

I will take an educated guess:
As we know acceleration up or down requires a force.
It is easy to picture speeding up or braking a spinning bicycle wheel
with one's hand as up/down accelelation.
Not so easily pictured is the changing of the axis of a wheel as also
a type of acceleration since you ARE changing the direction (vectors)
of the particles of the wheel. The spinning wheel resists. It feels
strange because we usually don't encounter this force between our
hands everyday when holding such a wheel in a demonstration.
When a top spins on it's side without falling it is because the
earth's gravity (an acceleration force) cannot overcome the
momentum (mass with a speed in a particular direction) needed to pull
it off it's axis. A particle in a wheel has an average speed but at
any point in time it has a velocity (speed in a particular direction).

When the spinning slows down (by friction) or if the gravity were to
be increased (as on Jupiter) the top will teeter and fall when it's
momentum force falls below the combination of the above forces.
In space, with little friction and with microgravity, spinning objects
can take a hell of a long time to teeter but they all do eventually.
Anthony Catalano - WW2W
http://www.pipeline.com/~acatalan/

5287. Alinco DJ-162 - batteries wanted...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: ljubisic@EUnet.yu
Message-ID: <33892f24.3592768@news.eunet.yu>
Source record: 93766

Anybody has (or knows where I can get) EBP-10NA (7,2V/700 mAh) battery for old but still operating Alinco DJ-162TD, for sale? It doesn't have to be EBP-10NA, just any matching to above mentioned handheld which is 'compatible' with even older model DJ-160.

I would prefer new ones, however, used and in 'good shape' are also most welcome, as well as other accessories You may have for it.

Thank You very much in advance!

Slobodan, YT1RVS
<ljubisic@EUnet.yu>

5288. Re: shortwave radio

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33874f08.3999199@news.mnsinc.com>
Source record: 93767

On Thu, 22 May 1997 12:05:50 -0700, "M.S" <polgron@pi.net> wrote:

>dear reader,
>
>Im looking for drawing of a shortwave radio circuit, to build one of my
>own. Could anyone tell me where I can find such a plan or maybe mail it
>as an attached file
>
>M.S.
>
>polgron@pi.net

Have a look at the web pages at:

http://www.mnsinc.com/bry/hamfiles.htm

AND

http://www.mnsinc.com/bry/hamlynx/hamhomeb.htm

All the best - Bry

5289. Re: data sheets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: delords@ibm.net
Message-ID: <338769e1.0@news1.ibm.net>
Source record: 93768

In <19970521174506704 69@zetnet.co.uk>, Brian Marshall <brian.marshall@zetnet.co.uk>
writes:
>does anyone have any data sheets on a CA3189 FM IF subsystem
>

Try

http://www.semi.harris.com/datasheets/lin-tel/ca3189/

for your choice of PDF or Postscript formats. I have the data book
and what you can download is exactly what is in the data book

5290. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: Douglas Wielfaert <marcy@vic.com>
Message-ID: <33878B78.4E8B@vic.com>
Source record: 93769

John Miles wrote:
>
> Sounds like a parasitic oscillation might be causing excessive current
> drain, which eventually alters the characteristics of the circuit enough
> to keep it from amplifying the desired signal at all.
>
> Pitfall 1: a 2SC2092 transistor was subbed for an MRF 472/476. The
> 2SC2092's NTE equivalent (don't have the original data sheet handy) is
> specified with an ft of 300 MHz, while the 472/476's equivalent is
> spec'ed at 150 MHz. If the same is true of the OEM parts, that could be
> a problem. When it comes to transistor ft, more is NOT always better --
> in this case, it will make the circuit much more prone to parasitic
> oscillation at some unknown VHF frequency. With a ground plane, this
> would be unlikely to occur, but...
>
> Pitfall 2: I wouldn't build a code-practice oscillator, much less any
> type of RF circuit, without a good ground plane. :-) Do yourself a
> favor and throw away every scrap of "perfboard" you own, and give it
> another try with dead-bug construction on bare copper-clad board.
>
> -- jm
>
> --
> Note: My E-mail address has been altered to avoid spam
> --

I discovered that most who build this rig don't use the component-side ground plane as specified. Actually, my problem was not with the transmitter at all. I build a general purpose power supply with a low current fixed 12 volt side and a 2 amp variable side. I had the rig on the 12 volt tap and wound up overheating the regulator! When I connected to heavy duty voltage source the rig worked very well. The 2SC2092s seem to be fine and I have gotten good signal reports so far. By the way, What is "dead bug" construction?

Doug
WB8PAD

5291. Re: L4B Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: dr7zyq@rand.nidlink.com
Message-ID: <NEWTNews.864542815.23770.dr7zyq@nidlink.com>
Source record: 93770

Try Drake -- they tend to keep things like that in stock. I was able to replace a switch on an MN-4 a couple of years ago just by calling Drake -- cost about $6.00 ppd.

David, WA7ZYQ

5292. Re: NEW DIY PCB PROTO TECH.- Printing direct on metal foil?!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: theo@marketto.demon.co.uk
Message-ID: <19970524.213707.85@marketto.demon.co.uk>
Source record: 93771
Cross-posted to: sci.electronics.misc,alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.design

In message <5le8ul$8vv@thorgal.et.tudelft.nl> Scott Stephens wrote:

> I've been reading a some threads on these newsgroups on toner
> transfer for fine pitch SMT and printing on metal foil. I tried it in
> my Epson Action Laser II, and it worked good!
>
> Getting a SMOOTH piece of Al (Aluminum) foil, I folded it over a piece
> of paper and fed it into the manual paper feed slot. I took care that
> no wrinkles would scratch the drum! The transfer and fusing worked
> great! Unlike others results (dirty foil maybe?) the toner did not rub
> off. Inspite of the fact that, logicaly, it shouldn't work.
>
> But don't blame me if you mess up your toner drum, I bet Al foil will
> scratch it up real good. And a neg. image will use lots of toner. But
> should still be far cheaper, easier, and more powerfull than current
> iron on crap, which never worked well for me.
>

Three thoughts about this. Firstly, the toner is meant to be attracted from the drum to the paper by electrostatically charging the paper. Foil will conduct this charge, so the toner is probably going to be deposited less accurately. Secondly, the fuser melts the toner, sticking it to the paper. The foil is likely to conduct heat away from the toner, so it may not adhere very well. Lastly, a fairly strong corrosive will be required to etch the aluminium. Copper reacts fairly readily with FeCl3, being substituted with an iron precipitate. Aluminium has a passivating oxide layer which makes it not very reactive. I suspect some _very_ nasty chemicals would be required - which would cause other problems.

I reserve the right to be completely wrong, by the way...

Cheers,
Theo

--
Theo Markettos theo@marketto.demon.co.uk
Liphook HardBack's home page:
Hampshire http://www.marketto.demon.co.uk/hardback/index.htm
UK http://www.townpages.org/diary/Liphook/index.htm

5293. Re: DOES ANYONE OUT THERE HAVE SCHEMATICS FOR A DIGITAL FREQ GENERATOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: the@primenet.com
Message-ID: <the-ya023580002405972225430001@news.primenet.com>
Source record: 93772

In article <337b0ecf.0@d2o61.telia.com>, jorgenj@uddeholm.se (J&#65533;rgen) wrote:

```
:Is anyone out there have any schematic for a digital
:frequencygenerator that creates frequency up to about 20 mhz
:if so pse send mailto:jorgen.jonsson@uddeholm.se
```

```
An AD7008 IC chip ($50) clocked at 50mhz should work pretty well, as long
as you are not using it in an application where spurs are a problem- e.g.
putting its output right into an antenna.
```

5294. Re: Light-Control Interference

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-24 00:00:00 UTC
From: the@primenet.com
Message-ID: <the-ya023580002405972220250001@news.primenet.com>
Source record: 93773
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

My advice is to get rid of it.

Murphey's law says that the next time you are trying to work some rare DX, that lamp controller osc will have a harmonic right on top of the DX frequency.

Rob.

5295. SOME INTERESTING QUESTIONS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <3387083e.247855@noticias.mundivia.es>
Source record: 93774
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.homebrew,es.rec.radio.amateur

Dear friends, I own a ICOM 706.
I would like any of you to send me all information, mods, improvements, and so with the 706. I would like to know also about the interfaces and programs for the 706 and the PC.
I am also very worried about these questions about blowing the 2 metre section up if you have the HF aerial very close to the 2 metre one. I have a vertical antenna for 144 in the same post support than a windom for 80-10metres. Is it any dangerous?. What is the proper distance?
By the way in my building there is a lightning arrestor (pararrayos) post at only 2 metres from my antennas' support. I have always thought that this could be some dangerous though Valencia is not a very stormy city. Anyway, some friends have told me that it is the same dangerous as it would be 50 metres away as a lightning has an action radius of about 150 metres, even a local ham told me to put my windom aerial up to the lightning arrestor mast which is 5 or 6 metres higher than my antenna post. He said is the same danger in the lighning post than only two metres away. What can you tell about all this?.
Will it be enough just swithching off the antenna plugs of the transceiver in case of a storm?.

Another question is, What is the proper high for a HF vertical (WARC Bands 18 & 24Mhz) above the roof of a 14 floor building?. I have one, donnot know it's name but is a trapped one for 10,18 & 24mhz, about 3 metres long (1/4 wave I am afraid). Mine is only at 1.5 metres from the roof and works OK, but many often is beated by the windom one which is only 4 metres from the roof. This is strange for me as I have always read that a vertical is always better than a dipole if that one is not at least at ' wave over the ground. For this theory, my vertical should be better because the dipole windom is only at 4 metres over the ground (the roof of my building), but in many cases the dipole overbeat the vertical. Can anyone explain this to me? What is the best height and number of radials for such a vertical?
I have read many E mail messages of hams talking about the pros and cons of verticals and dipoles, but nothing is clear yet. What is the real truth? Is really any real truth?
Is it true that the windom aerial makes more TVI tan a half wave dipole, for instance? Or than a vertical?
I live in the 14th floor of my 14 stories building. Should I say that my vertical is 45 metres over the ground or just 1.5 ? Should I say that my windom is 49 metres over the ground or should I say 4?
Thank you.

/|\
@ @
-----oOO-(_)-OOo----------
Francisco Garcia
e-mail: jorgegc@mundivia.es

5296. F.S. - Tubes, radios, books and more...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970525014801.VAA01149@ladder02.news.aol.com>
Source record: 93775

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #514-T.

5297. RTP Area Only: WTB: Tek 465 or similar

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: rjlopez1@mindspring.com
Message-ID: <5m876o$mpp@camel2.mindspring.com>
Source record: 93776

Need Tek 465/475 or similar HP for hobby use. Looking for a recently calibrated unit in good shapre, dual channel, 100Mhz. RTP, North Carolina only. 73, KF4AUS

REMEMBER TO DELETE "NOSPAM" FROM THE REPLY ADDRESS
BEFORE ANSWERING ANY MESSAGE

5298. Difficulty with MFJ noise bridge

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: kjhales@aol.com
Message-ID: <19970525033000.XAA19842@ladder01.news.aol.com>
Source record: 93777

I am having trouble with an MFJ-202B RX Noise Bridge,
and hope someone can offer some insight.

If I terminate the "unknown" terminal with a 50 ohm
resistor and tune my receiver to 1.0MHz, I get a nice
null (S-meter goes from max to zero). I then tune the
receiver to 2.0MHz. After slight adjustment on the
noise bridge, I can get a null, but not nearly as deep
as at 1.0MHz. Going up in frequency, by the time I get
to 5MHz, I can detect no null. Receiver is an AOR
AR-3000A; CW, SSB, AM all tested with essentially same
results.

The following items were checked:
Fresh battery installed
Power ON
Receiver jack to receiver
Unknown jack to 50 ohm resistor

Does this sound like a defective unit? Defective
operator? Is MFJ equipment typically flakey or marginal?

Thanks for any help.
Kevin Hales
KF4REA

5299. Re: Light-Control Interference

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: aruder@pipeline.com
Message-ID: <5m8cpk$g08@camel1.mindspring.com>
Source record: 93778
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

unit77 <unit77@concentric.net> wrote:

>Terry Simonds wrote:
>>
>> This may not be the proper group, but here goes anyway. No flames,
>> please! Just guidance....
>>
>> This concerns interference TO a light control, not the more common
>> interference BY a light control.
>>
>> The device is Radio Shack Cat. No. 81-2771 Touch Control. It gives
>> you dim, mid, bright, and off control of a lamp by successive touches
>> of any metallic part of the lamp or its cord.
>>
>> It works just fine as long as I am not on 40 or 80! On those bands
>> (SSB or CW), the lamp cycles though various stages of on and off in
>> step with wither my voice or CW. Most annoying to the XYL who is
>> trying to watch the tube in the same room with the lamp!! No problems
>> on 20 up.
>>
>> I'm running a clean TS440 barefoot through a tuner and LPF on 40 and
>> 80 to a dipole with a feed point at about 50 ft. on a tower about 25
>> feet from where the affected device is located. The other three bands
>> (20, 15, and 10) are through a tribander at 52 ft on the same tower.
>>
>> It's probably just a case of fundamental overload in the circuits of
>> the device, but has anyone had this trouble and found a fix?
>>
>> A neighbor called early on and said she had seen our lights flashing
>> on and off. Was there anything wrong? Most embarrassing. I could just
>> reach over and turn off the lamp at its switch, but that's not the way
>> a ham solves a problem like this!!
>>
>> Thanks for any help--
>>
>> 73--Terry/WB4FXD in Ft. Lauderdale, FL
>> ***Use this for reply: fsimonds@icanect.net
>> Address in header is SPAM filter
> The best solution I know of,at least the one 2 or 3 of my friends
>used,is to disconnect the device,open the door and throw the thing as
>far away as possible.Your troubles will suddenly be over:<)
>One friend of mine wrestled with this problem for a month or so before
>he used the above solution.

> If you come up with an alternative solution let us know.
> Good luck!!!
You might try using a 3-wire cord instead of the usual zip cord lamps use. Then, just inside the lamp, wire 3 caps across the 3 leads. Use 1kv, .001mfd discs, and it should fix lyou up.

good luck.

WB0NRU
Lou Hinshaw
aruder@pipeline.com

Prolific inventor,
Lousy Salesman,
Incompetent businessman.
(Typical)

5300. KEYING CIRCUIT PLEASE... CLICK HERE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: "SuperBrad.god" <superdude@ufo.org>
Message-ID: <01bc68c3$419c3940$bbfa41ce@default>
Source record: 93779

Does anyone know of a voltage driven keying circuit I can use to make the audio from a scanner external speaker jack key and be retransmitted out of the mike input jack on a HTX-404 xciever? This is going to be used as a seperate reciever site for a 2 meter repeater/autopatch.

Brad Cunningham
KB0NZA
kb0nza@dialnet.net
www.dialnet.net/users/kb0nza

5301. Two Great QRP Lists

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <338842d2.3043064@news.mnsinc.com>
Source record: 93780
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.misc,uk.radio.amateur

I have found two Great QRP E-MAIL lists!

The first is KNIGHT LIGHTS QRP - a group that started in North Carolina, but they allow folks all over to join in on the fun.

To subscribe:

You can send mail to "majordomo@acpub.duke.edu" with the following command in the body of your email message:

subscribe klqrp

Here's the general information on KLQRP:

The KLQRP list is for discussion of activities like technical projects, special operating events like Field Day or expeditions to the NC Lighthouse locations, get-togethers like meetings at member's houses, events like the hamfests, or other special events.

Here is a bit of philosophy from the list manager (Dave, WA4NID). Let me say that I do NOT plan to be a list policeman, in the sense of regulating or moderating the topics of discussion. Everyone is urged to freely post to these lists and suggest topics for consideration. It is hoped that the lists can become one mode of communication for KnightLite members and other interested hams, which encourages camaraderie and progress in amateur radio pursuits of all types. I hope that people will use these lists to keep in touch with the group as a whole, and to arrange meetings with specific members, and to discuss any QRP or radio-related ideas or plans.

==========

The next is probably the BEST QRP list in the world! G-QRP, where you can meet up with the likes of George Dobbs and the boys that STARTED the current wave of interest in QRP, long ago!

To subscribe:

list, you can send mail to "Majordomo@blacksheep.org" with the following command in the body of your email message:

unsubscribe gqrp-l bry@mnsinc.com

Here's the general information for the list you've subscribed to, in case you don't already have it:

Welcome to the GQRP-L mailing list!

This is the informational file for the G-QRP mailing list.

The gqrp-l mailing list was founded by members of the G-QRP club as a focus of QRP activity for QRP operators who have access to the Internet in the UK, and further afield.

The list exists for the discussion of technical matters, QRP operating, QRP events and other QRP-related topics. It is intended to be UK orientated and in this respect is not intended to replace the existing QRP mailing list at netcom.com.

There is a simple but strict editorial policy to keep this list a QRP mailing list, not for it to replace uk.radio.amateur, the rec.radio news groups or any other general discussion forum about amateur radio.

How to join the GQRP mailing list:

send mail to "Majordomo@blacksheep.org" with the following command in the body of your email message:

subscribe gqrp-l

How to leave the mailing list:

send mail to "Majordomo@blacksheep.org" with the following command in the body of your email message:

unsubscribe gqrp-l

How to send mail to the list:

send your mail to "gqrp-l@blacksheep.org"

your mail will then be sent to everyone on the list.

How to receive the daily digests:

If you'd rather not receive each individual message, but would like a bulk mail file sent daily containging all that day's messages to the list, then :

send mail to "Majordomo@blacksheep.org" with the following command in the body of your email

message:

subscribe gqrp-l-digest

Remember that this is instead of receiving the
individual messages, so you don't need to subscribe
to gqrp-l as well.

To stop receiving the digests:

send mail to "Majordomo@blacksheep.org" with the
following command in the body of your email
message:

unsubscribe gqrp-l-digest

Rules on use of the list:

Very simply, please bear these in mind when sending
mail to the list

1. No profanities please, this list may be copied
to packet-radio BBS sites.

2. Messages should be of direct interest to QRP
operators. eg:

a. Technical remarks and discussions relating
to QRP equipment

b. Discussions about QRP operating

c. Announcements of contests, QSO parties etc
d. Discussion of operating achievements
e. Anything else which might be of interest to QRP
operators.

3. Please do not over-quote when replying, most
people on the list pay for their connection to the internet.

4. Whenever possible, reply direct to the sender
rather than the list.

5. Requests sent to the list to unsubscribe from
the list will be ignored! Send these requests to
majordomo@blacksheep.org (see above)

Archives of the list

The list archives can be browsed on the World
Wide Web - point your browser at
http://www.blacksheep.org:8080/gqrp-l/index.html

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

5302. mobile mounting suggestions

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: roncook@worldnet.att.net
Message-ID: <33884ad2.91453157@netnews.worldnet.att.net>
Source record: 93781

Howdy. I'm not certain if this is the correct ng for this question
but here it is...
Might anyone have suggestions for mounting (or suggestions for a
mobile rig to mount) in a 1990 Dodge Spirit ?

The whole front console appears to be very unfriendly to 'owner
add-ins' :)

Thanks for any comments.

Ron (N1ZHI)
roncook@worldnet.att.net
cook@amsa.com

5303. FS: Older books

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: hudog@ibm.net
Message-ID: <33883F21.69A8@ibm.net>
Source record: 93782
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.swap,rec.radio.amateur.antenna

I have the following books for sale:

o VHF for the Radio Amateur, by Frank Jones. CQ Technical Series,
published 1962. $2

o Packet Radio, Rouleau and Hodgson. Tab Books 1981 $1.

o FM & Repeaters, ARRL 1978 $2.

o Servicing AGC Systems, Carter & Lesh. Sams, 1958. $.50

o Beam Antenna Handbook, Orr. Classic 1st Edition (MCMLV!) $3.

o DXCC Companion, Kearman. ARRL 1990. $2.

All of above are plus shipping.

I'm looking for any Rider's Publications you may have. 73, George. N0GH

5304. B9D valve holders

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: Harry Lythall <acz732k@tninet.se>
Message-ID: <5m9mlu$2fm$1@kalle.tninet.se>
Source record: 93783

Does anyone know where I can get them?

Regards Harry

5305. Sale VHF/UHF RF Amplifier

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: AWT <awt@ms2.hinet.net>
Message-ID: <01bc691c$4c16e1a0$b7955fa8@awt>
Source record: 93784

Dear Sir.
Our Company in Taiwan .
AWT Communications Accessories
Are Professional Producer of The OEM/ODM
Communications Product.We are Producing The :
CB / VHF / UHF / 900Mhz RF Linear Amplifier!
Full Duplex GSM Cellular Phone Repeaters Amplifier!
SWR/Power Meter, VHF/UHF Antenna. Antenna Tuner!
Antenna Switch, Switching Power Supply etc*.
Our Product Have OEM / ODM To Japan & USA !
These are the popular & OEM machine of our product.
AWT-144H (Same Daiwa LA-2035R. & MFJ Mirage B-34-G)
AWT-2090H (Same Daiwa LA-2080HK.)
AWT-3090H (Same Daiwa LA-2090HK. & MFJ Mirage B-310-G)
(Special to Design Great For ICOM IC-706)
AWT-160VH(Same Tokyo HY-Power HL-160V/25.MFJ Mirage B-2560-G)
AWT-200VH(Same Daiwa LA-2190HK. & MFJ Mirage B-2520-G)
AWT-268DH(VHF/UHF DualBand Same MFJ Mirage BD-35)
We Hope We Can Do The Business With You.

If You have any need. Please Contact with us.
We Will Provide The Best Quality & Best Price To You.
http://www.awt.com.tw
E-Mail:awt@ms2.hinet.net

Best Regards!

AWT Corp. Alex Heish

5306. pse help ID GE mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: "Ron, N7TAW" <ronh@chatlink.com>
Message-ID: <33884F9F.7F53@chatlink.com>
Source record: 93785
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap,rec.ham-radio

I need help finding a schematic for two old GE mobiles (currently used as local repeaters), especially the wiring for the control head as the controllers are about to be replaced, and the wiring of the old ones us a mess.

the numbers listed on the ID plaques are:

RG56TFS66, or N.P. 243349

and

YG56KJJ66, or N.P. 243349

They appear to be the same radios with different options.

Thanks to all,

Ron, N7TAW

5307. Re: L4B Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: Johan Bodin <sm6lkm.jbeab@swipnet.se>
Message-ID: <01bc6933$37d84460$69a4f482@win95.swipnet.se>
Source record: 93786

KK4TL <kk4tl@aol.com> skrev i inl�gg
<19970524131800.JAA20509@ladder01.news.aol.com>...

> We are looking for an on-off switch for the L4B.
>
> Anyone know where we might find one?
>
> Pls email me direct at:
>
> KK4TL@AOL.COM
>
> Thanx.
>

Look at the front panel.

73 de Johan / SM6LKM :-)

5308. Tri Band J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: eliminate@spam.com
Message-ID: <33888fce.4795561@nntp.a001.sprintmail.com>
Source record: 93787

I am looking for plans for a tri band j-pole.
Preferably for 6m, 2m, 440.
If anyone has plans, please send them to
craigv"at"sprintmail.com

Thanks

5309. Re: CB2SIX, part 1 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: MentalNut <mentalnut@geocities.com>
Message-ID: <33888E4E.4E85@geocities.com>
Source record: 93788

Plkease repost all 10 parts i have only been able to get 1, 6, 9, of 10
and would like to try this one out!!!

KF4GYQ
Russ
South Carolina

5310. R.S. Headset w/ Kenwood?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: Dave Johnson <djohnson@acpub.duke.edu>
Message-ID: <Pine.SOL.3.91.970525150941.19249A-100000@bio3.acpub.duke.edu>
Source record: 93789

Can anyone point me to info on how to convert the Radio
Shack "Communications Headset with VOX", cat. no. 19-312,
to use with Kenwood HTs? (I have Kenwood TH-79A)

There is no schematic with this product. Rather than try
to reinvent the wheel, I'd like to get some info from
someone who has done this or has good info.

I know this is not strictly homebrew but does involve
"homebrew mods". If there is another more appropriate
forum please let me know. Any help is much appreciated!

Sincerely,

Dave

David W. Johnson, Ph.D. QRP ARCI 6546
Amateur Radio Extra WA4NID G-QRP 4864
email: djohnson@acpub.duke.edu NorCal 355
packet: WA4NID@WR4AGC.#DUR.NC.USA.NOAM TSRAC 3482

5311. QRP & Homebrew

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: Harry Lythall <acz732k@tninet.se>
Message-ID: <5ma61n$78u$1@kalle.tninet.se>
Source record: 93790

Hi all,

I have posted loads of circuits on my homepage. The URL is

http://user.tninet.se/~acz732k/

Always open to suggestions for more circuits. Anything to
offer? Mail me.

73s de Harry

5312. *Updated Web Page*

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <33886801.4DEF@primenet.com>
Source record: 93791

Updated Web Page
http://www.qsl.net/k7on

5313. WANTED: Operating manual for AVO C.T. 160

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: Victor <victor@vicmck.demon.co.uk>
Message-ID: <$6uZQDAEWLizEwRW@vicmck.demon.co.uk>
Source record: 93792

I would like a user manual for the AVO CT160 (electronic valve test set)

May also sell if anyone is interested (exellent condition)
More details on request
--
Victor

5314. WTD: Valve Data

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <CB2XCCAKuLizEwVw@falstaf.demon.co.uk>
Source record: 93793
Cross-posted to: uk.radio.amateur,rec.radio.amateur.homebrew

Dear All,
Can anybody FAX/EMail me the characteristics (curves and data etc) for
an EF91 and an 807 please.

Regards

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

5315. WTD: Service Man. for HP 400H VTVM & Gen Rad 1650B Imp Bridge

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: rhard@ix.netcom.com
Message-ID: <5mafga$rje@dfw-ixnews12.ix.netcom.com>
Source record: 93794

Hi,

I am looking to get copies of service manuals for the following :

Hewlett Packard, Vacuum Tube Voltmeter 400H

General Radio, Impedance Bridge 1650-B

Can anyone help me locate these?
I need to repair one and calibrate both.

Any info is greatly appreciated!

Please email me: rhard@ix.netcom.com

Thanks!!!!

5316. FS Heath Station

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: sbrady@pce.net
Message-ID: <3387c1df.3658933@news.pce.net>
Source record: 93795

Hello All, I had posted this a couple of weeks ago and got a number of replys. The deal I thought I had fell through, so here is the posting again. You can see a picture of most of the equipment (and me too) on the cover of 73 Amateur Radio Today magaizine, September 1996.

All equipment is good to very good conditon, and all is working FB. All goes as a package only ...

SB-102 Transciever w/ 400 Hz CW filter
SB-600 SPEAKER
SB-610 MONITOR SCOPE
SB-620 SPECTRUM ANYLIZER SCOPE
SB-630 STATION CONSOLE
SB-640 REMOTE (LMO) VFO
SB-650 FREQ DISPLAY
HM-102 WATT METER
HD-3030 RTTY TU UNIT
HD-3006 RTTY 'CROSS-FIRE' TUNER
HD-1481 REMOTE COAX SWITCH
HP-23B POWER SUPPLY
HP-13B MOBILE POWER SUPPLY (NEVER TIRED THIS ONE OUT)
SBA-100-1 MOBILE MOUTING UNIT

QTH is Western New York, and would prefer pickup, so as to demo and save
on shipping costs and hassels. Will ship however, if interested.
Asking $650.00 U.S. (plus any shipping) as a complete package.
If interested please contact Shane, WB2WPM, sbrady@pce.net.
Or evenings (EST) at (716) 675-5797 ...

73, Shane WB2WPM

5317. Re: WTD: Service Man. for HP 400H VTVM & Gen Rad 1650B Imp Bridge

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: "D.Arnold" <D.Arnold@primocomputers.com>
Message-ID: <338912F7.6F30@primocomputers.com>
Source record: 93796

Ronald Reinhard wrote:
>
> Hi,
>
> I am looking to get copies of service manuals for the following :
>
> Hewlett Packard, Vacuum Tube Voltmeter 400H
>
> General Radio, Impedance Bridge 1650-B
>
> Can anyone help me locate these?
> I need to repair one and calibrate both.
>
> Any info is greatly appreciated!
>
> Please email me: rhard@ix.netcom.com
>
> Thanks!!!!

try the following link

http://www.manualsplus.com

5318. WTB 813 Tube Sockets

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: k9two@sprintmail.com
Message-ID: <864614459.30008@dejanews.com>
Source record: 93797

I am looking for 2 813 tube sockets for a homebrew
project.

Thanks much,

Don Ferrill K9TWO k9two@sprintmail.com

----------------==== Posted via Deja News ====----------------------
http://www.dejanews.com/ Search, Read, Post to Usenet

5319. WTB 2KV @ 50mA HV supply

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: "Robert R. Koblish" <Xn3hat@erols.com>
Message-ID: <3388FBB7.3D3@erols.com>
Source record: 93798

Hi,

Looking for a plate supply for new ATV PA -- something on the order of
50 mA @ 2KV ought to do. Can't use up a lot of rack height. If
anyone's got one kicking around that they don't need, it'd save our
having to build it.

TIA.
--
regards
-rrk

To reply, remove the leading X in my return address.

5320. URM26B SIGNAL GERNERATOR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: movius <movius@ibm.net>
Message-ID: <3388FC93.37B6@ibm.net>
Source record: 93799

WTB INTERESTED IN A CLEAN MODEL URM26B SIGNAL GENERATOR IN GOOD WORKING CONDITION. UNIT MUST BE ORIGINAL NO MODIFICATIONS. PLEASE CONTACT RON CARNET W6SJR AT CARNET2@IBM.NET.

5321. 30 cartons parts

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <3388F79C.2FF3@foothill.net>
Source record: 93800

I plan to take about 30 cartons of parts and small gear to the June 1, 1997 Livermore Swap Meet.

These are mostly some of the 4 building of stuff I bought back in February, 1996. I have now quickly gone through it all. None of this has been to a swap meet before.

I just got rid of my 10 x 20 foot storage unit. I only have my 10 x 30 foot now.. I don't really have room to bring any of this back home, and I don't intend to.

It is all packed and in my flat bed trailer. I have totally repressed what is in there. I will not be able to answer any questions as to what is there. If you build or repair you will no doubt find things you can use.

Gene with white Jeep Cherokee.

5322. fm radio cards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-25 00:00:00 UTC
From: Jerry McIntosh <jam@comsource.net>
Message-ID: <338885EA.95@comsource.net>
Source record: 93801

Has anyone try to convert these fm radiocards to work on 2 meters
With them being as cheap as they are now. I think it would a cheap
second hand receiver.

5323. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <3389412d.0@cheese.pcug.org.au>
Source record: 93706

Douglas Wielfaert <marcy@vic.com> wrote:

>By the way, What is "dead bug" construction?

Get a schematic diagram for a simple transmitter, the components and a piece of blank, single-sided PC board material. Working methodically (eg from the xtal osc/VXO towards the pi network) solder components that are earthed to the copper of the circuit board (drill no holes). Then solder components that are not connected to earth to the earthed components as per the schamatic. Where there is need for physical support but no earthed components nearby, use 10M ohm resistors as insulated standoffs, soldered direct to the board.

As you can probably appreciate, this form of construction is best for projects that don't use ICs. If you want to use ICs, use wire wrap IC sockets or mount the stages that use ICs on a small piece of unclad matrix board. You can use PC board pins to anchor these small boards to the main 'dead bug' board.

Provided leads are kept short, 'dead bug' is very good for RF circuits.

73,

Peter VK1PK

--

____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
____

5324. Cushcraft's All-American Ringo Fiberglass Vertical antenna

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: jhulet@aol.com
Message-ID: <19970526080800.EAA03259@ladder01.news.aol.com>
Source record: 93707

Hello,

I'm looking for information on Cushcraft's ARX-270 fiberglass vertical.
Anyone have any feedback about this rather expensive fiberglass 2
meter/440 vertical??

ALSO, any comments on fiberglass vertical antennas period??

Thanks,

Jhulet@aol.com

5325. Re: CB to 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <33895cff.5763115@news.mnsinc.com>
Source record: 93708

On Fri, 23 May 1997 10:24:20 GMT, "Paul Jordan" <jordan@santanet.com>
wrote:

>Does anyone know how to convert old CB radios to 6 meters? I've seen it
>talked about a few times but, never heard any tech data on actually doing
>it.
>Any help would be appreciated...
>
>Paul Jordan
>KL0AN
>Fairbanks, AK

There is a complete article you can download at:

http://www.mnsinc.com/bry/hamfiles.htm

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

5326. Mega Power Mobiles!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <FHbusJAk9XizEw08@two-way.demon.co.uk>
Source record: 93709

Just because you haven't seen it, doesn't make the earth still flat.
Another gentleman brought up the point of transformers. Most of the
super
power boys that are running MEGAwatts are running ac mobile amplifiers.
This means
that the alternators are taken full field output into step up
transformers
generating anywhere from 3000 to 4500 volts apiece. I have several
customers that are running multiple ceramic tube mobile HF amplifiers,
such as four 8877's, eight
8877's, a single 4cx10,000 and dual 4cx10,000's. you have to remember
that
the rating on these tubes is for continuous duty, not balls out
intermittant amateur
use. They will do much more power intermittantly, especially when driven
well
beyond factory specs. I have customers that are running lexidyne
generators that are used on locomotives. They are double stator designs
that generate 450 amps apiece all day long ! One guy has two of these
and
also uses a 200 amp dc Leece Neville alternator to power his driver amp,
which is 2 X
2SC2290's driving 8 X 2SC 2879's, this is why we lowly cber's laugh at
most hams. The
big boys run, at the minimum, balanced and blueprinted steel crank
350's.
The bearings/crank take a beating with this much of a load on them. I
guess this just goes to show that little boys never grow up, they just
get
more expensive toys.

Thought this would touch your sense of humour.

Phil de G4ZOW/Xtreme mobile, or at least I used to think so, until I met
this guy!

--
philip de cadenet

5327. WINRADIO

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: Luciano Marrocco <mluciano@pe.abol.it>
Message-ID: <01bc69af$77691560$1dfdb8c2@mluciano.abol.it>
Source record: 93710

anybody knows this visible product to www.winradio.com

5328. SWL'ers Looking for Pirates!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: bigjim@voicenet.com
Message-ID: <5mc32q$en5$1@news3.voicenet.com>
Source record: 93711
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Whata weekend for pirate radio loggings. Logged over 10 so far on 6.955mhz. Supposed to be alot of activity on memorial day so tune in your recievers and get some pirates in your logbooks.

Have fun

5329. Re: Mega Power Mobiles! (Darwin was right)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: Ed Wright ARS KA9AHQ/7 <emw@teleport.com.I.HATE.SPAM>
Message-ID: <33899FA6.4CC4@teleport.com.I.HATE.SPAM>
Source record: 93712

philip de cadenet wrote:
>
> Just because you haven't seen it, doesn't make the earth still flat.

> also uses a 200 amp dc Leece Neville alternator to power his driver amp,
> which is 2 X
> 2SC2290's driving 8 X 2SC 2879's, this is why we lowly cber's laugh at
> most hams.

While I can't understand why someone would want to run that much power,
much
less in a mobile, I do understand that nature takes care of it's own.

I would certainly consider being that close to that much RF as "simple
social
darwinism" and the curriosity to be self resolving.

Ed Wright

5330. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <3389AFDE.7D9C@crpl.cedar-rapids.lib.ia.us>
Source record: 93713

Paul Kein=E4nen wrote:
> =

>
> >According to Dave N., the handbook is supposed to be written
> >at a 10th grade level. =

The Handbook is not, cannot, and should not be written at a tenth grade level. There are plenty of introductory books at that level. Barnes and Noble stores carry lots of them.

Twelfth grade or Community College or electronic trade school would be more realistic.

Any High School worthy of the name teaches algebra, geometry and trigonometry.

Bill W0IYH

5331. Re: Bogen JO-100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: "Robert R. Koblish" <Xn3hat@erols.com>
Message-ID: <3389B924.3B93@erols.com>
Source record: 93714
Cross-posted to:
rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.antiques.radio+phono

Bry C wrote:

> OK, this thing has 70 Volt, 100 Volt and 120V outputs for the
> speakers.
>
> Can anyone tell me how to figure out what the IMPEDANCE is for a
> 120V output with this 100 watt amplifier?
P = I * V.

From Ohm's law, I = V / R. Substituting to get P in terms of V and R,
gives

P = V**2 / R.

Multiplying both sides by R / P,

R = V**2 / P.

Plugging in the numbers, R = 120 * 120 / 100 = 144 ohms.

> Can someone help me figure out what the impedance transformation ratio
> of such a transformer might be?

It is easily derived if you don't remember it.
See above formula, P = V**2 / Z

Ppri = (Vpri)**2 / Zpri ; Psec = (Vsec)**2 / Zsec.

Energy is conserved, power is energy per unit time, so the power in the
secondary is equal to the power in the primary. Therefore,

(Vpri)**2 / Zpri = (Vsec)**2 / Zsec.

Multiplying both sides by Zpri / (Vsec)**2 to rearrange, gives

(Vpri)**2 / (Vsec)**2 = Zpri / Z sec.

Taking the division inside the exponentiation,

Zpri / Zsec = (Vpri / Vsec)**2

Or in words, the impedance transformation ratio is the square of the
voltage transformation ratio.

Hope that this helps.
--
regards
-rrk

To reply, remove the leading X in my return address.

5332. bearcat 101

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: mikek0brxr@aol.com
Message-ID: <19970526163300.MAA24356@ladder01.news.aol.com>
Source record: 93715

I just picked up a Uniden Bearcat 101 Scanner but thats all. No manual telling me how to program it or anything. If you have this kind of scanner, please let me know if you can help in any way. I'd like to get a manual or a copy of a manual for this scanner.

Thank you.

Mike
mikek0brxr@aol.com

5333. Re: Help! - Kenwood 4 pin plug pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <3389BB0B.3190@onramp.net>
Source record: 93716

Dave Yanke wrote:
>
> Does anyone have the pinouts for a Kenwood four pin plug? I need to
> either wire an MC50 or build an adapter to go to a Kenwood 8 pin
> plug (TS940).
> **********
> As long as there are tests,
> there will always be prayer in school.
>
> n9ssg@techinter.com
> http://www.techinter.com/~frrl
> **********

4-PIN 8-Pin
Pin # Pin #

1----------1
2----------2
3----------8
4----------7

Note: Some unit have pins 3-4 together. On the 8-Pin plugs pin 7 is
audio ground (shield) and Pin 8 is DC Ground (PTT Gnd)

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

5334. Re: Help! - Kenwood 4 pin plug pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <3389BB26.39B7@onramp.net>
Source record: 93717

Dave Yanke wrote:
>
> Does anyone have the pinouts for a Kenwood four pin plug? I need to
> either wire an MC50 or build an adapter to go to a Kenwood 8 pin
> plug (TS940).
> **********
> As long as there are tests,
> there will always be prayer in school.
>
> n9ssg@techinter.com
> http://www.techinter.com/~frrl
> **********

4-PIN 8-Pin
Pin # Pin #

1----------1
2----------2
3----------8
4----------7

Note: Some mikes have pins 3-4 together. On the 8-Pin plugs pin 7 is
audio ground (shield) and Pin 8 is DC Ground (PTT Gnd)

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

5335. Re: Bogen JO-100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <3389d2e0.14278028@news.mnsinc.com>
Source record: 93718
Cross-posted to:
rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.antiques.radio+phono

MANY THANKS!!

On Mon, 26 May 1997 12:24:04 -0400, "Robert R. Koblish"
<Xn3hat@erols.com> wrote:

>Bry C wrote:
>
>> OK, this thing has 70 Volt, 100 Volt and 120V outputs for the
>> speakers.
>>
>> Can anyone tell me how to figure out what the IMPEDANCE is for a
>> 120V output with this 100 watt amplifier?
>P = I * V.
>
>From Ohm's law, I = V / R. Substituting to get P in terms of V and R,
>gives
>
>P = V**2 / R.
>
>Multiplying both sides by R / P,
>
>R = V**2 / P.
>
>Plugging in the numbers, R = 120 * 120 / 100 = 144 ohms.
>
>
>> Can someone help me figure out what the impedance transformation ratio
>> of such a transformer might be?
>
>
>It is easily derived if you don't remember it.
>See above formula, P = V**2 / Z
>
>Ppri = (Vpri)**2 / Zpri ; Psec = (Vsec)**2 / Zsec.
>
>Energy is conserved, power is energy per unit time, so the power in the
>secondary is equal to the power in the primary. Therefore,
>
>(Vpri)**2 / Zpri = (Vsec)**2 / Zsec.
>
>Multiplying both sides by Zpri / (Vsec)**2 to rearrange, gives
>
>(Vpri)**2 / (Vsec)**2 = Zpri / Z sec.

>
>Taking the division inside the exponentiation,
>
>Zpri / Zsec = (Vpri / Vsec)**2
>
>Or in words, the impedance transformation ratio is the square of the
>voltage transformation ratio.
>
>Hope that this helps.
>--
>regards
>-rrk
>
>To reply, remove the leading X in my return address.

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

5336. Foothill on 14th

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: Eugene Rippen <soundval@foothill.net>
Message-ID: <3389BC63.63CC@foothill.net>
Source record: 93719

In a posting of mine from yesterday I erroneously stated when
the next Foothill Swap Meet would be.

The next Foothill Colleg Swap Meet is June 14th.

5337. Re: SWL'ers Looking for Pirates!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: Doug Robbins <doug.robbins@worldnet.att.net>
Message-ID: <01bc6a06$04f2cba0$6c0892cf@globalyst-630>
Source record: 93720
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

Why?

Doug - W2DR

Jim <bigjim@voicenet.com> wrote in article
<5mc32q$en5$1@news3.voicenet.com>...
> Whata weekend for pirate radio loggings. Logged over 10 so far on
> 6.955mhz. Supposed to be alot of activity on memorial day so tune in
> your recievers and get some pirates in your logbooks.
>
> Have fun
>
>

5338. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: John Miles <jmiles@pop.removethistomailme.net>
Message-ID: <3389E737.187B@pop.removethistomailme.net>
Source record: 93721

> As you can probably appreciate, this form of construction is best for
> projects that don't use ICs. If you want to use ICs, use wire wrap IC
> sockets or mount the stages that use ICs on a small piece of unclad
> matrix board.
>

Au contraire! :) The term 'dead bug' itself was almost certainly
inspired by the sight of a DIP package glued to a copper-clad board,
resting upside down with its pins in the air.

You can even extend this idea to PLCC chips -- on my bench right now is
a 68-pin Qualcomm DDS chip resting about 1/4" above an unbroken
copper-clad ground plane, supported only by its own ground connections
and Vcc bypass capacitors. It's accompanied by about 20 other support
chips, mostly 16- and 18-pin DIPS glued to the plane with cyanoacrylate
adhesive, but also including a surface-mount 100-MHz DAC suspended just
above the ground plane by the 12 data lines from the synthesizer chip.
Works great.

Admittedly this is a bit extreme -- if I had it to do over again, I'd
save myself the eyestrain and mount the DDS chip with a PLCC prototyping
socket with solder pads. (I wasn't aware they existed when I started
this project.) But I'd mount everything else the same way.

-- jm KE5FX

Note: My E-mail address has been altered to avoid spam

5339. Tri Band J-Pole

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: eliminate@spam.com
Message-ID: <33888de5.4306786@nntp.a001.sprintmail.com>
Source record: 93722

Hello.

I am looking for plans for a tri- band J-Pole.
I lost the plans that someone on this group sent me du to a hard drive
crash, if anyone has the plans send then to ------
craigv"at"sprintmail.com. (replace "at" with @)

Thanks a million.

73's
n0vhp
Craig

5340. CB antenna placement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: zebra@apci.net
Message-ID: <3389F761.6B24@apci.net>
Source record: 93723

I have a truck with shell on back and can someone tell me where is the best place to mount it? Like if I'm sitting in the truck and looking outward, would the antenna be best on (on the roof) right, left, center, or what??

thanks in advance,
zebra@apci.net

5341. Re: SWL'ers Looking for Pirates!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: Hughe@largewanker.com
Message-ID: <3389fb89.773344@news.alt.net>
Source record: 93724
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

I'm a looking with ya!

On Mon, 26 May 1997 12:31:05 GMT, bigjim@voicenet.com (Jim) wrote:

>Whata weekend for pirate radio loggings. Logged over 10 so far on
>6.955mhz. Supposed to be alot of activity on memorial day so tune in
>your recievers and get some pirates in your logbooks.
>
>Have fun
>

5342. Re: SWL'ers Looking for Pirates!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: yaesutom@aol.com
Message-ID: <19970526214200.RAA16797@ladder01.news.aol.com>
Source record: 93725

>Whata weekend for pirate radio loggings. Logged over 10 so far on
>6.955mhz. Supposed to be alot of activity on memorial day so tune in
>your recievers and get some pirates in your logbooks.
>
>Have fun

Try 27.555, the international music playing frequency

yaesutom@aol.com
http://members.aol.com/yaesutom

5343. Re: CB to 6 ??????????

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: on1dan@boomer.digibel.be
Message-ID: <338a01a4.27057457@NEWS.BRU.TFI.BE>
Source record: 93726

On Fri, 16 May 1997 16:52:42 GMT, "Paul Jordan" <jordan@santanet.com>
wrote:

>If you find anything out about this, can you pass it on to me also?? I too
>am interested in converting some old CB radios over to 6 meters.
>
>Thanks, Paul KL0AN
>
>jrv <jvaldes@whoi.edu> wrote in article <337B69AD.A0B6AC09@whoi.edu>...
>> I've seen one or two references to CBs converted to 6 meters. Does
>> anyone have a specific reference on which radio's might be the easiest
>> to convert? I have many of the articles (73) from the late 70's on
>> conversions but nothing timely. My interest is SSB conversions, as it
>> would be nice to get a few of the newcomers on six when we have Es
>> propagation.
>>
>> Thanks, Jim WA1GPO
>>
>>
>>
>
Hi,

where can I find this info to convers CB <> 6 meter SSB ?
73's de on1dan

5344. Re: NEW DIY PCB PROTO TECH.- Printing direct on metal foil?!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: daveb@iinet.net.au_spam_trap
Message-ID: <338a1322.39624238@news.iinet.net.au>
Source record: 93727
Cross-posted to: sci.electronics.misc,alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.design

theo@marketto.demon.co.uk (Theo Markettos) wrote, regarding use of
Al-foil to make PCBs:

:... Lastly, a fairly strong corrosive will be required to etch the
:aluminium. Copper reacts fairly readily with FeCl3, being substituted with
:an iron precipitate. Aluminium has a passivating oxide layer which makes it
:not very reactive. I suspect some _very_ nasty chemicals would be required -
:which would cause other problems.
:
The standard etchant for aluminium is strong alkali. Sodium or
potassium hydroxide will work well. They are not to be treated lightly
indeed, but hardly rate as _very_ nasty compared to some things in a
well-stocked lab cupboard. I can't comment on the possible action of
hydroxide on toner.

Be aware that hydroxide on aluminium is a standard procedure for
obtaining hydrogen gas. This of course, is highly explosive when mixed
with air. No naked lights, plenty of ventilation.

-- Dave Brooks <http://www.iinet.net.au/~daveb>
PGP public key via <http://www.iinet.net.au/~daveb/crypto.html>, or servers
"From" line rigged to foil spambots: daveb <at> iinet.net.au

5345. Re: Bogen JO-100

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: Steve <thebizlk@erols.com>
Message-ID: <3389E52B.2F29@erols.com>
Source record: 93728
Cross-posted to:
rec.audio.tubes,rec.radio.amateur.misc,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.antiques.radio+phono

I think I have a schematic for that unit or one very much like it.

Bry C wrote:
>
> MANY THANKS!!
>
> On Mon, 26 May 1997 12:24:04 -0400, "Robert R. Koblish"
> <Xn3hat@erols.com> wrote:
>
> >Bry C wrote:
> >
> >> OK, this thing has 70 Volt, 100 Volt and 120V outputs for the
> >> speakers.
> >>
> >> Can anyone tell me how to figure out what the IMPEDANCE is for a
> >> 120V output with this 100 watt amplifier?
> >P = I * V.
> >
> >From Ohm's law, I = V / R. Substituting to get P in terms of V and R,
> >gives
> >
> >P = V**2 / R.
> >
> >Multiplying both sides by R / P,
> >
> >R = V**2 / P.
> >
> >Plugging in the numbers, R = 120 * 120 / 100 = 144 ohms.
> >
> >
> >> Can someone help me figure out what the impedance transformation ratio
> >> of such a transformer might be?
> >
> >
> >It is easily derived if you don't remember it.
> >See above formula, P = V**2 / Z
> >
> >Ppri = (Vpri)**2 / Zpri ; Psec = (Vsec)**2 / Zsec.
> >
> >Energy is conserved, power is energy per unit time, so the power in the
> >secondary is equal to the power in the primary. Therefore,
> >
> >(Vpri)**2 / Zpri = (Vsec)**2 / Zsec.

> >
> >Multiplying both sides by Zpri / (Vsec)**2 to rearrange, gives
> >
> >(Vpri)**2 / (Vsec)**2 = Zpri / Z sec.
> >
> >Taking the division inside the exponentiation,
> >
> >Zpri / Zsec = (Vpri / Vsec)**2
> >
> >Or in words, the impedance transformation ratio is the square of the
> >voltage transformation ratio.
> >
> >Hope that this helps.
> >--
> >regards
> >-rrk
> >
> >To reply, remove the leading X in my return address.
>
> For great Ham Radio resources on the web, VISIT:
> http://www.mnsinc.com/bry/hamfiles.htm

5346. Re: pse help ID GE mobile

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: n3ab@ptdprolog.net
Message-ID: <3388e43a.3617475@news.ptdprolog.net>
Source record: 93802
Cross-posted to: rec.ham-radio.swap,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.swap,rec.radio.swap,rec.ham-radio

On Sun, 25 May 1997 07:41:35 -0700, "Ron, N7TAW" <ronh@chatlink.com>
wrote:

>I need help finding a schematic for two old GE mobiles (currently used
>as local repeaters), especially the wiring for the control head as the
>controllers are about to be replaced, and the wiring of the old ones us
>a mess.
>
>the numbers listed on the ID plaques are:
>
>RG56TFS66, or N.P. 243349
>
>and
>
>YG56KJJ66, or N.P. 243349
>
>They appear to be the same radios with different options.
>
>Thanks to all,
>
>Ron, N7TAW

The first unit sounds like an older GE Exec (not the Exec II). If I
recall, this radio may have tube finals. Not sure about the 2nd unit.

John N3AB

5347. Help! - Kenwood 4 pin plug pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: n9ssg@pobox.COM
Message-ID: <199705260247.VAA04458@mail.xnet.com>
Source record: 93803

Does anyone have the pinouts for a Kenwood four pin plug? I need to
either wire an MC50 or build an adapter to go to a Kenwood 8 pin
plug (TS940).
****
As long as there are tests,
there will always be prayer in school.

n9ssg@techinter.com
http://www.techinter.com/~frrl
****

5348. AM using "Autotransformer Modulation"??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <3388fc5b.2398409@news.mnsinc.com>
Source record: 93804

Subject: "Autotransformer modulation"
Send reply to: bry@mnsinc.com

Anyone here familiar with this concept and like to discuss it a little?

The idea is that you use an old P-P outout transformer and only use the primary side.

You connect the B+ to the center tap. One side goes to the modulator tube (Can be parallel tubes for more juice if desired. This would be a class A audio power amp stage.

The other side of the xfmr primary goes to your RF final amp stage. You make the idling currents about the same in the two so t hat the NET DC current in the xfmr primary is about ZERO, so that they balance out and the xfmr can handle more power that way.

Now, my friend G3UUR says that this works best when the turns ration on the two sides is about 1.4:1 - so I would think you could use an xfmr with a screen tap on the primary in some cases.

Help me out a little and tell me if this would work.

I have seen designs for small rigs using such a scheme in the old ARRL articles (but not many) and no one seems to have used this scheme for a higher power - say 100-200 watt rig.

Now, I have an audio amplifier that can supply 100 watts using a pair of 807 tubes, BUT the output tranny is no use for modulation xfmr because it only has "70V, 100V, and 120V LINE" outputs which seem to run in the range of about 50-90 ohms characteristic impedance.

I would love to use this brute as an autotrasformer choke mod scheme with a medium power AM final.

Any thoughts, y'all?

Bry, AF4K / G3XLQ

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

5349. Hamcomm interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-26 00:00:00 UTC
From: "Joseph C. Bender" <jcbender@oakland.edu>
Message-ID: <Pine.OSF.3.95.970526001506.17799A-100000@saturn.acs.oakland.edu>
Source record: 93805

Has anybody had any experience programming the hamcomm interface?
Or know of any Internet resources out there that might give some
clues/tips/information. I can't seem to find anything in that regard, and
I'd like to use it for the project that I'm currently working on.

Regards,

J. Bender

Joseph C. Bender | PGP MAIL PREFERRED
Consultant at Large | PGP key at:
Computing/Audio/Video/Stage Lighting | finger jcbender@saturn.oakland.edu
Homepage: http://www.oakland.edu/~jcbender | www.oakland.edu/~jcbender/key.asc
Information wants to be free. Emancipate some today!

5350. Re: converting cb to 10m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: k5dh@qsl.net
Message-ID: <5mfgag$8f6@sf18.dseg.ti.com>
Source record: 93656

In article <Pine.SUN.3.95.970527111842.18396D-100000@diamond.sierra.net>,
jherman@sierra.NET says...
>
>Hi Folks. I've converted a RS TRC-415 cb to 10m (changed the 10.240 MHz
>xtal to a 10.635 so that now ch1 = 28.01 MHz, ch2 = 28.02, ...).
>My intention was to use this for CW, and I found a spot to splice
>the key into (between the xtal oscillator and the driver stages)
>that gives pretty clean keying.
>Now, how to add a BFO? If its rcvr had the traditional 455 kc IF,
>a BFO would be easy to install. But without a schematic I have
>no idea what this sythesized rig uses for an IF. Any ideas?

Most a-m CB rigs use a dual conversion scheme. The most common one
I've seen is 10.695 MHz and 455 KHz. Have you looked into getting a
Sams Photofacts manual on this radio? Drop by your local CB shop
and see if the technician will let you look at the Sams manual, or
perhaps loan it to you to make a copy. Radio Shack can get you the
factory service manual on this radio as well (if you wanna pay that
much).

73,
Dean K5DH

5351. Re: NEW DIY PCB PROTO TECH.- Printing direct on metal foil?!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Pat Kelley <manaret@swbell.net>
Message-ID: <5mfhog$t58@thorgal.et.tudelft.nl>
Source record: 93657
Cross-posted to: sci.electronics.misc,alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.design

Theo Markettos wrote:
> Lastly, a fairly strong corrosive will be required to etch the
> aluminium. Copper reacts fairly readily with FeCl3, being substituted with
> an iron precipitate. Aluminium has a passivating oxide layer which makes it
> not very reactive. I suspect some _very_ nasty chemicals would be required -
> which would cause other problems.

Not at all. Ferric chloride will attack aluminum
even more readily than it will copper, and you might have
to dilute your normal etchant to keep control of the situation.
As to the rest of it, seems to me to be going to extraordinary
lengths to avoid something that was never much of a problem
to begin with. Photo-etch processes are cheap, easy, and
give excellent results. If you need to make more than a dozen
or so boards, it's cheaper to farm it out to a board shop
anyway.

--
\\
"I think, therefore you are. Don't make me regret it."
http://www.flash.net/~manaret/
//

5352. Re: CB antenna placement

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <338AF94E.469@taxes.net>
Source record: 93658

Some often overlooked items of mobile antenna placement --

o How high is the top of the antenna when installed?
(parking garages, low branches, the fluorescent lights at Sonic...)
o How sturdy is the sheet metal where the antenna is attached?
o How hard/easy is it to attach your feed line?
o What else is in the way, like a tailgate or fog lamp?

These should be given greater weight than "what's the best place"
from an electrical standpoint. In this sense, "best" is the highest
point, as close to the center of the vehicle as possible, to provide
the best pattern. If you have a fiberglas shell on your truck, you
may get the best pattern on CB with the antenna in the middle
of the hood. For 2 meter, the roof may be best.

I gave up a long time ago finding the "best" place and instead went
with the installation that was the most secure, easiest to attach
feedline, and easiest to work on or around.

5353. Re: CB to 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Anders Kvalvaag <anderskv@online.no>
Message-ID: <01bc6aeb$56506760$1e058d2c@anders>
Source record: 93659

The article "CB to Six metres", by ZR1EV can be downloaded from
my new Web page, at the following URL:

http://home.sol.no/anderskv/files/mods/cb2six/cb2six.zip

Hope this may be of help...

73 de Anders, LC3HAT
anderskv@online.no
http://home.sol.no/anderskv/lc3hat/

5354. need help with RF speech compressor, SN76514 BM ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Peter Shintani <shintani@tv.sony.co.jp>
Message-ID: <01bc6af7$d8ff2f00$6103022b@dell-for-peter>
Source record: 93660

Hi:
I am currently wasting my free time
by trying to design an
RF speech processor based upon a Texas Instruments
SN76514 Balanced Modulator IC. My problem is that the
BM used to recreate the audio seems to have an
asymmetric response. Does anyone have any
experience with the TI SN76514 ?

I use a TL084 as a mild speech clipper and buffer,
a second TL084 has a 300-3500 Hz BPF, feed the
first SN76514 to create the DSB signal.
The local oscillator is a LC osc at 453.5 kHz.
The DSB signal is boosted with a 2SK241
and clipped with two diodes, buffered
with a 2SK125 and fed into a ssb filter.

I am currently using a Murata CFJ455K5
monolithic ceramic filter, about a 2.4 kHz @
-6db response to filter out the unwanted
products of the prior clipping stage.
The SSB signal is then fed into the second
SN76514 BM , sent into a BPF to
remove any residual carrier and noise.

The output of the second BM is distorted.
I am feeding a local level about about 120 mVpp
into pin 5 of both IC's, individually buffered
from the one local osc. The input level to the
2nd BM is about 25 mVpp.
The distortion is apparent even there is
zero compression and and zero clipping.
I am just following the recommendations of the TI
spec sheet. Does anyone have any suggestions ?
Did TI ever release a detailed applications guideline
for this IC ?
Should I forget about using the SN 76514 and
use a different IC for a BM. (I don't have
access to small toroids so I can't make a
discrete BM. I have to use IC's.

Sincerely

Peter

5355. Re: UHF Repeater Desense Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: "Allan (VE6AQK)" <doblera@cadvision.com>
Message-ID: <338B836F.6EE5@cadvision.com>
Source record: 93661

Tracy Dillingham wrote:
>
> Howdy,
>
> Hoping someone out there might be able to shed some light on or suggest a
> solution to a problem I am having with repeater receiver desense.

>
> I'd welcome any help or advice. This one's got me flustered...
>
> 73 de Tracy
> tdilyham@rof.net

I doubt the tx just went spurious or the old receiver would have been affected too. I think the hot ticket is too turf the Hamtronics receiver and put a good preamp on the original GE receiver. GE even left a spot in the the front end in which to place a preamp. The reason that the GE receiver was not as sensitive is because it had more filtering, which is lossy. Sometimes adding a hot preamp can cause problems too. If the amp has 20dB gain, you lose 20 dB in selectivity. I suppose everything in life has a trade-off.

Allan VE6AQK

5356. FreeNetAccessWorldwide

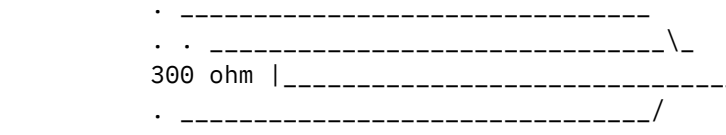
Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: interbbs@hotmail.com
Message-ID: <338b1798.8494700@hiroken.hiroken.or.jp>
Source record: 93662

```
Free Adult Internet Connection Worldwide Via Our Bbs.
Follow the link and enjoy...
http://cybercity.hko.net/la/interbbs/freenet/free.htm
```

5357. Re: TV 75/300 ohm balun for 3W transmitting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: "R. F. Gillette" <r.f.gillette@ieee.org>
Message-ID: <338A2EEA.7557@ieee.org>
Source record: 93729
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

Bob Cromwell wrote:
>
> I'm planning to build the dual rhombic antenna for 1296 MHz, described
> in a recent "QST", and am considering how to transform its 300 ohm
> to (roughly) 50 ohms.
>
> What's the current thought on using television VHF/UHF baluns for
> low-power use at amateur UHF frequencies? My transverter will have
> 3W PEP, which I *think* may be adequately handled by the little
> handy easy-to-replace TV units.
>
> Bob Cromwell KC9RG
> cromwell@ecn.purdue.edu
I have used the balun that Admiral used at 100+ watts, and it works
fine, using 4 wire rotor cable (flat like 300 ohm line but 4 wires,
Belden makes it).



Length = 1/4 wave

On the 300 ohm side short the center two conductors, connect to
the outer two. on the 75 ohm side short conductor 1 & 3 and 2 & 4
(no connect at my X) and then connect the coax to center to 1 & 3
and the shield to 2 & 4. (if your are left handed you can reverse
same)

It is very broad band, but use an electrical 1/4 wave to assure
isolation. With a choke balun it will work two octaves.

--
Richard F. Gillette PE, W9PE, Board Member, Harper CC \\////
RF gillette inc. PO Box 1605, Palatine, IL 60078-1605 (oo)
r.f.gillette@ieee.org, v)847-526-2626, f)847-526-2944 ooOO=={}==OOoo=

5358. Help Cincinnati Mw. Phone

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: "R. F. Gillette" <r.f.gillette@ieee.org>
Message-ID: <338A33CD.5B31@ieee.org>
Source record: 93730

HELP
I (and a lot of others) purchased Cincinnati Microwave 900 MHz
spread spectrum phones at the Dayton Hamvention. I have 4 out of
4 bad! CMI is in Chapter 11 and will not provide service data.
I need a schematic and/or service manual. Will pay for coping and
postage.

THANKS
--
Richard F. Gillette PE, W9PE, Board Member, Harper CC \\////
RF gillette inc. PO Box 1605, Palatine, IL 60078-1605 (oo)
r.f.gillette@ieee.org, v)847-526-2626, f)847-526-2944 ooOO=={}==OOoo=

5359. Re: TV 75/300 ohm balun for 3W transmitting?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: "R. F. Gillette" <r.f.gillette@ieee.org>
Message-ID: <338A35B9.1175@ieee.org>
Source record: 93731
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna

R. F. Gillette wrote:
>
> Bob Cromwell wrote:
> >
> > I'm planning to build the dual rhombic antenna for 1296 MHz, described
> > in a recent "QST", and am considering how to transform its 300 ohm
> > to (roughly) 50 ohms.
> >
> > What's the current thought on using television VHF/UHF baluns for
> > low-power use at amateur UHF frequencies? My transverter will have
> > 3W PEP, which I *think* may be adequately handled by the little
> > handy easy-to-replace TV units.
> >
> > Bob Cromwell KC9RG
> > cromwell@ecn.purdue.edu
> I have used the balun that Admiral used at 100+ watts, and it works
> fine, using 4 wire rotor cable (flat like 300 ohm line but 4 wires,
> Belden makes it).
>
> . _________________________________
> . __________________________________
> 300 ohm |_________________________________X_ 75 ohm
> . _________________________________/
>
> Length = 1/4 wave
>
> On the 300 ohm side short the center two conductors, connect to
> the outer two. on the 75 ohm side short conductor 1 & 3 and 2 & 4
> (no connect at my X) and then connect the coax to center to 1 & 3
> and the shield to 2 & 4. (if your are left handed you can reverse
> same)
>
> It is very broad band, but use an electrical 1/4 wave to assure
> isolation. With a choke balun it will work two octaves.
>
> --
> Richard F. Gillette PE, W9PE, Board Member, Harper CC \\////
> RF gillette inc. PO Box 1605, Palatine, IL 60078-1605 (oo)
> r.f.gillette@ieee.org, v)847-526-2626, f)847-526-2944 ooOO==={}==OOoo=

5360. Re: Alinco DJ-162 - batteries wanted...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Tony Fay <tonyfay@indigo.ie>
Message-ID: <338A45D0.5DE3@indigo.ie>
Source record: 93732

Slobodan R. Ljubisic wrote:
>
> Anybody has (or knows where I can get) EBP-10NA (7,2V/700 mAh) battery for old
> but still operating Alinco DJ-162TD, for sale? It doesn't have to be EBP-10NA,
> just any matching to above mentioned handheld which is 'compatible' with even
> older model DJ-160.
>
> I would prefer new ones, however, used and in 'good shape' are also most
> welcome, as well as other accessories You may have for it.
>
> Thank You very much in advance!
>
> Slobodan, YT1RVS
> <ljubisic@EUnet.yu>

Have you tried opening the battery pack and replacing the old cells with
new tagged and soldered cells ??
This would cost you about 1/3 of the cost of a new battery pack.

I ahve dine this to many a pack for handhelds and also for computer
laptops.
regards ,, Tony

5361. Speaker mike wiring WTD

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Tony Fay <tonyfay@indigo.ie>
Message-ID: <338A472C.32FD@indigo.ie>
Source record: 93733

I am looking for the wiring details for speaker mick for an Alinco
ALX-2E handheld.. also user book or service manual.

regards , Tony

5362. Re: Transistor Theory: Seductive Fraud?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: atkes@imap1.asu.edu
Message-ID: <5mdosd$7en@news.asu.edu>
Source record: 93734

Bill Turner (wrt@eskimo.com) wrote:
: Well said! So many scientists think because they can MEASURE
: something, they UNDERSTAND it. Not so. For example, I have yet to
: hear an explanation of why a spinning gyroscope can be balanced off
: of one's finger, with it's entire mass off to the side and not fall.
: Why does rotation apparently counteract gravity? I sent that question
: into Marilyn Vos Savant, the self-proclaimed holder of the world's
: highest IQ and never got a reply. Anyone know?

: 73, Bill W7TI

A similar question is how can I hold my arm straight out with its
entire mass off to the side and it doesn't fall either. Why does
my body apparently counteract gravity? :-)

73 Kevin w9cf@ptolemy.la.asu.edu

5363. Re: Hamcomm interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Jacqui <Jacqui@Realestatelady.com>
Message-ID: <338A6965.1228@Realestatelady.com>
Source record: 93735

Joseph C. Bender wrote:
>
> Has anybody had any experience programming the hamcomm interface?
> Or know of any Internet resources out there that might give some
> clues/tips/information. I can't seem to find anything in that regard,

Joe, I am also going to build one of these and came across this site,
http://ourworld.compuserve.com/homepages/HFFAX/ I think it has
everything you need. The Radioraft software looks good, is cheap ($28)
has a free demo and promises to increase the modes available soon.
Already it does more than my PK232 software did !
Good Luck ! Jacqui N1DVE

5364. Dynaco FM-3 Schematic/Manual

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: bfayette@aol.com
Message-ID: <19970527051800.BAA20042@ladder01.news.aol.com>
Source record: 93736

I am in need of a schematic, or preferably a user manual with the schemaitc and assembly instructions for a Dynaco FM-3 tuner. A copy is OK. Thanks!!

Brad

5365. Re: NEW DIY PCB PROTO TECH.- Printing direct on metal foil?!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <338AB447.4CE9@kfa-juelich.de>
Source record: 93737
Cross-posted to: sci.electronics.misc,alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.design

```
Theo Markettos wrote:
>
> In message <5le8ul$8vv@thorgal.et.tudelft.nl> Scott Stephens wrote:
>
> > I've been reading a some threads on these newsgroups on toner
> > transfer for fine pitch SMT and printing on metal foil. I tried it in
> > my Epson Action Laser II, and it worked good!
> >
> > Getting a SMOOTH piece of Al (Aluminum) foil, I folded it over a piece
> > of paper and fed it into the manual paper feed slot. I took care that
> > no wrinkles would scratch the drum! The transfer and fusing worked
> > great! Unlike others results (dirty foil maybe?) the toner did not rub
> > off. Inspite of the fact that, logicaly, it shouldn't work.
> >
> > But don't blame me if you mess up your toner drum, I bet Al foil will
> > scratch it up real good. And a neg. image will use lots of toner. But
> > should still be far cheaper, easier, and more powerfull than current
> > iron on crap, which never worked well for me.
> >
>
> Three thoughts about this. Firstly, the toner is meant to be attracted from
> the drum to the paper by electrostatically charging the paper. Foil will
> conduct this charge, so the toner is probably going to be deposited less
> accurately. Secondly, the fuser melts the toner, sticking it to the paper.
> The foil is likely to conduct heat away from the toner, so it may not adhere
> very well. Lastly, a fairly strong corrosive will be required to etch the
> aluminium. Copper reacts fairly readily with FeCl3, being substituted with
> an iron precipitate. Aluminium has a passivating oxide layer which makes it
> not very reactive. I suspect some _very_ nasty chemicals would be required -
> which would cause other problems.
>
> I reserve the right to be completely wrong, by the way...
>
> Cheers,
> Theo
>
> --
> Theo Markettos theo@marketto.demon.co.uk
> Liphook HardBack's home page:
> Hampshire http://www.marketto.demon.co.uk/hardback/index.htm
> UK http://www.townpages.org/diary/Liphook/index.htm
Aluminum can be etched with Ferric Cloride so no new and more dangerous
chemicals are needed.
```

No comment on the rest of the process!

Bob

5366. FS: Teflon Wire #20,22,24,26

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: radiodale@dclink.com
Message-ID: <5mefio$6jr@news1.hlc.net>
Source record: 93738
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.repair

I have the following sizes and colors of Teflon wire available. All gauges are .07/ft. except #20 which is .10/ft.

Size Color
20 1,4,7

22 0,2,3,4,6,7

24 0,5,7

26 2,6

Limit is 100ft./color/size. Shipping is $3.00 for any amount.

Thank you,
Dale

5367. Re: Hamcomm interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Gabe Nemeth <gabe@bnr.ca>
Message-ID: <338AC719.5A7F@bnr.ca>
Source record: 93739

Jacqui wrote:
>
> Joseph C. Bender wrote:
> >
> > Has anybody had any experience programming the hamcomm interface?
> > Or know of any Internet resources out there that might give some
> > clues/tips/information. I can't seem to find anything in that regard,
>
> Joe, I am also going to build one of these and came across this site,
> http://ourworld.compuserve.com/homepages/HFFAX/ I think it has
> everything you need. The Radioraft software looks good, is cheap ($28)
> has a free demo and promises to increase the modes available soon.
> Already it does more than my PK232 software did !
> Good Luck ! Jacqui N1DVE

The HTTP fails? Do you, or anyone else have another?
cheers
--
Gabe Nemeth (VE3SLJ) The binary information above, that may appear as
Northern Telecom Canada forms of text, graphics, etc, is not endorsed
by
522 University Ave. 14th Flr. Northern Telecom, NORTEL, BNR.
Toronto, M5G1W7
Ontario, CANADA

5368. Who can help me with a Simple stepper controler ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: erwin.cremers@ingram.nl
Message-ID: <5mej5i$95t$1@news.Kijfhoek.NL.net>
Source record: 93740

Can any one help me to a site on the net that has a simple stepper controler on display including the parts i need to buy.

I want to build a remote antenna controler and would like to use some stepper motors from a old printer to rotate the C's and windings.

So if you know any thing that could help me please send me a reply .

Hope to here from you !!!!!!!!!!

Erwin Cremers


```
____
| |
//////////\\\\\\\\\\
| Erwin Cremers |
| PE1MGR |
| Dutch Radio Operator |
\\\\\\\\\\//////////
|____________________|
______|Check my homepage at|________
|www.geocities.com/capecanaveral/4312|
|------------------------------------|
\----------------------------------/
|_| |_| |_| |_|
```

5369. Re: CB2SIX, part 1 of 10

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <338ad72b.8072327@news.mnsinc.com>
Source record: 93741

On Sun, 25 May 1997 15:09:02 -0400, MentalNut
<mentalnut@geocities.com> wrote:

>Plkease repost all 10 parts i have only been able to get 1, 6, 9, of 10
>and would like to try this one out!!!
>
>KF4GYQ
>Russ
>South Carolina

RUSS: They are available as a ZIP file off of my web site at:

http://www.mnsinc.com/bry/hamfiles.htm

See you on 6M !!

Bry, AF4K

For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

5370. "Boatanchors SWAP LIST"

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: bry@mnsinc.com
Message-ID: <338ae57f.11447798@news.mnsinc.com>
Source record: 93742
Cross-posted to:
rec.radio.amateur.boatanchors,rec.ham-radio.swap,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.swap

Re: BOATANCHORS SWAPLIST

This e-mail list is for posting of items for sale, want to buys,
and want to trades. It is for tube type equipment and their
contemporary accessories and parts. Any equipment with
tubes is welcome.

Here's how to subscribe:

THE LIST NAME IS: baswaplist
It is located at: baswaplist@foothill.net

To subscribe send email TO: majordomo@foothill.net
and in the message ONLY say: subscribe baswaplist

To unsubscribe send email TO: majordomo@foothill.net
and in the message ONLY say: unsubcribe baswaplist

To send a post to the members of the list:
send email TO: baswaplist@foothill.net

To get a copy of the posting sent back to yourself you
must CC it to yourself.

For ANY administrative matters, complaints, etc please
address them to:
The list manager who is: Eugene Rippen <soundval@foothill.net>

When you subscribe you will get a complete list of the rules
and commands!

HAPPY BA TRADING!
For great Ham Radio resources on the web, VISIT:
http://www.mnsinc.com/bry/hamfiles.htm

5371. Re: NEW DIY PCB PROTO TECH.- Printing direct on metal foil?!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Bob Mueller <r.mueller@kfa-juelich.de>
Message-ID: <5mep9u$oti@thorgal.et.tudelft.nl>
Source record: 93743
Cross-posted to: sci.electronics.misc,alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.design

Theo Markettos wrote:
>
> In message <5le8ul$8vv@thorgal.et.tudelft.nl> Scott Stephens wrote:
>
> > I've been reading a some threads on these newsgroups on toner
> > transfer for fine pitch SMT and printing on metal foil. I tried it in
> > my Epson Action Laser II, and it worked good!
> >
> > Getting a SMOOTH piece of Al (Aluminum) foil, I folded it over a piece
> > of paper and fed it into the manual paper feed slot. I took care that
> > no wrinkles would scratch the drum! The transfer and fusing worked
> > great! Unlike others results (dirty foil maybe?) the toner did not rub
> > off. Inspite of the fact that, logicaly, it shouldn't work.
> >
> > But don't blame me if you mess up your toner drum, I bet Al foil will
> > scratch it up real good. And a neg. image will use lots of toner. But
> > should still be far cheaper, easier, and more powerfull than current
> > iron on crap, which never worked well for me.
> >
>
> Three thoughts about this. Firstly, the toner is meant to be attracted from
> the drum to the paper by electrostatically charging the paper. Foil will
> conduct this charge, so the toner is probably going to be deposited less
> accurately. Secondly, the fuser melts the toner, sticking it to the paper.
> The foil is likely to conduct heat away from the toner, so it may not adhere
> very well. Lastly, a fairly strong corrosive will be required to etch the
> aluminium. Copper reacts fairly readily with FeCl3, being substituted with
> an iron precipitate. Aluminium has a passivating oxide layer which makes it
> not very reactive. I suspect some _very_ nasty chemicals would be required -
> which would cause other problems.
>
> I reserve the right to be completely wrong, by the way...
>
> Cheers,
> Theo
>
> --
> Theo Markettos theo@marketto.demon.co.uk
> Liphook HardBack's home page:
> Hampshire http://www.marketto.demon.co.uk/hardback/index.htm
> UK http://www.townpages.org/diary/Liphook/index.htm
Aluminum can be etched with Ferric Cloride so no new and more dangerous
chemicals are needed.

No comment on the rest of the process!

Bob

5372. Re: CB to 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Jim Valdes <jvaldes@whoi.edu>
Message-ID: <338AEAD6.10A8ED21@whoi.edu>
Source record: 93744

Bry Carling, G3XLQ / AF4K wrote:
>
> On Fri, 23 May 1997 10:24:20 GMT, "Paul Jordan" <jordan@santanet.com>
> wrote:
>
> >Does anyone know how to convert old CB radios to 6 meters? I've seen
> it
> >talked about a few times but, never heard any tech data on actually
> doing
> >it.
> >Any help would be appreciated...
> >
> >Paul Jordan
> >KL0AN
> >Fairbanks, AK
>
> There is a complete article you can download at:
>
> http://www.mnsinc.com/bry/hamfiles.htm
>
> For great Ham Radio resources on the web, VISIT:
> http://www.mnsinc.com/bry/hamfiles.htm

where on the site is the article??

5373. Re: Who can help me with a Simple stepper controler ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: sig@file.com
Message-ID: <338B17EE.4427@file.com>
Source record: 93745

erwin cremers wrote:
>
> Can any one help me to a site on the net that has a simple stepper
> controler on display including the parts i need to buy.
>
> I want to build a remote antenna controler and would like to use some
> stepper motors from a old printer to rotate the C's and windings.

Anaheim Automation has a stepper controller which is pretty inexpensive, they are in Anaheim, CA.

To make a stepper move, all you need to do is switch two windings in the motor, for example when you energize the first winding your at 0 deg. now energize the second winding and your half way between 0 deg and 2 deg. now turn off the first winding and voila you move to 2 deg. The next part is a requires a little more, you must invert the polarity of the first winding and then do the same with the other.

If you can build yourself a regulated supply to not exceed the current rating of the motor, the rest can be done by simply turning on power transistors to the windings. In the electronic trade magazines I see many ads for cheapo controllers.

On the other hand, if you still have the printer complete you already have the driver! It will take some experimentation but if you put 5v (use a 1k to drop) to the different pins of the controller you'll make the motor move.

Tim Hynde - KA8DDZ - hynde@flash.net
Equipment NorCal 40A, NorCal 38 Special, Dipoles

5374. Re: L4B Switch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Butch Magee <butch@apollo.wes.army.mil>
Message-ID: <338AF90E.ECA@apollo.wes.army.mil>
Source record: 93746

KK4TL wrote:
>
> We are looking for an on-off switch for the L4B.
> Anyone know where we might find one?
> Pls email me direct at:
> KK4TL@AOL.COM
> Thanx.

About 5 years ago I got a replacement directly from Drake, can't remember what it cost, but it was not identicle to the original switch in that it had 3 positions. When wired in and pushing to "on" the first "on" would not turn amp on, had to push again to go to the next "on". Hey, it works. They may have the correct ones in now.

Butch Magee, KF5DE

5375. Re: NEW DIY PCB PROTO TECH.- Printing direct on metal foil?!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Pat Kelley <manaret@swbell.net>
Message-ID: <338B07AD.CAD@swbell.net>
Source record: 93747
Cross-posted to: sci.electronics.misc,alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.design

Theo Markettos wrote:
> Lastly, a fairly strong corrosive will be required to etch the
> aluminium. Copper reacts fairly readily with FeCl3, being substituted with
> an iron precipitate. Aluminium has a passivating oxide layer which makes it
> not very reactive. I suspect some _very_ nasty chemicals would be required -
> which would cause other problems.

Not at all. Ferric chloride will attack aluminum
even more readily than it will copper, and you might have
to dilute your normal etchant to keep control of the situation.
As to the rest of it, seems to me to be going to extraordinary
lengths to avoid something that was never much of a problem
to begin with. Photo-etch processes are cheap, easy, and
give excellent results. If you need to make more than a dozen
or so boards, it's cheaper to farm it out to a board shop
anyway.

--
\\
"I think, therefore you are. Don't make me regret it."
http://www.flash.net/~manaret/
//

5376. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: w7el@teleport.com
Message-ID: <5mf1nfcse1@nadine.teleport.com>
Source record: 93748

In article <3389E737.187B@pop.removethistomailme.net>,
John Miles <jmiles@pop.removethistomailme.net> wrote:
>. . .
>Au contraire! :) The term 'dead bug' itself was almost certainly
>inspired by the sight of a DIP package glued to a copper-clad board,
>resting upside down with its pins in the air.
>. . .

It predates DIPs. I recall using the term (and construction method) in the
days of 8-pin round epoxy RTL "bugs" and 709 op amps.

Roy Lewallen, W7EL
Charter member, OFC

5377. +++NEED QST ARTICLE ABOUT HOMEBREW VOTER+++

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19970527170500.NAA12790@ladder02.news.aol.com>
Source record: 93749

Hi,

I remember seeing an article in a magazine that I believe was QST. The article had the schematic for a simple Voter for a multiple receiver repeater system. If you know which issue it appeared in, or if you have a copy, Please E-Mail me.

Thanx
Mike

5378. Re: Johnson CB schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Jim <jstrohm@taxes.net>
Message-ID: <338AC21F.70CF@taxes.net>
Source record: 93750

E.F. Johnson still maintains a fairly extensive set of technical information on their old products. They were able to help me with my Invader 2000 a few years back.

They're still in Wauseca IL. Give directory information a try.

5379. converting cb to 10m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: jherman@sierra.NET
Message-ID: <Pine.SUN.3.95.970527111842.18396D-100000@diamond.sierra.net>
Source record: 93751

I'm on an email-only account and cannot read this NG so *please*
eamil me any comments you might have regarding the following:

Hi Folks. I've converted a RS TRC-415 cb to 10m (changed the 10.240 MHz
xtal to a 10.635 so that now ch1 = 28.01 MHz, ch2 = 28.02, ...).

My intention was to use this for CW, and I found a spot to splice
the key into (between the xtal oscillator and the driver stages)
that gives pretty clean keying.

Now, how to add a BFO? If its rcvr had the traditional 455 kc IF,
a BFO would be easy to install. But without a schematic I have
no idea what this sythesized rig uses for an IF. Any ideas?

I'm on an email-only account and cannot read this NG so *please*
email me your comments.

Thanks in advance, and 73,
Jeff KH2PZ / 7

5380. Re: UHF Repeater Desense Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: email@domain.com
Message-ID: <email-2705971447450001@port34.aug5.gn-intl.net>
Source record: 93752

In article <N.052797.113654.99@rof.net>, tdilyham@rof.net (Tracy Dillingham) wrote:

> Howdy,
>
> Hoping someone out there might be able to shed some light on or suggest a
> solution to a problem I am having with repeater receiver desense.
>
> Recently, I decided to give our 449.725- GE MastrII Rack Mount Deck (what I
> thought to be) a better set of ears. The old MastrII UHF Receiver with .5
> microvolt + plus receiver deck was replaced with a Hamtronics R451 Receiver.
> The new receiver is contained within an RF Tight pressed fab aluminum box with
> tight fitting cover mounted within the existing receiver deck (on the drop lid)
> of the MastrII Base/Repeater Chasis. All wires (B+, COS and Spkr Audio) use
> feed through caps. The antenna connection still uses the stock grey RG-174u RCA
> cabling from inside the receiver deck to the rf tight enclosure (which is
> enclosed in the old receiver's compartmented cavity covered by yet another
> lid).
>
> The GE Exciter (within the drop lid in the lower partition) and GE 30 Watt PA
> (contained within the swiss cheese box attached to the heat sink on the back)
> are the only GE OEM parts being utilized. Controller is an MCC RC-100 mounted
> on top of a slide in card (the old GE decommissioned COS relay card) located in
> the card cage (directly above the PA). GE fans will recognize this as the place
> where the 10VDC regulator resides.
>
> The problem: RECEIVER DESENSE! When the PA is off, reception is great! Full
> quieting even on the weakest signals (every repeater owner's dream!). Turn on
> the transmitter and it all goes to hell (every repeater owner's nightmare)!
> Given the extent of rf sheilding, feed throughs, and specific repeater design
> by GE, etc., I am at a loss to figure out what's wrong. The GE receiver did
> alright--but nothing to write home about! Of course, it had a 7 stage helical
> front end. But Hamtronics claims a -100dB figure with use of an 8 pole crystal
> filter. Duplexers are DB Products 80+ dB full size rack mounts. I don't believe
> these are the culprits since they worked before the ear transplant.
>
> Now, I'm thinking PA? Could the PA be blasting spurs directly into the

R451? Or
> what else could be responsible? Might anyone out there have had similar
> experiences or possibly be able to give me a clue as to what might be
happening?
>
> I'd welcome any help or advice. This one's got me flustered...
>
> 73 de Tracy
> tdilyham@rof.net

Get/rent a spectrum analyzer and see where the spurs are coming from. Could
be that you could retune the LPA in the exciter or the PA in the amp and "put"
the spur(s) somewhere other than the receiver frequency. Or, you could have
a component ready to die. GL

--
B C N U
73 de AC4WW

5381. UHF Repeater Desense Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: tdilyham@rof.net
Message-ID: <N.052797.113654.99@rof.net>
Source record: 93753

Howdy,

Hoping someone out there might be able to shed some light on or suggest a solution to a problem I am having with repeater receiver desense.

Recently, I decided to give our 449.725- GE MastrII Rack Mount Deck (what I thought to be) a better set of ears. The old MastrII UHF Receiver with .5 microvolt + plus receiver deck was replaced with a Hamtronics R451 Receiver. The new receiver is contained within an RF Tight pressed fab aluminum box with tight fitting cover mounted within the existing receiver deck (on the drop lid) of the MastrII Base/Repeater Chasis. All wires (B+, COS and Spkr Audio) use feed through caps. The antenna connection still uses the stock grey RG-174u RCA cabling from inside the receiver deck to the rf tight enclosure (which is enclosed in the old receiver's compartmented cavity covered by yet another lid).

The GE Exciter (within the drop lid in the lower partition) and GE 30 Watt PA (contained within the swiss cheese box attached to the heat sink on the back) are the only GE OEM parts being utilized. Controller is an MCC RC-100 mounted on top of a slide in card (the old GE decommissioned COS relay card) located in the card cage (directly above the PA). GE fans will recognize this as the place where the 10VDC regulator resides.

The problem: RECEIVER DESENSE! When the PA is off, reception is great! Full quieting even on the weakest signals (every repeater owner's dream!). Turn on the transmitter and it all goes to hell (every repeater owner's nightmare)! Given the extent of rf sheilding, feed throughs, and specific repeater design by GE, etc., I am at a loss to figure out what's wrong. The GE receiver did alright--but nothing to write home about! Of course, it had a 7 stage helical front end. But Hamtronics claims a -100dB figure with use of an 8 pole crystal filter. Duplexers are DB Products 80+ dB full size rack mounts. I don't believe these are the culprits since they worked before the ear transplant.

Now, I'm thinking PA? Could the PA be blasting spurs directly into the R451? Or what else could be responsible? Might anyone out there have had similar experiences or possibly be able to give me a clue as to what might be happening?

I'd welcome any help or advice. This one's got me flustered...

73 de Tracy
tdilyham@rof.net

5382. Re: QRP (my first such homebrew) Xmtr chokes 2 minues after powerup

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <338b41c6.0@cheese.pcug.org.au>
Source record: 93754

John Miles <jmiles@pop.removethistomailme.net> wrote:
>> As you can probably appreciate, this form of construction is best for
>> projects that don't use ICs. If you want to use ICs, use wire wrap IC
>> sockets or mount the stages that use ICs on a small piece of unclad
>> matrix board.
>>
>
>Au contraire! :) The term 'dead bug' itself was almost certainly
>inspired by the sight of a DIP package glued to a copper-clad board,
>resting upside down with its pins in the air.

What happens if the IC fails or you need to (temporarily) borrow it for another project? In either case, you would need to unsolder all the components soldered to the IC (regardless of whether it's in a socket or not) and use some pliers or a lever to prise the chip off the board.

As one who is always pinching ICs from projects to use in others (especially NE602s :) all this is too messy for me, and with my typical hamfistedness, I'm likely to break something in my attempt to get the chip off the board.

73,

Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

5383. Wanted: Notching dimensions for rack panels

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-27 00:00:00 UTC
From: jpotter@jpaw.com
Message-ID: <338b3aae.364710559@news.santafe.edu>
Source record: 93755
Cross-posted to: sci.electronics.design,rec.radio.amateur.homebrew

Somewhere I have seen a table of dimensions for standard rack panels.
I know they come in multiples of 1.75 inches in height, what I'm
looking for is the standard locations for the notches in standard
height panels. Can anyone point me to such table?

Thanks,

Jim Potter (K9GXC)

5384. Re: Who can help me with a Simple stepper controler ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: gelleric@goethe.informatik.uni-stuttgart.de
Message-ID: <5mgnte$ova@zdi.informatik.uni-stuttgart.de>
Source record: 93663

In article <338B17EE.4427@file.com>, sig@file.com writes:
|> erwin cremers wrote:
|> >
|> > Can any one help me to a site on the net that has a simple stepper
|> > controler on display including the parts i need to buy.
|> >
|> > I want to build a remote antenna controler and would like to use some
|> > stepper motors from a old printer to rotate the C's and windings.
|>

I just built a remote control to tune the capacitor of my homemade
magnetic loop antenna. I used a stepper motor that was part of a 5"25
floppy disk drive (for moving the r/w-head). Try getting a drive
which is out of order - the stepper motor will probably still work.
This kind of stepper motor can be controlled by an SAA 1028. You
only need very few additional parts. Ask for the IC's data sheet.

vy 73,

Wolfgang DJ3TZ

5385. Re: fm radio cards

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: archer@netgate.net
Message-ID: <338fe4ae.7446439@nntp.netgate.net>
Source record: 93664

On Sun, 25 May 1997 13:33:14 -0500, Jerry McIntosh <jam@comsource.net>
wrote:

>Has anyone try to convert these fm radiocards to work on 2 meters
>With them being as cheap as they are now. I think it would a cheap
>second hand receiver.

While you could down-convert the 2 meter band to some 4 Mhz portion
of the 88-108 Mhz FM band, the results would be disappointing. FM
broadcast receivers are designed to demodulate much wider-band
signals than used by amateurs. I suspect the distortion would be
awful.

Also, the steps would be too far apart with digital tuning.

That said, I wouldn't be the least surprised if some ambitious
ham didn't find a clever way to make this work. :-)

5386. Re: converting cb to 10m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <338bec20.0@cheese.pcug.org.au>
Source record: 93665

jherman@sierra.NET (Jacqueline Herman) wrote:
>I'm on an email-only account and cannot read this NG so *please*
>eamil me any comments you might have regarding the following:
>
>Hi Folks. I've converted a RS TRC-415 cb to 10m (changed the 10.240 MHz
>xtal to a 10.635 so that now ch1 = 28.01 MHz, ch2 = 28.02, ...).
>
>My intention was to use this for CW, and I found a spot to splice
>the key into (between the xtal oscillator and the driver stages)
>that gives pretty clean keying.
>
>Now, how to add a BFO? If its rcvr had the traditional 455 kc IF,
>a BFO would be easy to install. But without a schematic I have
>no idea what this sythesized rig uses for an IF. Any ideas?
>

To check the IF of the equipment you need an RF signal generator capable of coverage of from below 400 KHz to 30 MHz or so. Connect a piece of wire to the output of the signal generator. With the CB receiver on (say channel 20, preferably with covers off), sweep the generator over its frequency range. If you hear a carrier try switching the channel change knob to see if it disappears. If it does, keep tuning the generator. If the carrier can be heard on all channels, you've found the IF (or a subharmonic of it) with your signal generator. To check this, it's probably a good idea to start with the sig gen on its highest frequency and tune down - then you will pick up the first (high) IF first and the second (low) IF next. Common IF freqs for CBs are 10.7, 7.8 & 455 kHz. If you find that the carrier can be heard across two channels at settings of the signal generator that are not harmonically related, your radio probably has two or more IF. And, you can use the sig gen as a temporary BFO until you finish building the permanent unit.

73,

Peter VK1PK

--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.

5387. FS: Tektronix 465M's, Tubes

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: sales@emodus.com
Message-ID: <5mgtff$fa2$7@news.internetmci.com>
Source record: 93666

Hello!
We have a couple of specials this month:

TEKTRONIX 465M 100MHz Oscilloscopes, all reconditioned and
calibrated, 120 day warranty shipping free in the USA, $465.00 each!

JAN 6186W, equal to 6AG5WA, sharp cut-off pentodes 7 pin miniature
made by Philips in the USA 1986, NOS, individual boxes, 8000 available,
$0.10 each, shipping in the USA: 1 - 199 $3.00, 200 or more shipping free!

For more ELECTRON TUBES (both new and/or used), various ANTIQUE RADIO
COMPONENTS or ELECTRONIC TEST EQUIPMENT, please E-mail

sales@emodus.com

For a complete list. Thank you! Dealer inquiries welcome!

5388. Re: UHF Repeater Desense Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: hq54@aol.com
Message-ID: <19970528032701.XAA10427@ladder02.news.aol.com>
Source record: 93667

Get rid of the Hamtronics stuff, It's garbage!!!!!!!!!!!!

5389. Re: UHF Repeater Desense Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: frog207lillypads@juno.com
Message-ID: <5mg97g$jn2$2@news.wco.com>
Source record: 93668

>
>Hoping someone out there might be able to shed some light on or suggest a
>solution to a problem I am having with repeater receiver desense.
>
>Recently, I decided to give our 449.725- GE MastrII Rack Mount Deck (what I
>thought to be) a better set of ears. The old MastrII UHF Receiver with .5
>microvolt + plus receiver deck was replaced with a Hamtronics R451 Receiver.

No need to go any farther than what's above. It contains the reason for your problem. Personally, I have found the GE Mastr II receiver to be one of the best ever produced. What you should have tried is a nice medium gain RF preamp infront of the GE RX. That Hamtronics may have lots of sensitivity, but it lacks in Selectivity by leaps and bounds compared to the MAstr II. Those front end helical resonators on the GE are what kept your TX out! The Hamtronics has nothing like it. That 8 pole filter you cite for the HAmtronics is down the line in the IF and does nothing to reject adjacent frequency coming into the RX front end, where it gets amplified.

My recommendation, go back to the GE and try a nice quality preamp. Also, you may have a duplexer tuning problem that didn't manifest itself until you added a RX with more gain. If you get desense with a preamp in front of the GE, do some serious duplex tuning.

Ed W7DXZ

REPLY INFO:
==========
Return address modified to prevent automatic SPAM response.
TO REPLY: remove the "lillypads" from my return address.
==========

5390. Pointer to Ham Radio.FAQ

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2805970607440001@wd1v.mv.com>
Source record: 93669
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

Announcing NEW
Ham Radio.FAQ

This is the second generation of the original file that was
a regular USENET posting entitled

"rec.radio.amateur.misc Frequently Asked Questions"

The NEW Ham Radio.FAQ is a HyperText document that is on the
WWW and it contains 3 chapters plus hundreds of LINKS to radio
related sites!

1 - Introduction to the Ham Radio.FAQ
2 - Amateur Radio Organizations, Services, and Data Sources
3 - Amateur Radio Advanced and Technical Questions

Please provide a copy of the Ham Radio.FAQ to any new or
soon-to-be Hams that you know or share with them the URL to this
site:

http://www.mv.com/ipusers/wd1v

Send me an EMAIL <or packet with your Email address> if you want the
FAQ text file sent to you as an attached <120 K> file with the words
"HAM FAQ" on the subject line.

Send me a formatted disk with SASE disk mailer if you want the
FAQ text file sent to you on disk. PC or Mac are fine.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

5391. Free Ham Radio Test Simulators - Mac - + CW Tutor

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2805970609170001@wd1v.mv.com>
Source record: 93670
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

FREE - BRAND NEW Macintosh HAM TEST SIMULATORS

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The newest Macintosh Ham Test Simulators are HERE (and THERE if you can FTP)!

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Or you may obtain a version "6" Ham Test Simulator by mailing me a *FORMATTED
disk HD disk (1.4 M) and include a Self Addressed and Stamped disk mailer for
the return. Specify the test you need.

Simulator Name Version Valid Until

Advanced Ham Test 6.0 June 30, 1998
Extra Ham Test 6.0 June 30, 2000
General Ham Test 6.0 June 30, 1998
Novice Ham Test 6.0 June 30, 1997
Technician Ham Test 6.0 June 30, 1997

Your comments and suggestions for future versions are always welcome.

ATTN: PC and other platform users:
^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^^
My Home Page also links to sites that offer live ham test simulations right
over the net - plus links to Ham Radio.FAQ and VE session schedules.

Good luck with YOUR next test!

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

5392. Macintosh Ham Radio Users Group = Macnet

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: john@wd1v.mv.com
Message-ID: <john-2805970611100001@wd1v.mv.com>
Source record: 93671
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

There is an informal group of amateur radio operators that use Macintosh computers called "Macnet" with > 800 members world-wide.

We stay in touch with each other via packet & Internet and we have a HyperCard stack that tells the story of each of us called "Macnet Roster" that list

o CALL SIGN @ HOME PBBS
o FULL NAME
o Street ADDRESS
o CITY, STATE, ZIP
o INTERNET ADDRESS
o MACS USED
o RADIOS USED
o SOFTWARE USED
o PASSIONS
o COMMENTS

Macnet members can then communicate with one another directly or use our Macnet Moderated Mailing List to pose comments or questions to all of us on the Net.

To join Macnet, put YOUR INFO (via EMAIL or via disk using TEACH TEXT on a formatted disk in a self addressed and stamped disk mailer that is in a large envelope clearly marked "ROSTER").

Or connect to our home page via the WWW http://www.mv.com/ipusers/wd1v

-------<sent to all new Macnet Subscribers & Macnet Roster Updates>---------

Welcome to Macnet!

A trip to my home page also reveals there are many superb files and programs for amateur radio operators that want to use Mac computers. See more details in January 1997 QST, page 100. http://www.mv.com/ipusers/wd1v/

* Ham Radio Test Simulators - where you can go from Novice to Extra Class practicing the actual tests right on your Mac! Check out the info on the new NO CODE license or scramble your neurons and learn Morse on the Mac too!

* Macnet Email Reflector - send an Email to all Macnet users on the Internet.

* Macnet Roster - a virtual "Who's Who" HyperCard stack with > 800 entries giving the names, addresses, phone numbers, of radio operators all over the world that are using Macs. Check out their projects and

their passions and put a design on your Mac Radio future. See what neat things are being done with Macs and Ham Radio!

* Mac Ham Radio Software Listing - as the name implies, its "The List" of the latest - much of it with FTP links so what you see is what you can get your new programs with just a click.

* Ham Radio.FAQ - compiled on a Mac with a lots of links to great Mac FTP sites for radio, electronic engineering, and similar data.

73,

John D. Seney |_|_|_|_| john@wd1v.mv.com
144 Pepperidge Dr |_| |_| Page 5956779@skymail.com
Manchester, NH 03103-6150 |_|_ _|_| wd1v@wb1dsw.nh.usa.noam
Voice Mail 617.686.9882 | | | | Fax 603.627.1623

http://www.mv.com/ipusers/wd1v

5393. Re: need help with RF speech compressor, SN76514 BM ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: myers@West.Sun.COM
Message-ID: <5mgc1m$9d4@abyss.West.Sun.COM>
Source record: 93672

In article <01bc6af7$d8ff2f00$6103022b@dell-for-peter>,
Peter Shintani <shintani@tv.sony.co.jp> wrote:
>Hi:
> I am currently wasting my free time
>by trying to design an
>RF speech processor based upon a Texas Instruments
>SN76514 Balanced Modulator IC. My problem is that the
>BM used to recreate the audio seems to have an
>asymmetric response. Does anyone have any
>experience with the TI SN76514 ?
>
>I use a TL084 as a mild speech clipper and buffer,
>a second TL084 has a 300-3500 Hz BPF, feed the
>first SN76514 to create the DSB signal.
>The local oscillator is a LC osc at 453.5 kHz.
>The DSB signal is boosted with a 2SK241
>and clipped with two diodes, buffered
>with a 2SK125 and fed into a ssb filter.
>
>I am currently using a Murata CFJ455K5
>monolithic ceramic filter, about a 2.4 kHz @
>-6db response to filter out the unwanted
>products of the prior clipping stage.
>The SSB signal is then fed into the second
>SN76514 BM , sent into a BPF to
>remove any residual carrier and noise.

What happens when you remove or disable the clipper, so
you just create a DSB signal, reduce one of the sidebands,
and demodulate the result?

--
* Dana H. Myers K6JQ, DoD#: j | Views expressed here are mine and should *
* (310) 348-6043 | not be interpreted or represented as *
* Dana.Myers@West.Sun.Com | those of Sun Microsystems, Inc. *

5394. Re: UHF Repeater Desense Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: Chris Nicholson <csnichol@mail.delcoelect.com>
Message-ID: <338C1E8B.67B6@mail.delcoelect.com>
Source record: 93673

Ed G. wrote:
>
> >
> >Hoping someone out there might be able to shed some light

replaced with a Hamtronics R451 Receiver.
>
> No need to go any farther than what's above. It contains the reason for
>

Ed G Is right on target. Hamtronics stuff is junk to put it
mildly. They have no front end. Stick with the GE you may be able to use
a gasfet preamp, the only to tell is to try.

73 Chris N9LLO

5395. Re: UHF Repeater Desense Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: Mike Willis <"mjw "@rcru.rl.ac.uk>
Message-ID: <338C2652.1A46@rcru.rl.ac.uk>
Source record: 93674

You need high Q filters on both transmittter and receiver. All transmitters produce broadband noise and nearly all receiver front ends will saturate without them when presented with 0 dBm or higher inputs.

5396. Re: need help with RF speech compressor, SN76514 BM ?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: "William E. Sabin" <sabinw@crpl.cedar-rapids.lib.ia.us>
Message-ID: <338C4561.526A@crpl.cedar-rapids.lib.ia.us>
Source record: 93675

Peter Shintani wrote:
>
>
> The DSB signal is boosted with a 2SK241
> and clipped with two diodes, buffered
> with a 2SK125 and fed into a ssb filter.
>
> I am currently using a Murata CFJ455K5
> monolithic ceramic filter, about a 2.4 kHz @
> -6db response to filter out the unwanted
> products of the prior clipping stage.
> The SSB signal is then fed into the second
> SN76514 BM , sent into a BPF to
> remove any residual carrier and noise.

An RF/IF clipper requires *two* IF filters, one between the first modulator and the clipper and the second between the clipper and the second modulator.

The purpose of the first IF filter is to remove the image frequencies so that they do not get into the clipper. If this is not done, odd-order harmonics are generated in the audio output. A close scrutiny of the various mixing operations involved will show why this happens.

The 1996/7 ARRL Handbooks, chapter 17, show the correct block diagram. The 1995 block diagram is incorrect. As the author of that chapter. that oversight was my error.

I would also suggest eliminating the audio clipping because it is redundant.

You might also like to read my article in the Winter 1997 edition of Communications Quarterly, which uses a different simple approach.

Bill W0IYH

5397. Re: NEW DIY PCB PROTO TECH.- Printing direct on metal foil?!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5mh7pn$rtc@news1.zippo.com>
Source record: 93676
Cross-posted to: sci.electronics.misc,alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.design

In message <5le8ul$8vv@thorgal.et.tudelft.nl> Scott Stephens wrote:

>> I've been reading a some threads on these newsgroups on toner
>> transfer for fine pitch SMT and printing on metal foil. I tried it in
>> my Epson Action Laser II, and it worked good!
>>
>> Getting a SMOOTH piece of Al (Aluminum) foil, I folded it over a piece
>> of paper and fed it into the manual paper feed slot. I took care that
>> no wrinkles would scratch the drum! The transfer and fusing worked
>> great! Unlike others results (dirty foil maybe?) the toner did not rub
>> off. Inspite of the fact that, logicaly, it shouldn't work.

How do you plan to solder components to the Aluminum?

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

5398. FreeNetAccessWorldwid+

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: interbbs@hotmail.com
Message-ID: <337b1798.8494700@hiroken.hiroken.or.jp>
Source record: 93677

```
Free Adult Internet Connection Worldwid+ Via Our Bbs.
Follow the link and enjoy...
http://cybercity.hko.net/la/interbbs/freenet/free.htm
```

5399. Re: Johnson CB schematic

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: Lyle Koehler <k0lr@emily.net>
Message-ID: <338CAFAF.AAE@emily.net>
Source record: 93678

Jim wrote:
>
> E.F. Johnson still maintains a fairly extensive set of technical
> information on their old products. They were able to help me
> with my Invader 2000 a few years back.
>
> They're still in Wauseca IL. Give directory information a try.

Try Waseca, MN

73,

Lyle, K0LR

5400. PIN diode T/R switching at the KW level

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: owens@stout.atd.ucar.edu
Message-ID: <5miccr$7l3$1@ncar.ucar.edu>
Source record: 93679

I'd like to build a PIN diode T/R switch at HF (1.8-30MHz) at
the 1.5 KW level.

Alpha Power Inc. uses this type of switching in their famous
line of HF linear amplifiers. Does anyone out there have an
Alpha amplifier that would volunteer schematic and PIN diode
information that would help in building this type of T/R switch?

Has anyone built (successfully) a PIN diode T/R switch that
works at the 1.5 KW level? If so, I'd like to hear from you.

Thanks & '73, Chip Owens, NW0O, Boulder, CO

--
Chip Owens NW0O, (owens@stout.atd.ucar.edu)

5401. need help w/ troubleshooting - LAFAYETTE 6m AM TCVR

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: jwg6@cornell.edu
Message-ID: <jwg6-2805972230380001@cu-dialup-1203.cit.cornell.edu>
Source record: 93680
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.boatanchors

Trying to get a HE45b up and running, but having some trouble. Any comments/suggestions would be great...

A 7868 pentode is the modulator and audio amp. The final (plate modulated) is a 2E26. Problem is, no modulation. I have to whistle very loud into the
mic to get any indication that modulation is taking place at all. I have checked the mic and tested all the tubes, and all appear to be fine.

One outstanding symptom is that the 7868 (modulator) gets VERY HOT, alarmingly so, even when I am not attempting to transmit at all. I checked the tube-socket voltages and they seem to be OK, in the ballpark. The rig works fine in receive mode, incidentally, so as an audio amp the tube is working properly.

When I first got the rig there was a strange squeal (intermittent) upon adjusting the tank (output) capacitor for peak power. The squeal seemed to be coming from the 7868 or nearby.

Now I don't even get the squeal, and the relative transmit power seems to be greatly reduced compared to what it was. I used to get a half-scale reading on the meter when keying the mic and peaking the output, but now about 1/5 scale is the best I can get.

The manual states that the meter should fluctuate as you speak, and I have not had this happen at all. A loud whistle will make the meter reading drop, but only a very tiny bit.

One final note -- now when I key the mic the output hits its max value, but immediately falls off over the first few seconds.

I replaced the modulator 7868 tube recently, but the rig still does not behave as it should (there was no difference).

I would be grateful for any suggestions. The tcvr is in excellent cosmetic condition and the components do not show signs of failure, burnout or leaking, so far as I can tell. So... ??????. Anybody got any hints?

Many thanks,

JWG N1AEP Freeville, NY

5402. Cum visit our free BBS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: stephlise@telco.com
Message-ID: <336b1798.8494700@hiroken.hiroken.or.jp>
Source record: 93681

```
Free Adult Internet Connection Worldwid- Via Our Bbs.
Follow the link and enjoy...
http://cybercity.hko.net/la/interbbs/freenet/free.htm
```

5403. Physics Project

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: Norbert Pazdzior <norbert@eagle.ca>
Message-ID: <338CF232.603DE2B6@eagle.ca>
Source record: 93682

Hello you guys in the RADIO world....
I'm planing on making a simple AM band transmiter for a Physics Project
Just enought to send a half decent voice over the air waves.....Any
sqematics would be greatly appreciated.....

Reply to
norbert@eagle.ca

5404. Re: converting cb to 10m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: Michael Black <blackm00@CAM.ORG>
Message-ID: <Pine.GSO.3.94.970527235403.12526B-100000@Ocean.CAM.ORG>
Source record: 93683

Are you sure the thing is actually working with the new crystal?

I don't know that particular set, but I've seen schematics for
CB sets and the 10.240 crystal is used in a number of places.

Divided down, it is the reference frequency for the sythesizer. Thus,
if it's changed, the channel spacing changes. 10.240/1024 = 10 KHz.
10.635/1024= 10.385 KHz.

It may be used as a local oscillator (either directly or divided by
2 I think) to mix the output of the VCO down to a lower frequency
before the signal enters the divide by N chain.

If it's a dual conversion receiver, it's used as the second local
oscillator to move from about 10.7MHz down to a 455 KHz second IF.

I thought these were fairly standard, though there were exceptions.
There were also variations, if I recall correctly. More recent
CB sets used PLL IC"s that did not allow for easy modification.

Depending on the circuit, changing the 10.240 MHz crystal will
not only change the channel spacing, but also, mess with the IF
chain. The combinations of the oscillators will not line up
the right way, and also if ceramic filters are used in the
receiver, the desired signals will be out of the passband.

As I said, I don't know this rig so perhaps the 10.240 MHz xtal
is used in a different way, though it does seem odd to see that
specific frequency used if the familiar scheme is not used.

As far as the IF frequencies go, you may be lucky. Open the rig
up again, and look for ceramic filters. Look for something that
looks like a ceramic capacitor, except it has 3 leads. If it's there,
it should be marked with a frequency, and chances are more than likely
that it's 10.7. If it's a cheaper rig, it may not have that filter, or
it may not even be double-conversion. If it's a more expensive rig,
or it's an SSB rig, then the first filter is bound to be bigger and
will jump at out you when you look inside. Hopefully it will have
a frequency marked on it.

It's most likely that there is an IF at 455KHz (or perhaps 450KHz),
whether it be the only IF or the second IF frequency. While in
years past some CB sets did feature Collins mechanical filters, it's
more likely that the filter at this frequency is ceramic. All of
those that I've seen are in a plastic square or rectangular package,
colored orange or green. The number of pins depends on the particular
filter. Again, if you're lucky it too will be marked with it's frequency.

Michael VE2BVW

On 27 May 1997, Jacqueline Herman wrote:

> I'm on an email-only account and cannot read this NG so *please*
> eamil me any comments you might have regarding the following:
>
> Hi Folks. I've converted a RS TRC-415 cb to 10m (changed the 10.240 MHz
> xtal to a 10.635 so that now ch1 = 28.01 MHz, ch2 = 28.02, ...).
>
> My intention was to use this for CW, and I found a spot to splice
> the key into (between the xtal oscillator and the driver stages)
> that gives pretty clean keying.
>
> Now, how to add a BFO? If its rcvr had the traditional 455 kc IF,
> a BFO would be easy to install. But without a schematic I have
> no idea what this sythesized rig uses for an IF. Any ideas?
>
> I'm on an email-only account and cannot read this NG so *please*
> email me your comments.
>
> Thanks in advance, and 73,
> Jeff KH2PZ / 7
>
>
>

5405. Re: Help! - Kenwood 4 pin plug pinout

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-28 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <338CA418.6F4@cam.org>
Source record: 93684

Dave Yanke wrote:
>
> Does anyone have the pinouts for a Kenwood four pin plug? I need to
> either wire an MC50 or build an adapter to go to a Kenwood 8 pin
> plug (TS940).

From cord side with notch down

3 o o 2 1: Mike 4: Mike GND
4 o o 1 2: PTT (N.Open) 3: PTT and chassis GND
/-\
notch

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Antenna simulation for Windows

5406. power amp m57727 HELP!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: baack@maine.edu
Message-ID: <5minpr$2gdu$1@sol.caps.maine.edu>
Source record: 93685

Help my Kenwood 9130 is starting to go south....
I have a feeling it is the brick in the back.

The part number is M57727

Where can I get one of these?????

Thanks,

Jason Baack N1RWY
baack@maine.edu

5407. Help with Transistor Identification

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: georgie@aztec.asu.edu
Message-ID: <5misd3$nv8@news.asu.edu>
Source record: 93686

I have a transistor I need to replace. It is about the same size
and case as a 2N3053.It has RCA on the top. Below the RCA is, what
I imagine is, a date code: HY 7901. Above the RCA is a number
60352. I imagine this is the identifying number but I can't find
it in my catalog. Can anyone help? Please Email. Thank you.

73 George, KQ7C

--

5408. Make Cash, not the same old Scam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: Flipper Boy <netcom@ix.netcom.com>
Message-ID: <01bc59d4$e5fad0d0$2fcdb7c7@martin>
Source record: 93687
Cross-posted to: alt.binaries.pictures.teen-idols,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.

Make money selling stupid stuff on the Net (Great for Teenagers)

Hey there are ways to do it, In my 5 page book, ill give you all the locations on the net to sell stuff that costs you nothing. Ill give you all the address's to online auction house's, Newsgroups to post to, and all the rules in the game. Hey you wont make a million bucks, but you sure as hell can increase your income by about 200-500 dollars a week, Spending only 5-6 hrs a week at the computer. And who wouldnt mind that.

For "How to make cash on the Net"

Send $5.00 cash and an empty SASE to:

Make Cash
PO Box 26
Edgewater MD 21037-0026

Not responsible for lost or misguided orders. Please allow 2 weeks for delivery, Rush orders add $3.00 for priority mail. No Checks accepted, Cah only. Make Money, Relax!

5409. new ham web site

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: Al & Jane Perreault <janeal@intergate.bc.ca>
Message-ID: <01bc6bf1$45d971e0$9ec0cecd@InternetGateway.intergate.bc.ca>
Source record: 93688

Hello,
I am working on a comprehensive list of web sites by hams.
If you would like to add a Personal Web Page by a ham, then please go visit
my web site at http://www.geocities.com/HotSprings.com/9732/hams.html, and
fill out the application form. I will post it as soon as I can. I have
totally revamped the website, so tell me what you think!

Albert Perreault RN
E-mail: ve7fym@geocities.com
URL: http://www.geocities.com/HotSprings/9732
Burnaby, British Columbia, Canada

5410. new web page.. correct url

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: Al & Jane Perreault <janeal@intergate.bc.ca>
Message-ID: <01bc6bf8$0c3829c0$9ec0cecd@InternetGateway.intergate.bc.ca>
Source record: 93689

Sorry!
Error in previous message, please note correct web address!

I am working on a comprehensive list of web sites by hams.
If you would like to add a Personal Web Page by a ham, then please go visit
my web site at http://www.geocities/HotSprings/9732/hams.html, and
fill out the application form. I will post it as soon as I can. I have
totally revamped the website, so tell me what you think!

_____
Albert Perreault RN
E-mail: ve7fym@geocities.com
URL: http://www.geocities/HotSprings/9732
Burnaby, British Columbia, Canada

5411. Re: NEW DIY PCB PROTO TECH.- Printing direct on metal foil?!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: geotek@comwerx.net
Message-ID: <5mj7gc$isd@thorgal.et.tudelft.nl>
Source record: 93690
Cross-posted to: sci.electronics.misc,alt.comp.hardware.homebuilt,rec.radio.amateur.homebrew,sci.electronics.design

In message <5le8ul$8vv@thorgal.et.tudelft.nl> Scott Stephens wrote:

>> I've been reading a some threads on these newsgroups on toner
>> transfer for fine pitch SMT and printing on metal foil. I tried it in
>> my Epson Action Laser II, and it worked good!
>>
>> Getting a SMOOTH piece of Al (Aluminum) foil, I folded it over a piece
>> of paper and fed it into the manual paper feed slot. I took care that
>> no wrinkles would scratch the drum! The transfer and fusing worked
>> great! Unlike others results (dirty foil maybe?) the toner did not rub
>> off. Inspite of the fact that, logicaly, it shouldn't work.

How do you plan to solder components to the Aluminum?

George Carlson KC5RCC

Houston Home Metal Shop Club
http://www.comwerx.net/biz/geotek/hmsc/index.htm

5412. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: "Thor E. Wiegman" <thorw@sierra.net>
Message-ID: <01bc6c2f$6e5295a0$11ec87cf@thorw.sierra.net>
Source record: 93691

Um, excuse me folks. I read a handbook cover to cover in seventh grade. I understood most of it too. And I was a C and D student too. By tenth grade I already was reading things like the CET exam book. I would be suprised if the handbook was written to 10th grade level, my guess is 9th grade. By the way, the U.S. Air Force only requires that it's enlisted corps read at the 9th grade level and we deal with electronics far more advanced in operations and maintenance than anything in modern amateur radio.

William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
<3389AFDE.7D9C@crpl.cedar-rapids.lib.ia.us>...
Paul Kein&#65533;nen wrote:
>
>
> >According to Dave N., the handbook is supposed to be written
> >at a 10th grade level.

The Handbook is not, cannot, and should not be written at a tenth grade level. There are plenty of introductory books at that level. Barnes and Noble stores carry lots of them.

Twelfth grade or Community College or electronic trade school would be more realistic.

Any High School worthy of the name teaches algebra, geometry and trigonometry.

Bill W0IYH

5413. Re: Hi power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: etipton*@hiwaay.net
Message-ID: <5mk8m9$ii5$24@parlor.HiWAAY.net>
Source record: 93692
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

In article <336171B0.6566@sn.no>, la3pu@sn.no wrote:
>I am in need of a hi power shorting bandswitch. Need on wafer with 9
>positions. The amplifier gives a theoretical maximum of 1800 watts and
>covers 160 to 10m. Does anyone have one to sell or know where one can be
>bought ??
>Any information would be highly appreciated.
>
>73 de Svein
>la3pu@sn.no

Check EENet -- http://www.eenet.com for a possible source. EENet has over
10,000 links to the electronics industry.

*you DO know what to do to make the email address work, don't you?

5414. Re: power amp m57727 HELP!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: Clif <avvid@onramp.net>
Message-ID: <338DAC53.4F43@onramp.net>
Source record: 93693

Jason Baack wrote:
>
> Help my Kenwood 9130 is starting to go south....
> I have a feeling it is the brick in the back.
>
> The part number is M57727
>
> Where can I get one of these?????
>
> Thanks,
>
> Jason Baack N1RWY
> baack@maine.edu

What are the symptoms before you spend a bunch of bucks for the wrong
part??

Clif @ AVVid
AVVid is an Authorized Kenwood and Icom Service Center
http://rampages.onramp.net/~avvid

5415. HF VERTICAL & DIPOLE ANTENNAS

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: jorgegc@mundivia.es
Message-ID: <338dab7b.122284@noticias.mundivia.es>
Source record: 93694
Cross-posted to: rec.radio.amateur.homebrew,rec.radio.amateur.antenna,es.rec.radio.amateur

Hello Friends !

My name is Francisco and first of all let me thank you for reading this message.
I have some questions and doubts about HF antennas, so if you can help please send me a message.
My antenna instalation nowdays is a windom antenna that I made myself with a 1:6 balum, which is 41 metres long and it works ok on 80,40,20,17,12 & 10 metres. It is at 5 metres over the roof of my 14 floors building. I also own a commercial vertical for WARC bands but I donnot know it's name or brand. It has a first part of aluminium for 12m, after that a coil and another part of aluminum for 17m and then another coil and another part of aluminum for 30m. I would like to know which antenna is it, maybe it is not difficult to know as there has to be not many Warc vertical in the market. I have took the last vertical part of aluminum off, as i donnot expect to use the 30 metres band, and I have taken this off to make the antenna shorter. (I guess it will not modify it's caracteristics on the 17 and 12 metres band).
I took this last part off also because I had to repair the first coil (the one for 17 metres) because it was broken. I glued the plastic part with epoxy glue and I soldered the coil to the aluminum part, anyway I thought it has been not a good solution as I found that the aluminum did not soldered very good. Maybe there is another good solution to repair it in good conditions. Due to this repair I took the last part of aluminum off to make it shorter and maybe more resistent to wind effect. I have also put nylon cord to the antenna.
I have put the antenna just at 1.5 metres over the roof with two radials, one for 12 & one for 17metres band (1/4 wavelenght ground radials made of copper wire). They are parallel to the ground, I mean they are 90° to the vertical element. I do not know if I will notice much improvement if I put the antenna to 3 metres over the ground and if I put two or three radials for each band, also do not know the angle between the vertical radiator and the radials.
By the way I thought that the vertical was going to work better than the windom, but several times I hear stations with the dipole that I can not hear with the vertical. Only from time to time the stations from USA are a little bit stronger in the vertical, but I wish it could work better on Dx than the windom dipole.
I also wonder what could it be the difference in performance in the 17 metres band between the coils vertical and a ° wave monoband vertical for 17 metres. Will it be too much?
Another question that I have is, What is the difference in performance between a windom antena and some doublets ° wave dipoles antennas for

the 20,17,12 and 10 metres band? Will a wave dipole outperform the windom so much?
Please tell me also which vertical can you recommend if I live in a place affected with high winds in some months of the year and very close to the sea (I can see the beachside from my bedroom window. How about the magnetic antennas, which first of all seem very expensive?
What is the proper distance between a HAM antenna and a lightning post arrestor? What will it happen in a stormy day?
73S and thank you in advance for your answers.

E mail to : jorgegc@mundivia.es
or by post to Francisco Garcia Apartado 123 E-46080 Valencia
SPAIN

5416. fs - MOTOROLA HT .... LEXMARK PORTABLE PRINTER.... MISC...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: deli-bear@worldnet.att.net
Message-ID: <338DE221.3B8F@worldnet.att.net>
Source record: 93695

F O R S A L E

MOTOROLA MTX9000 fm handi-talkie radio,
model H01WCF4DB5AN NX type WCMA.
900mHz range. With charger and info.
Only $699.

PCMCIA Sound Card --- by AMP. Includes software,
cables, microphone.
V-Synth wavetable synthesizer
Wave SE sound editor
Stratos MIDI software
MIDI Tune-Up
Windows Sound System software
Cardsoft Card and Socket Services
Traveler adapter module
Microphone
Compliant with PCMCIA Release 2.1
12-bit recording and playback□
5 sampling rates
Turtle Beach Hurricane architecture
Thin-profile Type II card
requires:
Type II or III PCMCIA socket
386, 486, or Pentium processor
4MB of Ram
$65 + shipping..

------------------- F L A S H L I G H T S ---------------------

4-D cell (2x2 style), krypton bulb. In box, never used.
$5 + shipping.

6-D cell multifunction lantern. Sleek tubular style with
bright incandescent light at end, 6W fluorescent bulb
along bottom, and flashing red and yellow on top. Also
has electronic sonic alarm that can be switched on with
the flashing lights. In box, never used. $12 + shipping

3-C cell Eveready worklight-style. Bright yellow with
hook for hanging, frosted bulb to diffuse light over area.
Unused, but no box. $5 + shipping

Batteries NOT included.....

COCA-COLA caps. Red cloth, white lettering. New.
$8 each + shipping. Only 9 available.

..... FOR YOUR DRIVING PLEASURE .....
1929 Mercedes SSK kitcar on VW chassis. Just completed, never titled.
Yellow, with brown fenders and running board, tan convertible top, side
curtains, and tonneau cover. Gold trim instruments.

COBRA 18-ULTRA CB ---- 40 channel, pushbutton tuning, with 3
NOAA weather channels. Includes microphone, but no mounting
hardware. $ 39.

LEXMARK/IBM PORTABLE PRINTER 5183 ---- powered by rechargable
battery or AC wall adaptor (included), this printer is only
11.5" x 3.5" x 2", and weighs about 2.5 pounds with battery
in place. Using silent thermal print head, it will print on
either thermal fax paper or on regular paper using the enclosed
thermal transfer ribbons. Very quiet in operation, and because
it runs on a battery, it is completely portable, for use with
laptop computers anywhere. Includes parallel port cable. $89.
.
ANADEX WORD-SCRIBE PRINTER ---- heavy duty dot matrix printer.
Multiple ports, but no literature so only parallel port in use
now. Tractor or friction feed. Fast, good quality; 17-inch
platten. $ 15
.
add shipping to all prices.
if interested, leave e-mail...

5417. Re: Make Cash, not the same old Scam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: Orbitz <justme@my.com>
Message-ID: <338DEE2A.3A68@my.com>
Source record: 93696
Cross-posted to: alt.binaries.pictures.teen-idols,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.

Flipper Boy wrote:
>
> Make money selling stupid stuff on the Net (Great for Teenagers)
>
> Hey there are ways to do it, In my 5 page book, ill give you all the
> locations on the net to sell stuff that costs you nothing. Ill give you all
> the address's to online auction house's, Newsgroups to post to, and all the
> rules in the game. Hey you wont make a million bucks, but you sure as hell
> can increase your income by about 200-500 dollars a week, Spending only 5-6
> hrs a week at the computer. And who wouldnt mind that.
>
> For "How to make cash on the Net"
>
> Send $5.00 cash and an empty SASE to:
>
> Make Cash
> PO Box 26
> Edgewater MD 21037-0026
>
> Not responsible for lost or misguided orders. Please allow 2 weeks for
> delivery, Rush orders add $3.00 for priority mail. No Checks accepted, Cah
> only. Make Money, Relax!

I'm sure if you posted clearer pictures more people would respond to
you'r scam. I like the part about "misguided orders", at least your
honest about ripping people off.

-fool me once, shame on you, fool me twice, shame on me-

TheOrB

5418. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <338DD150.18B4@HP.com>
Source record: 93697

Thor E. Wiegman wrote:
>
> Um, excuse me folks. I read a handbook cover to cover in seventh grade. I
> understood most of it too. And I was a C and D student too. By tenth
> grade I already was reading things like the CET exam book. I would be
> suprised if the handbook was written to 10th grade level, my guess is 9th
> grade. By the way, the U.S. Air Force only requires that it's enlisted
> corps read at the 9th grade level and we deal with electronics far more
> advanced in operations and maintenance than anything in modern amateur
> radio.
>
> William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
> <3389AFDE.7D9C@crpl.cedar-rapids.lib.ia.us>...
> Paul Kein&#65533;nen wrote:
> >
> >
> > >According to Dave N., the handbook is supposed to be written
> > >at a 10th grade level.
>
> The Handbook is not, cannot, and should not be written at a tenth grade
> level. There are plenty of introductory books at that level. Barnes and
> Noble stores carry lots of them.
>
> Twelfth grade or Community College or electronic trade school would be
> more realistic.
>
> Any High School worthy of the name teaches algebra, geometry and
> trigonometry.
>
> Bill W0IYH
>
> ----------
Hello Paul and Bill,

I too read radio literature at the level of ARRL Handbooks in Jr. High School.
But that was Jr High THEN (1950's) not Jr High NOW. With the general dumbing-down of U.S.
grade school education over the past 3 decades (10 percent decline in SAT scores
in spite of quintupling the constant-dollars spent per student!), it is not surprising
that both the ARRL Handbook and QST in general have likewise been dumbed-down. (The ARRL matches

the level of material to their target audience; that is how they stay in the publishing business).
We have folks who are functionally illiterate in their native (English) language graduating
not only from high school, but apparently some colleges too.

73,
Don, W6JL

5419. Re: Make Cash, not the same old Scam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: "Christopher A. King" <cking4@ford.com>
Message-ID: <338DCACF.6641@ford.com>
Source record: 93698
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.

Flipper Boy wrote:

> Make money selling stupid stuff on the Net (Great for Teenagers)

So what we're supposed to do is send you money for what *you*
are selling, which by your definition is already "stupid" to
begin with...?

C.K.

5420. Tubes, books, radios....

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: rog42@aol.com
Message-ID: <19970529210200.RAA28204@ladder02.news.aol.com>
Source record: 93699

FOR SALE: Tubes, test equipment, radios including Hallicrafters, Hammarlund, and Philco. Other older tube type radios and radio related publications. Schematics for many older radios just $1. Tube Manuals, Tube Substitution books, Service Manuals, QST magazines, much more from the 30's, 40's, 50's, 60's. Now over 1600 different tube types in stock - Contact Rog42@aol.com and ask for an E-mail copy of my latest offerings on RADIO list - #528-T. - Approx. 100 new publication titles just added to the list.

5421. Linking two 6M repeaters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: John Welton <John_Welton@unc.edu>
Message-ID: <01bc6c2c$553db700$d5e70298@JWELTON.UNCH.UNC.EDU>
Source record: 93700

We are looking at linking two 6m repeaters, one in the Western part of NC in the mountains at ~ 5,000 ft (proposed) and one in central NC up on a tower at ~1300 ft HAAT (Chapel Hill 53.45/107.2pl - to be implemented shortly). Distance between the two is ~140 statute miles with nothing of interest in between.

What would be the best way to link these two machines on a continuous basis?

1. would a remote base at one of the sites for the other repeater cause interference/desense at that site? (we don't have freq coordinated yet for the mtn repeater so can't say what the freq spread would be)

2. if # 1 was used at the mtn site, we could put in extra band reject cavities and a beam for the link to CH (should be no problem with space), the opposite would be impossible at the Chapel Hill site since there's no additional room for cavities up on the platform)

3. should we consider a simplex 220 dedicated link with beams at both ends - two extra radios/ant (anyone know of a reasonably priced continuous duty 220 link RX/TX). The distance is probably too far for a 440/430 link.

4. could find some half way point and cross link the two repeaters.

5. any other options/opinions??

TNX DE N4SJW
John

5422. **QSL.Net Back Up!**

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <338E36FB.2873@primenet.com>
Source record: 93701

QSL.Net Back Up!

Please check my web page:
http://www.qsl.net/k7on

5423. UHF / Microwave RF modules

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: jgrow@vir.com
Message-ID: <jgrow.11.0029BBFC@vir.com>
Source record: 93702

Hello to all, I have the following RF modules / components. These are new, not pulled.

3 MC 5848 RF Power module NEC $ 5.00 each
7 MC 5809L RF Power module NEC $ 5.00 each
2 MHW806A1 RF Power module Motorola $ 5.00 each
2 MC 5313A " " NEC $ 3.00 each
1 BEY 45B " " Philips $ 4.00 each
3 BGY 90A " " Philips $ 5.00 each
1 MGF 1402 Microwave fet Mitsubishi $ 1.00 each
20 CFU455 ceramic filter MURATA $ 1.00 each

I'm open to a complete package deal, and plain open minded. So if your interested please email me.
Regards,
John

5424. WTB: Amtor/Sitor Controllers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <338E3BEA.30D4@primenet.com>
Source record: 93703

WTB: Amtor/Sitor Controllers

For amateur use, Amtor has lost popularity recently
and may become a forgotten mode...

I would like to start a private Amtor collection.

Obviously, I can't pay a lot to put the gear on a
shelf, but I will pay for your unwanted items.

Let me know what you may have?

-Brian ke7gh@primenet.com

5425. FREE HOT PICTURES HOT!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-29 00:00:00 UTC
From: stephlise@telco.com
Message-ID: <998b1798.8494700@hiroken.hiroken.or.jp>
Source record: 93704

```
Free Adult Internet Connection Worldwide Via Our Bbs.
Follow the link and enjoy...
http://cybercity.hko.net/la/interbbs/freenet/free.htm
```

5426. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Daniel Donaly <ddonaly@worldnet.att.net>
Message-ID: <5mlgdl$sii@mtinsc03.worldnet.att.net>
Source record: 93606

Don Huff <don_huff@HP.com> wrote:
>Thor E. Wiegman wrote:
>>
>> Um, excuse me folks. I read a handbook cover to cover in seventh grade. I
>> understood most of it too. And I was a C and D student too. By tenth
>> grade I already was reading things like the CET exam book. I would be
>> suprised if the handbook was written to 10th grade level, my guess is 9th
>> grade. By the way, the U.S. Air Force only requires that it's enlisted
>> corps read at the 9th grade level and we deal with electronics far more
>> advanced in operations and maintenance than anything in modern amateur
>> radio.
>>
>> William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
>> <3389AFDE.7D9C@crpl.cedar-rapids.lib.ia.us>...
>> Paul Kein&#65533;nen wrote:
>> >
>> >
>> > >According to Dave N., the handbook is supposed to be written
>> > >at a 10th grade level.
>>
>> The Handbook is not, cannot, and should not be written at a tenth grade
>> level. There are plenty of introductory books at that level. Barnes and
>> Noble stores carry lots of them.
>>
>> Twelfth grade or Community College or electronic trade school would be
>> more realistic.
>>
>> Any High School worthy of the name teaches algebra, geometry and
>> trigonometry.
>>
>> Bill W0IYH
>>
>> ----------
>Hello Paul and Bill,
>
> I too read radio literature at the level of ARRL Handbooks in Jr. High
>School.
>But that was Jr High THEN (1950's) not Jr High NOW. With the general
>dumbing-down of U.S.
>grade school education over the past 3 decades (10 percent decline in
>SAT scores
>in spite of quintupling the constant-dollars spent per student!), it is
>not surprising

>that both the ARRL Handbook and QST in general have likewise been
>dumbed-down. (The ARRL matches
>the level of material to their target audience; that is how they stay in
>the publishing business).
>We have folks who are functionally illiterate in their native (English)
>language graduating
>not only from high school, but apparently some colleges too.
>
>
> 73,
> Don, W6JL

I have, in front of me, The Radio Amateur's Handbook for 1973.
In my opinion, it's just as dumb as the 1997 edition of the
same book. There's less of it, too.

Tom Donaly Ka6ruh

5427. Re: !!!!!MAKE MONEY FAST!!!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: masa@writeme-x.com
Message-ID: <338e556b.20103917@news.bctel.ca>
Source record: 93607
Cross-posted to: rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Fri, 30 May 1997 01:18:21 GMT, reznor_nin@hotmail.com (chris)
wrote:

>1) G. Carroll, PO Box 204, Muncie, IN 47308-0204
>
>2) R. Gebbie, 17 Church Lane, Loughton, Milton Keynes, MK5 8AS, England,
>Europe
>
>3) S. Hogan, 36 Prenton Lane, Prenton, Wirral, Merseyside, L42 8LB, England,
>Europe
>
>4) J. Larsen, Grinnek rrsvgen 50, 436 56 Hovs, Sweden, Europe
>
>5) C. Mason, 473 44th Ct. NW, Rochester, MN 55901-6666

What i do not understand is the people's mind who want to show their
name + address...

>STEP (3)
>Post the article to at least 200 news groups. There are at least
>20000 news groups at any give moment in time. The more groups you
>post to, the more people will see your article and send you cash!
>It's recommended that you do AT LEAST 200 news groups for a lot of
>people to read it!

and how many people respond to the article ? anyone have done this
thought of thing ?

>STEP (4)
>You are now in business for yourself, and should start seeing
>returns within 7 to 14 days. Remember, the Internet is new and
>huge. There's no way you can lose.

there's no way you can lose your mind huh ? keep posting your name +
address. you will become pretty famous !! well... in a bad way.

Masa
Masa@WriteMe-X.com
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/radio.htm (Ham Freqs + BC Freqs)
http://www.geocities.com/Yosemite/1325/scanner.htm (R.S. scanners)
http://www.geocities.com/Yosemite/1325/pro26.htm (Cellular Bands Info)
http://www.geocities.com/Yosemite/1325/at600.htm (AT-600 Dual Bander)
http://www.geocities.com/Yosemite/1325/freqs.htm (Int'l Freqs Info)

http://www.geocities.com/Yosemite/1325/mod.htm (Modifications)
http://www.geocities.com/Yosemite/1325/cb.htm (CB General Info)
Spam Security is ON:
Remove "-x" from noted e-mail address to contact me.

5428. *** Re: !!!!!MAKE MONEY FAST!!!!! ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: masa@writeme-x.com
Message-ID: <338e58c1.20957729@news.bctel.ca>
Source record: 93608
Cross-posted to: rec.radio.amateur,rec.radio.amateur.antenna,rec.radio.amateur.digital.misc,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space

On Fri, 30 May 1997 01:18:21 GMT, reznor_nin@hotmail.com (chris)
wrote:

>If you want to know how to make thousands of dollars quickly,
>legally

>Well, two weeks later, I began receiving money in the mail!

>Fold a $1 bill
>inside each paper, and mail them to the following five addresses:

well... sending out a cash in a mail is NOT legal. Get a life. You
are contradicting yourself.

>Now here is how and why this system works:

>Out of every block of 250 posts I made, I got back 5 responses.
>Yes, that's right, only 5. You make $5.00 in cash, not checks or
>money orders, but real cash with your name at #5.

>Each additional person who sent you $1.00 now also makes 250
>additional postings with your name at #4, 1000 postings.
>On average then, 50 people will send you $1.00 with your name
>at #4 ... $50.00 in your pocket!
(...)

how do you know that the people actually send you the money ? fake !!
I can just post the "money make fast" with slipping my name into #5 of
this, and post the article again. Just right now... without sending
out the money. Remember, this kind of stupid stuff will not work.
Get a life.

Masa
Masa@WriteMe-X.com
http://www.geocities.com/Yosemite/1325/ (General Interest)
http://www.geocities.com/Yosemite/1325/radio.htm (Ham Freqs + BC Freqs)
http://www.geocities.com/Yosemite/1325/scanner.htm (R.S. scanners)
http://www.geocities.com/Yosemite/1325/pro26.htm (Cellular Bands Info)
http://www.geocities.com/Yosemite/1325/at600.htm (AT-600 Dual Bander)
http://www.geocities.com/Yosemite/1325/freqs.htm (Int'l Freqs Info)
http://www.geocities.com/Yosemite/1325/mod.htm (Modifications)
http://www.geocities.com/Yosemite/1325/cb.htm (CB General Info)
Spam Security is ON:
Remove "-x" from noted e-mail address to contact me.

5429. Re: CB to 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: bry@ix.netcom.com
Message-ID: <338e6718.11730332@news.mnsinc.com>
Source record: 93609

On Tue, 27 May 1997 10:08:22 -0400, Jim Valdes <jvaldes@whoi.edu>
wrote:

>Bry Carling, G3XLQ / AF4K wrote:
>>
>> On Fri, 23 May 1997 10:24:20 GMT, "Paul Jordan" <jordan@santanet.com>
>> wrote:
>>
>> >Does anyone know how to convert old CB radios to 6 meters? I've seen
>> it
>> >talked about a few times but, never heard any tech data on actually
>> doing
>> >it.
>> >Any help would be appreciated...
>> >
>> >Paul Jordan
>> >KL0AN
>> >Fairbanks, AK
>>
>> There is a complete article you can download at:
>>
>> http://www.mnsinc.com/bry/hamfiles.htm
>>
>> For great Ham Radio resources on the web, VISIT:
>> http://www.mnsinc.com/bry/hamfiles.htm
>
>
>where on the site is the article??

http://www.mnsinc.com/bry/ham/cb2six.zip

I guess you don't have a web browser if you can't see it at:

http://www.mnsinc.com/bry/hamfiles.htm

It is there plain as day!

5430. Re: Make Cash, not the same old Scam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Brad Gulleff <bgulleff@pacifier.com>
Message-ID: <338F2664.1011@pacifier.com>
Source record: 93610
Cross-posted to: alt.binaries.pictures.teen-idols,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.

Flipper Boy wrote:
>
> Make money selling stupid stuff on the Net (Great for Teenagers)
>
> Hey there are ways to do it, In my 5 page book, ill give you all the
> locations on the net to sell stuff that costs you nothing. Ill give you all
> the address's to online auction house's, Newsgroups to post to, and all the
> rules in the game. Hey you wont make a million bucks, but you sure as hell
> can increase your income by about 200-500 dollars a week, Spending only 5-6
> hr. a week at the computer. And who wouldn't mind that.
>
> For "How to make cash on the Net"
>
> Send $5.00 cash and an empty SASE to:
>
> Make Cash
> PO Box 26
> Edge water MD 21037-0026
>
> Not responsible for lost or misguided orders. Please allow 2 weeks for
> delivery, Rush orders add $3.00 for priority mail. No Checks accepted, Cah
> only. Make Money, Relax!
You are posting on the wrong news group. Hams are to smart for a scam!

5431. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: wx <wxyz@concentric.net>
Message-ID: <338E8E11.2FE3@concentric.net>
Source record: 93611

Don Huff wrote:
>
> Thor E. Wiegman wrote:
> >
> > Um, excuse me folks. I read a handbook cover to cover in seventh grade. I
> > understood most of it too. And I was a C and D student too. By tenth
> > grade I already was reading things like the CET exam book. I would be
> > suprised if the handbook was written to 10th grade level, my guess is 9th
> > grade. By the way, the U.S. Air Force only requires that it's enlisted
> > corps read at the 9th grade level and we deal with electronics far more
> > advanced in operations and maintenance than anything in modern amateur
> > radio.
> >
> > William E. Sabin <sabinw@crpl.cedar-rapids.lib.ia.us> wrote in article
> > <3389AFDE.7D9C@crpl.cedar-rapids.lib.ia.us>...
> > Paul Kein&#65533;nen wrote:
> > >
> > >
> > > >According to Dave N., the handbook is supposed to be written
> > > >at a 10th grade level.
> >
> > The Handbook is not, cannot, and should not be written at a tenth grade
> > level. There are plenty of introductory books at that level. Barnes and
> > Noble stores carry lots of them.
> >
> > Twelfth grade or Community College or electronic trade school would be
> > more realistic.
> >
> > Any High School worthy of the name teaches algebra, geometry and
> > trigonometry.
> >
> > Bill W0IYH
> >
> > ----------
> Hello Paul and Bill,
>
> I too read radio literature at the level of ARRL Handbooks in Jr. High
> School.
> But that was Jr High THEN (1950's) not Jr High NOW. With the general
> dumbing-down of U.S.
> grade school education over the past 3 decades (10 percent decline in
> SAT scores
> in spite of quintupling the constant-dollars spent per student!), it is

> not surprising
> that both the ARRL Handbook and QST in general have likewise been
> dumbed-down. (The ARRL matches
> the level of material to their target audience; that is how they stay in
> the publishing business).
> We have folks who are functionally illiterate in their native (English)
> language graduating
> not only from high school, but apparently some colleges too.
>
> 73,
> Don, W6JL

The dumbing-down of our whole education system for 4 decades
now is becoming very prominently apparent as we compare to achievements
in other nations. The final cap is that today there are more Master's
and PhD candidates from off-shore in our U sytems than US born
candidates.

You can bet that this demise pervades from elementary to
middle school to high school and colleges. Brought about by the
"experimental" educators since WW II at every turn! And our
"friendly" National Education Association.

wx

5432. fs - POWER SUPPLY MODULES .... MISC

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: deli-bear@worldnet.att.net
Message-ID: <338F0460.5708@worldnet.att.net>
Source record: 93612

```
...... FOR SALE....:

PCMCIA Sound Card --- by AMP. Includes software,
cables, microphone.
V-Synth wavetable synthesizer
Wave SE sound editor
Stratos MIDI software
MIDI Tune-Up
Windows Sound System software
Cardsoft Card and Socket Services
Traveler adapter module
Microphone
Compliant with PCMCIA Release 2.1
12-bit recording and playback
5 sampling rates
Turtle Beach Hurricane architecture
Thin-profile Type II card

requires:
Type II or III PCMCIA socket
386, 486, or Pentium processor
4MB of Ram
$65 + shipping..

.............MODEMS...............
2400 baud external modem with power supply. The easy way to
add a modem, since you don't have to open your computer to
install it! Only $ 9.
.
2400 baud internal modem card. Only $ 5
.
2400 baud PCMCIA fax/modem card (9600 fax). Only $17
(only 2 available)

14.4K baud PCMCIA fax/modem card. Only $29
. (only 1 available)

14.4Kbaud internal fax/modem card. Only $25

IDE hard drives:
Seagate 341 meg ........$ 99
Seagate 428 meg ........ 119
Seagate 120 meg ......... 79.
Maxtor 120meg ............ 79.
IBM 256 meg ............... 89.
Western Digital 540 meg. 135
```

IDE laptop drive: 4" x 2.75" x .75" with mini IDE connector
Seagate ST9546A 540meg $149

COLORADO 250meg backup tape drive with tapes. $55
(includes Arcada software for 350meg tapes)
.
MAINBOARDS WITH CPU CHIP: Tested with Dos and Windows
(these boards use 30pin memory simms)
386sx 16Mhz $10
486sx 25mHz $30
386DX 40mHz..... $30

MEMORY SIMMS: (specify parity or not)
4 meg 72pin non-parity .... $ 25
4 meg 72pin parity ..... $ 25
30-pin memory SIMMS: 256K 60 or 70ns ($4)
80ns ($3)
100ns ($2)

---------- P O W E R S U P P L Y M O D U L E S ------
I have several power supply modules available. These are complete, requiring only the DC input voltage. The modules contain the necessary IC regulator and caps or coils as needed. These are new, never used. The boards have the input and output terminals marked.☐

1.) 2" x 2" PCB with regulator, transformer, etc, installed.
8V to 16VDC input, +12V / 1A out.
6 units available at $8 each, plus shipping.

2.) 24pin DIP regulator-on-a-chip. No external components
are needed! Up to 40VDC input, +5V/1A out.
3 available at $5 each, plus shipping.

.....CPU CHIPS.....
AMD 386DX40mHz. A great way to speed up those older boards!
Only $ 8
.
add postage to listed price.
e-mail me if interested...

5433. Racal RA1772 Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: john.taylor@emelec.co.UK
Message-ID: <9705301432.AA02043@emelec.co.uk>
Source record: 93613

Can anyone help with locating source of service manuals for the RA1772?
Three of us, UK amateurs, have aquired these receivers and all have some
sort of faults - with mine, although the "vfo" appears to operate, and the=20
frequency
display changes, the "vfo" seems disconnected from the rx as the rx=20
frequency
does not change. Everything else seems OK - antenna noise, and even the odd
station heard on HF at night, but cannot alter the rx frequency - any=20
ideas???

Thanks on behalf of G4ZHG, G7MUB and G8DYK,
John, G8DYK

john.taylor@emelec.co.uk

5434. Re: Make Cash, not the same old Scam

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: W2GL <w2gl@qsl.net>
Message-ID: <338EE382.DAD@qsl.net>
Source record: 93614
Cross-posted to: alt.binaries.pictures.teen-idols,rec.radio.amateur.boatanchors,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.

Anyone who likes stupid ideas could look at the following URL:
http://www.dreamnets.com/youtalk/index.html

BTW, I was listed on the counter as #1. Either this dolt can't write CGI scripts, or he isn't making 200-500 dollars a week on this scam!

73, W2GL
==========
Flipper Boy wrote:
>
> Make money selling stupid stuff on the Net (Great for Teenagers)
>
> Hey there are ways to do it, In my 5 page book, ill give you all the
> locations on the net to sell stuff that costs you nothing. Ill give you all
> the address's to online auction house's, Newsgroups to post to, and all the
> rules in the game. Hey you wont make a million bucks, but you sure as hell
> can increase your income by about 200-500 dollars a week, Spending only 5-6
> hrs a week at the computer. And who wouldnt mind that.
>
> For "How to make cash on the Net"
>
> Send $5.00 cash and an empty SASE to:
>
> Make Cash
> PO Box 26
> Edgewater MD 21037-0026
>
> Not responsible for lost or misguided orders. Please allow 2 weeks for
> delivery, Rush orders add $3.00 for priority mail. No Checks accepted, Cah
> only. Make Money, Relax!

5435. FS - Rohn - HBX-48 - Tower

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: kc2bcg@aol.com
Message-ID: <19970530144200.KAA11392@ladder02.news.aol.com>
Source record: 93615

I have an Rohn HBX-48 Tower for sale.
6 Sections each being 8 feet long.
All the paperwork showing Accessories,Part numbers, Instructions, customer
Drawings, and Foundation & Anchor Bolt details drawing.
Includes: BX-SM Mount assembly - for mounting an omni on the side.
10 sq.ft. wind loading
no hardware (bolts and nuts)
Unit resides in central NJ.
I need to get $ 250.00 for it.
Only the serious need reply!

Email - GDHarris@ AMP.com or KC2BCG@AOL.com
Thanks for reading this Ad.

Take Care of Number 1
Don't Step in Number 2

5436. Re: SWL'ers Looking for Pirates!!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: tbryant@cannet.com
Message-ID: <5mmnj4$pos@dolphin.cannet.com>
Source record: 93616
Cross-posted to:
rec.radio.amateur.antenna,rec.radio.swap,rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,rec.radio.amateur.misc

```
:> Whata weekend for pirate radio loggings. Logged over 10 so far on
:> 6.955mhz. Supposed to be alot of activity on memorial day so tune in
:> your recievers and get some pirates in your logbooks.
:
:> Have fun
:
:Why?
:
:Doug - W2DR
:
```

Shortwave pirate chasing actually has quite a following. George Zeller publishes a direectory each year of pirate stations that he's heard. A lot of them are one-time broadcasts, but some are quite regular. Some even list mail drops that you can send an SASE to for a QSL.

I personally have no problem with pirate stations. They're operating outside the U.S. amateur bands, so they're not interfering. Shortwave broadcast stations aren't found on this frequency either. I'm sure they know the illegalities and the risks, so please spare the lectures.

Tom - N8ECW

5437. Re: help-GR sexless connector adapters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Dale Dawson KB8FTF <ddawson@ceddec.com>
Message-ID: <338EB8C1.33FC@ceddec.com>
Source record: 93617

Gerald Sargent wrote:
>
> Help ! I need adapters to enable connection to the General Radio
> Sexless connectors. Can anyone advise where I can obtain adapters,
> preferably to type "N" , but BNC, SMA, TNC are all acceptable.
> If anyone can "sell" a few GR connectors, new or used, with or
> without short coax tails, that can be used to make up adapters with short
> lengths of coax, this would be appreciated. Thanks in anticipation, Gerald
> VK4ZSG.

Surplus sale of Nebraska sells a full line of adapters for the GR
connectors. They always run an ad in QST. Be prepared for a shock when
you get the bill though. They are very pricey.

73, KB8FTF

Dale Dawson

5438. fs - MOTOROLA HT..... COBRA CB ..... PRINTERS...

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: deli-bear@worldnet.att.net
Message-ID: <338F2D39.DEE@worldnet.att.net>
Source record: 93618

F O R S A L E

MOTOROLA MTX9000 fm handi-talkie radio,
model H01WCF4DB5AN NX type WCMA.
900mHz range. With charger and info.
Only $699.

PCMCIA Sound Card --- by AMP. Includes software,
cables, microphone.
V-Synth wavetable synthesizer
Wave SE sound editor
Stratos MIDI software
MIDI Tune-Up
Windows Sound System software
Cardsoft Card and Socket Services
Traveler adapter module
Microphone
Compliant with PCMCIA Release 2.1
12-bit recording and playback☐
5 sampling rates
Turtle Beach Hurricane architecture
Thin-profile Type II card
requires:
Type II or III PCMCIA socket
386, 486, or Pentium processor
4MB of Ram
$65 + shipping..

------------------- F L A S H L I G H T S ---------------------

4-D cell (2x2 style), krypton bulb. In box, never used.
$5 + shipping.

6-D cell multifunction lantern. Sleek tubular style with
bright incandescent light at end, 6W fluorescent bulb
along bottom, and flashing red and yellow on top. Also
has electronic sonic alarm that can be switched on with
the flashing lights. In box, never used. $12 + shipping

3-C cell Eveready worklight-style. Bright yellow with
hook for hanging, frosted bulb to diffuse light over area.
Unused, but no box. $5 + shipping

Batteries NOT included.....

COCA-COLA caps. Red cloth, white lettering. New.
$8 each + shipping. Only 9 available.

..... FOR YOUR DRIVING PLEASURE .....
1929 Mercedes SSK kitcar on VW chassis. Just completed, never titled.
Yellow, with brown fenders and running board, tan convertible top, side
curtains, and tonneau cover. Gold trim instruments.

COBRA 18-ULTRA CB ---- 40 channel, pushbutton tuning, with 3
NOAA weather channels. Includes microphone, but no mounting
hardware. $ 39.

LEXMARK/IBM PORTABLE PRINTER 5183 ---- powered by rechargable
battery or AC wall adaptor (included), this printer is only
11.5" x 3.5" x 2", and weighs about 2.5 pounds with battery
in place. Using silent thermal print head, it will print on
either thermal fax paper or on regular paper using the enclosed
thermal transfer ribbons. Very quiet in operation, and because
it runs on a battery, it is completely portable, for use with
laptop computers anywhere. Includes parallel port cable. $89.
.
ANADEX WORD-SCRIBE PRINTER ---- heavy duty dot matrix printer.
Multiple ports, but no literature so only parallel port in use
now. Tractor or friction feed. Fast, good quality; 17-inch
platten. $ 15
.
add shipping to all prices.
if interested, leave e-mail...

5439. RF amp pcb design.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <t9fEi8AwYtjzEw6w@two-way.demon.co.uk>
Source record: 93619

I'd like help in designing a full legal, all band solid state HF mobile
amp using 16 X 2SC2879's.
Is there any software orientated towards RF amplifier design, and if so,
does anyone accept commissions?
I have put together a full list of design parameters if anyones
interested in taking this further.

73 de G4ZOW.

5440. Rhode & Shwartz BN15075 Receiver

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Paul Nicolay <paul_nicolay@merck.com>
Message-ID: <01bc6d04$6dc42880$6e036536@merck.com>
Source record: 93620
Cross-posted to: rec.antiques.radio+phono,rec.ham-radio,rec.ham-radio.misc,rec.ham-radio.swap,rec.radio.amateur,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.shortwave,rec.radio.swap

Hi,

Is there somebody who has the pin assignments of plug 14 of this old (at least more than 10 years) R&S receiver. The plug is normally attached to the power-supply, which I'm missing, and has two rows of pins (labeled 1-8A & B). Any description on what comes out and goes in would be great. This would help me in building my own power-supply.

73s, ON1DJU

Please Email me as well as it is hard to keep up for me

The contents of this message express only the sender's opinion.
This message does not necessarily reflect the policy or views of
my employer, Merck & Co., Inc. All responsibility for the statements
made in this Usenet posting resides solely and completely with the
sender.

5441. Re: WTB: Amtor/Sitor Controllers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Don Huff <don_huff@HP.com>
Message-ID: <338F2056.61BC@HP.com>
Source record: 93621

Brian K. Short wrote:
>
> WTB: Amtor/Sitor Controllers
>
> For amateur use, Amtor has lost popularity recently
> and may become a forgotten mode...
>
> I would like to start a private Amtor collection.
>
> Obviously, I can't pay a lot to put the gear on a
> shelf, but I will pay for your unwanted items.
>
> Let me know what you may have?
>
> -Brian ke7gh@primenet.com

Hi Brian,

WOW, Amtor obsolete? Funny, I use it almost every day. Actually gets
through better than Pactor
for weak sigs/dx, due probably to the shorter burst length and simpler
5-bit+ 2-parity constant-ratio code.
They knew what they were doing when they designed SITOR, for plain-text
use on HF cicuits. That matches
real-time ragchewing very well. I think if you read advertisements,
and product reviews in QST and CQ, you
can get the impression that Amtor is "obsolete". Not so. There are
many cases where "newer" ain't
necessarily "better", but one seldom hears about them in magazines which
rely on advertising. I have
three Amtor controllers, and I would not part with one of them.

GL, I am sure you can find others who are willing to give up theirs...

73,
Don, W6JL

5442. Re: Hamcomm interface

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Charlie Panek <charlier@lsid.hp.com>
Message-ID: <338F2716.3118@lsid.hp.com>
Source record: 93622

Gabe Nemeth wrote:
>
> Jacqui wrote:
> >
> > Joseph C. Bender wrote:
> > >
> > > Has anybody had any experience programming the hamcomm interface?
> > > Or know of any Internet resources out there that might give some
> > > clues/tips/information. I can't seem to find anything in that regard,
> >
> > Joe, I am also going to build one of these and came across this site,
> > http://ourworld.compuserve.com/homepages/HFFAX/ I think it has
> > everything you need. The Radioraft software looks good, is cheap ($28)
> > has a free demo and promises to increase the modes available soon.
> > Already it does more than my PK232 software did !
> > Good Luck ! Jacqui N1DVE
>
> The HTTP fails? Do you, or anyone else have another?
> cheers
> --
> Gabe Nemeth (VE3SLJ) The binary information above, that may appear as

I'm not quite sure what Jacqui was talking about, but the unofficial
home page for the HamComm digital communications program (but not including
FAX) written by DL5YEC, can be found at:

http://www.accessone.com/~tmayhan/

There are lots of tips for using HamComm as well as plans for building
an improved interface.

--
Charlie Panek KX7L Hewlett Packard Company
Lake Stevens Division
Everett, Washington

5443. Re: power amp m57727 HELP!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: la8ak@offline.no
Message-ID: <338f2b6f.2942057@news.online.no>
Source record: 93623

```
>Jason Baack wrote:
>>
>> Help my Kenwood 9130 is starting to go south....
>> I have a feeling it is the brick in the back.
>>
>> The part number is M57727
>>
>> Where can I get one of these?????
>>
local radio club had some problems with 70cm rigs, RF power modules
broke down after a year. The reason was no thermal compounds used
when the factory installed the items. when properly fitted the new
power modules lasted several years
```

Jan-Martin N&#65533;ding,
LA8AK, Voielia 39B, N-4623 Kristiansand
RSGB - NRRL - NRHF. tel: +47-380-87178

5444. Re: Hi power bandswitch

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: la8ak@offline.no
Message-ID: <338f2b0e.2844126@news.online.no>
Source record: 93624
Cross-posted to: rec.radio.amateur.homebrew,sci.electronics.components

On Thu, 29 May 97 15:54:06 GMT, etipton*@hiwaay.net wrote:

>In article <336171B0.6566@sn.no>, la3pu@sn.no wrote:
>>I am in need of a hi power shorting bandswitch. Need on wafer with 9
>>positions.
Try OZ8RO/LA5HE
Jan-Martin N&#65533;ding,
LA8AK, Voielia 39B, N-4623 Kristiansand
RSGB - NRRL - NRHF. tel: +47-380-87178

5445. TH-75 A help needed

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Michael Gladu <mgladu@warwick.net>
Message-ID: <338F0B90.7DCB@warwick.net>
Source record: 93625

Greetings all Kenwood TH-75A owners and experts,

I recently aquired a used Kenwood TH-75A and would like to ask a few
questions about it. From looking at the schematic, I was curious what
D2, D3, and D4 do exactly to the operation to the radio.
I would like to modify this handheld to transmit up at 470 to 480 MHz.
Is this possible ??? Have any of you documented what each of these
diodes does ??? I used to own one and used it in the 450 to 460 MHz
band for commercial 2-way transmissions at the 2-way radio shop I used
to work for. I know that I had to "tweek" the UHF VCO.
Also, I would be interested in purchasing the service manual for this
radio. Does Kenwood still sell service manuals ??? Any one have one
they would like to sell ???
Thanks for any and all info. You can email me directly at:
mgladu@warwick.net

73 de N1fbz ----------- Michael Gladu -----------------------

5446. Re: Linking two 6M repeaters

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Peter Parker <parkerp@pcug.org.au>
Message-ID: <338f3bf0.0@cheese.pcug.org.au>
Source record: 93626

"John Welton" <John_Welton@unc.edu> wrote:
>We are looking at linking two 6m repeaters, one in the Western part of NC
>in the mountains at ~ 5,000 ft (proposed) and one in central NC up on a
>tower at ~1300 ft HAAT (Chapel Hill 53.45/107.2pl - to be implemented
>shortly). Distance between the two is ~140 statute miles with nothing of
>interest in between.
>
>What would be the best way to link these two machines on a continuous
>basis?
>
>
>5. any other options/opinions??
>

A possibility could be to install a normal 10m, 2m, 70cm or 23cm repeater about half way between the two six metre repeaters. Then use 'off air' linking to link the six metre repeaters via the two metre repeater. This could entail having a 2m/70/23cm transmitter/receiver at each 6m repeater site. The benefit of this is once you have your 2m or UHF repeater frequencies, you don't need additional frequencies for linking. As with any off air linking, there is saving of equipment - there is need for linking equipment at only one end to link two repeaters, and only two sites to link three repeaters (as we are effectively doing here). If course, if you were linking (say) a 6m repeater to a 2m repeater, you wouldn't need an additional repeater half way in between, as the repeaters to be linked are on different bands.

73,

Peter VK1PK

--

_____
Peter Parker

E-mail: parkerp@pcug.org.au
Phone: (06) 285 1004 (ah)
Amateur Radio: VK1PK

Home Page: http://www.pcug.org.au/~parkerp/
The home of Novice Notes Online and the VK QRP Web Page.
_____

5447. test

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Harry Lythall <acz732k@tninet.se>
Message-ID: <5mnfsc$r88$1@kalle.tninet.se>
Source record: 93627

http://user.tninet.se/~acz732k/

Try it!!!

Harry

5448. HAM RADIO VACATIONS IN CRETE GREECE

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: "NERANTZULIS MANOS(SV9ANJ)" <PELAMARE@HER.FORTHNET.GR>
Message-ID: <01bc6cdf$309af620$e6915cc1@dummy.forthnet.gr>
Source record: 93628
Cross-posted to: rec.radio.amateur.digital,rec.radio.amateur.digital.misc,rec.radio.amateur.dx,rec.radio.amateur.equipment,rec.radio.amateur.homebrew,rec.radio.amateur.misc,rec.radio.amateur.policy,rec.radio.amateur.space,rec.radio.scanner,rec.radio.shortwave,uk

7 STUDIOS 20M FROM BEACH.USE OF SHACK AND ANTENNAS.OPEN FROM 14/April/97 TO
31/October/97.
FOR INFORMATIONS CONTACT:SV9ANJ QRA MANOS VIA EMAIL OR FAX AT
++30 81 761382

5449. FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: toms@inconnect.inconnect.com
Message-ID: <5mnk2ugib1@news.inconnect.com>
Source record: 93629

I sent email to FAR recently, but no reply. I called a phone number, but no reply. The phone number I have is 836-9148. I tried many different area codes. Does anyone have this information?

--
Best Regards,

Tom Schaefer
Computer Consultant Unisys A Series & Windows NT: Amateur Radio NY4I

5450. Re: Plessey PLL Eprom Generator for Win95(10k !)

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Keith McQueen <keithm@enol.com>
Message-ID: <338F7F7F.5B3C@enol.com>
Source record: 93630

the@primenet.com wrote:
>
> Is there any interest in starting a rec.radio.amateur.binaries group?
>
> People could post programs, pictures of projects or gear, eprom data, etc.
>
> Rob.

I would love this!

5451. WWW Message Board Experiment

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: "Brian K. Short" <ke7gh@primenet.com>
Message-ID: <338F7F5F.684E@primenet.com>
Source record: 93631

WWW Message Board Experiment

Folks,

May I engage your services for an experiment...

As you know, I set up a "Personal Web Server" on my
home computer running Win95. Previously, the server
had only a copy of my web page...

But, now...

I have taken the mirror of my home page off and installed
an automated message/discussion group faility called aptly
"Short Circuits"...

Please go to my home page http://www.qsl.net/k7on and click
on the rotating arrow and while I'm connected you'll be then
connected to my personal server where you can access the messages
entered by you and others.

It is threaded and resembles a Usenet newsgroup, but will not
be spammed as it is not connected to the Internet by a static
IP address...(this is part of the experiment, BTW...)

Please give it a shot!

I'll be watching for messages on there and I've put 2 already myself.

73, Brian http://www.qsl.net/k7on

5452. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: "Chuck (Jack) Hawley" <c-hawley@uiuc.edu>
Message-ID: <338F8F28.2FD2@uiuc.edu>
Source record: 93632

Try http://www.cl.ais.net/farcir/
--

Charles (Jack) Hawley Jr.
Amateur Radio: Chuck, KE9UW
BMW Motorcycles: Jack, BMWMOA #224
c-hawley@uiuc.edu
Sr. Research Engineer Emeritus
University of Illinois, Urbana-Champaign

5453. software

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Watts <watts@rgv.net>
Message-ID: <338F98B3.4631@rgv.net>
Source record: 93633

Would really like to get some software to help draw and design circuits and then the draw out the printed circuit boards. Probably this would be two programs.

Gary Watts watts@rgv.net

5454. Re: UHF Repeater Desense Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: Demolition Man <demoman@rollanet.nospam.org>
Message-ID: <338F6987.253F@rollanet.nospam.org>
Source record: 93634

HQ54 wrote:
>
> Get rid of the Hamtronics stuff, It's garbage!!!!!!!!!!!!

that's what just about everyone says =[
do you know where one could get rf modules in kit form for similar
price? i need 2 rcvrs and 2 xciters for rptr use. was looking
at the hamtronics kits but nobody likes them.
440 and 6m modules are needed
--
A.C.Curtis
KB0WLF

mailto:demoman@rollanet.org
http://www.rollanet.org/~demoman/

5455. Bird slug mods ???

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-30 00:00:00 UTC
From: hduff@ica.net
Message-ID: <338e2c6d.0@lightning.ica.net>
Source record: 93705

Has anyone ever succesfully reworked or modified Bird wattmeter slugs
?
I'm wondering what is involved in changing the power rating or
frequency range within a slug (or if it is even feasible) ?
Not having ever owned a Bird wattmeter (but considering the purchase
of one) I have no knowledge of the internal workings of the slugs
other than that they are basically tuned pickup sensors that drive
the meter.

Many thank !
Hugh VA3TO

5456. Re: CDR rotors

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: marty gunnarsson <marty@fia.net>
Message-ID: <3390ED36.2661@fia.net>
Source record: 93557

joewalsh wrote:
>
> Is this company still in business. Anybody know where I can find parts for
> a Ham-M control box. I think I need a power transformer. I'd also
> appreciate talking to anyone with experience troubleshooting/repairing
> these rotors.
> Thanks
> Joe
>
try rotordoctor .com

5457. Re: Mega Power Mobiles!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: philip de cadenet <phil@two-way.demon.co.uk>
Message-ID: <uPtkOAA6U$jzEwYo@two-way.demon.co.uk>
Source record: 93558

>
>Just because you haven't seen it, doesn't make the earth still flat.
>Another gentleman brought up the point of transformers. Most of the
>super
>power boys that are running MEGAwatts are running ac mobile amplifiers.
>This means
>that the alternators are taken full field output into step up
>transformers
>generating anywhere from 3000 to 4500 volts apiece. I have several
>customers that are running multiple ceramic tube mobile HF amplifiers,
>such as four 8877's, eight
>8877's, a single 4cx10,000 and dual 4cx10,000's. you have to remember
>that
>the rating on these tubes is for continuous duty, not balls out
>intermittant amateur
>use. They will do much more power intermittantly, especially when driven
>well
>beyond factory specs. I have customers that are running lexidyne
>generators that are used on locomotives. They are double stator designs
>that generate 450 amps apiece all day long ! One guy has two of these
>and
>also uses a 200 amp dc Leece Neville alternator to power his driver amp,
>which is 2 X
>2SC2290's driving 8 X 2SC 2879's, this is why we lowly cber's laugh at
>most hams. The
>big boys run, at the minimum, balanced and blueprinted steel crank
>350's.
>The bearings/crank take a beating with this much of a load on them. I
>guess this just goes to show that little boys never grow up, they just
>get
>more expensive toys.
>
>Thought this would touch your sense of humour.
>
>Phil de G4ZOW/Xtreme mobile, or at least I used to think so, until I met
>this guy!
>

--
philip de cadenet

5458. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: mzenier@netcom.com
Message-ID: <mzenierEB3sCD.1pI@netcom.com>
Source record: 93559

In article <338f8d8a.53220075@news.atl.bellsouth.net>,
Gary Coffman <ke4zv@bellsouth.net> wrote:
...
>The bright kids are just as bright today as they were in the 50s, and exist
>in about the same, or perhaps somewhat higher, numbers than they did
>in the 1950s too. They are the natural audience for the Handbook, not the
>functional illiterates. That's why dumbing down the Handbook is a tragic
>mistake. It devalues the Handbook for those capable of benefitting from
>the information it contains. But dumbing it down doesn't benefit those too
>stupid to appreciate it anyway.

I disagree that The Handbook has been dumbed down. Compared with the
1995 or later editions, the old books are a terse idiosyncratic
patchwork. The newer version covers more current technology and
theory to a greater depth than the old one.

It is a shame that they wimped out on the math. But that's a general
problem. At least in the US, mathematics has become the defacto
monopoly of the mathematicians and mathematics educators, (the people
who seem to have done the worst job of it). The general book publishing
industry has virtually no materials that I've seen that introduce or
can serve as self study materials for anything more advanced than 10th
grade. It's either trivial or textbooks (and mostly textbooks that are
designed to require a teacher).

Mark Zenier mzenier@eskimo.com mzenier@netcom.com

5459. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: bry@ix.netcom.com
Message-ID: <338f790a.11458178@news.mnsinc.com>
Source record: 93635

On 30 May 1997 22:24:30 GMT, toms@inconnect.inconnect.com (Thomas Schaefer) wrote:

>I sent email to FAR recently, but no reply. I called a phone number, but
>no reply. The phone number I have is 836-9148. I tried many different area
>codes. Does anyone have this information?
>
> --
>Best Regards,

Please let me know if you find out! I wish I knew too!

Bry AF4K
bry@mnsinc.com

5460. Re: power amp m57727 HELP!!

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: jonz@shell.rmii.com
Message-ID: <5mo8f2$9qv$1@news1.rmi.net>
Source record: 93636

J M Noeding (la8ak@offline.no) wrote:

: >Jason Baack wrote:
: >>
: >> Help my Kenwood 9130 is starting to go south....
: >> I have a feeling it is the brick in the back.
: >>
: >> The part number is M57727
: >>
: >> Where can I get one of these?????

I missed the original post -- and any followups -- so:

RF Parts has'em ~~ $70 in onesies. 1-800-737-2787
email: rfp@rfparts.com
fax: 1-888-744-1943

Jonesy - W3DHJ

--
SK

5461. Re: WTB: Amtor/Sitor Controllers

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <338f9734.55695052@news.atl.bellsouth.net>
Source record: 93637

On Fri, 30 May 1997 11:45:42 -0700, Don Huff <don_huff@HP.com> wrote:
>Brian K. Short wrote:
>>
>> WTB: Amtor/Sitor Controllers
>>
>> For amateur use, Amtor has lost popularity recently
>> and may become a forgotten mode...

>Hi Brian,
>
> WOW, Amtor obsolete? Funny, I use it almost every day. Actually gets
>through better than Pactor
>for weak sigs/dx, due probably to the shorter burst length and simpler
>5-bit+ 2-parity constant-ratio code.

The reason AMTOR may perform better is due to the lower baud, 45.5
versus 100/200 for PACTOR. Shannon tells us we can trade speed for
SNR. A *good* PACTOR implementation with memory ARQ will still usually
show a greater average error free throughput than AMTOR (not all PACTOR
implementations are good, tests have shown up to a 2:1 variation in performance
depending on the brand of the controller).

The superior FEC of PACTOR II, Clover II, and GTOR make them greatly superior
to AMTOR. And PACTOR II and Clover II can adaptively slow baud to even lower
rates than AMTOR for the really tough conditions (and their implementations use
DSP to allow them to take maximum advantage of that adaptive ability). GTOR's
fixed higher baud, and lack of adaptive DSP, make it fall apart at higher signal levels
than the other two, but it is still usually better than AMTOR.

AMTOR may not yet be obsolete, but it *is* declining in popularity as
the better methods are coming into wider use. Aside from its lesser
performance ability compared to the best available methods, its lack
of support for a full modern character set has reduced its popularity too.
It is far from dead, but many of the newer controllers which can do it can
also do the better methods, so its appeal is declining as those newer
controllers penetrate the market.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

5462. Re: AM, why handbook shows carrier changing?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <338f8d8a.53220075@news.atl.bellsouth.net>
Source record: 93638

On Thu, 29 May 1997 11:56:16 -0700, Don Huff <don_huff@HP.com> wrote:
> I too read radio literature at the level of ARRL Handbooks in Jr. High
>School.
>But that was Jr High THEN (1950's) not Jr High NOW. With the general
>dumbing-down of U.S.
>grade school education over the past 3 decades (10 percent decline in
>SAT scores
>in spite of quintupling the constant-dollars spent per student!), it is
>not surprising
>that both the ARRL Handbook and QST in general have likewise been
>dumbed-down. (The ARRL matches
>the level of material to their target audience; that is how they stay in
>the publishing business).
>We have folks who are functionally illiterate in their native (English)
>language graduating
>not only from high school, but apparently some colleges too.

That's true, Don, but how many of them are trying to be hams?

You have to be careful with this "dumbing down" business. Yes,
average SAT scores have declined, but in the 1950s only 10% to
15% of a high school class *took* the SAT. And they were the *top*
10% or 15% too, those who were college bound.

Today nearly *every* high school student takes the SAT, thanks to
college becoming something nearly all students are expected to attend
rather than being intended only to serve the "best and brightest". The
Bell Curve assures that this near universal testing will naturally lower
the average score. But the top 10% to 15% are still scoring well.

So declining average scores don't represent a dumbing down. Instead
they represent a dilution *of the measurement*, and that has very different
implications. When you discount those taking the SAT who are destined
for the manual trades and look at the top 10% to 15%, you find about the
same relative number of bright and sharp students as in the 1950s.

Indeed, thanks to the extra funds and effort poured into some school
districts, perhaps 30% to 40% of today's students are scoring on a par
with the top 10% to 15% of the 1950s. But on the bottom side are students
whose only score is due to putting their name (sometimes misspelled)
on the top of the answer sheet. These students *didn't take* the SAT in
the 50s. That drags the average score down today, but it doesn't represent
a dumbing down of the population. Those stupid kids existed in the 1950s
too, they just didn't take the test, and usually didn't graduate from high school
either.

High school graduation requirements have been lowered in order to graduate those dumb kids, and college entrance requirements have been lowered in order to admit those dumb kids, but those dumb kids were there in the 50s too, they just didn't graduate high school, take the SAT, or go on to college.

The bright kids are just as bright today as they were in the 50s, and exist in about the same, or perhaps somewhat higher, numbers than they did in the 1950s too. They are the natural audience for the Handbook, not the functional illiterates. That's why dumbing down the Handbook is a tragic mistake. It devalues the Handbook for those capable of benefitting from the information it contains. But dumbing it down doesn't benefit those too stupid to appreciate it anyway.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

5463. surface mount

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: Watts <watts@rgv.net>
Message-ID: <338FBCB1.681A@rgv.net>
Source record: 93639

Does anyone have a source for surface mount capacitors in the pf range.

Gary Watts K5XZ watts@rgv.net

5464. Re: UHF Repeater Desense Problem

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: k9ydo@aol.com
Message-ID: <19970531064300.CAA02982@ladder02.news.aol.com>
Source record: 93640

#1 All coax needs to be double shielded or 100 % shield type of coax from duplexers to transmitter and to recv. #2 The Hamtronics is not the better choice for a receiver. #3 The duplexers need to be checked for rejection on the receiver side of the Tx Freq. #4 Sometimes the antenna match can cause problems. With better receive sens. all of these need to be checked. 73, Bill

5465. Planar Data Wanted

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: drussell@idirect.com
Message-ID: <338F8DE7.1CE1@idirect.com>
Source record: 93641

Greetings,

I am looking for technical information (characteristic curves,

specifications, mechanical drawings, application notes, etc) for the

familly of ceramic planar triodes made by GE. Some example type numbers

are : 7296 7462 7588 7625 8081 8082 8083

Please email or post anything you feel may be of interest, thanks in

advance.

73

david, VE3 VDO

5466. Theory fpr Vackar Oscillator

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: Robin Birch <robin@falstaf.demon.co.uk>
Message-ID: <a3f39HA+gAkzEwUN@falstaf.demon.co.uk>
Source record: 93642
Cross-posted to: rec.radio.amateur.homebrew,uk.radio.amateur

Dear All,
Does anybody know of a paper, article etc that gives the theory behind
the vackar oscillator?.

Cheers

Robin
Robin Birch robin@falstaf.demon.co.uk

M1ASU Old computers and radios always welcome

5467. Looking for WA6BQU or DCTL antenna Info Pse.

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: Jean-Philippe BUCHET <f5gkw@hol.fr>
Message-ID: <01bc6dc3$3a2cdc00$8c069ac3@default>
Source record: 93643
Cross-posted to: alt.ham-radio.am,alt.ham-radio.hf,alt.radio.scanner.uk,aus.radio.amateur.misc,fr.rec.radio,rec.radio.amateur.antenna,rec.radio.amateur.homebrew

Hi,
Thanks for reading this.
I'm Jean-Phi, in LIMOGES, Middle FRANCE loc: JN05PT
Since more than 1 year via packet or Inet, I' looking for QSO Jim
McLellandd,
WA6BQU for questions about the DCTL antenna on 80M :
In the French version of CQ Magazine, May 1995, there is a description
of this "Distributed Capacity Twisted Loop" for 80M
There is no formulas for calculate an other version E.G. 40, 30 or 20Mtrs
In the article, it's gave the length of :
LL : 8.534M (main & twisted loop)
LC : 0.76 M (Open Loop, capacity)
LZ : 1.37M (Impedance Adapation Loop)

If somebody have info, please give me !
i am living in a flat, at the 7th floor, and the roof is at the 13th !
and i have no possibilty to place any antenna at the top of the building.
Perhaps, your info will give us the possibility to do QSO on HF !

To Jim, WA6BQU : Congratulations about this antenna. Reading the article
give me a kind of dream !: I will operate my HF TRX (IC725) very soon !

To all : Best regards and wishes to you and your familly, 73's and Tks Agn.

And sorry about my approximate English ! I hope it's unterstandable.
I understand it myself, so, I think I am in the good way !!!!!

I do prefer answer by Email Pse

THANKS A LOT

/EX

--
Jean-Philippe BUCHET
Amateur Radio Station F5GKW
nr LIMOGES Locator JN05PU
300 Km South Paris

Email f5gkw@hol.fr
Ax25 f5gkw@f5roc.fali.fra.eu

5468. Re: converting cb to 10m

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: philipc@erinet.COM
Message-ID: <199705311330.JAA28675@erinet.com>
Source record: 93644

The Realistic TRC-415 uses a LC7132 PLL which is one of those not easily modifiable ROM based chips. The chip accepts direct VCO input in the range of 13-16 Mhz depending on whether you are in TX or RX. The 10.240 Mhz crystal is used as the reference for the PLL and for the second RX mixer.

In receive mode the T/R pin on the PLL is pulled high which selects a VCO division in the range of 3254 (Ch 1) to 3342 (Ch 40). The VCO generates a frequency in RX mode from 16.270 Mhz (Ch 1) to 16.710 Mhz (Ch 40). The 16 Mhz VCO is mixed with the 27 Mhz RF in the 1st RX mixer to give a first IF of 10.695 Mhz. The 10.695 Mhz IF is mixed with the 10.240 Mhz PLL reference crystal to give a second IF of 455 Khz.

In transmit mode the T/R pin on the PLL is pulled low which selects a VCO division in the range of 5393 (Ch 1) to 5481 (Ch 40). The VCO generates a frequency in TX mode from 13.4825 Mhz (Ch 1) to 13.7025 Mhz (Ch 40). The 13 Mhz VCO is then doubled to give a TX output in the 27 Mhz range. In TX mode a capacitor is placed in the VCO circuit to lower the VCO frequency from 16 Mhz RX mode to 13 Mhz TX mode.

Because the PLL accepts the direct VCO input (13 - 16 Mhz) and the channel selection is decoded by ROM in the PLL, this radio is not easily modifiable and changing the 10.240 Mhz crystal is NOT the way to go!

I didn't get your original message so I don't have your email address, so maybe someone that does have your original message will forward this message on to you.

Regards,

Phil
KA8FJA

>
> On 27 May 1997, Jacqueline Herman wrote:
>
> > I'm on an email-only account and cannot read this NG so *please*
> > eamil me any comments you might have regarding the following:
> >
> > Hi Folks. I've converted a RS TRC-415 cb to 10m (changed the 10.240 MHz
> > xtal to a 10.635 so that now ch1 = 28.01 MHz, ch2 = 28.02, ...).
> >
> > My intention was to use this for CW, and I found a spot to splice
> > the key into (between the xtal oscillator and the driver stages)
> > that gives pretty clean keying.
> >
> > Now, how to add a BFO? If its rcvr had the traditional 455 kc IF,

> > a BFO would be easy to install. But without a schematic I have
> > no idea what this sythesized rig uses for an IF. Any ideas?
> >
> > I'm on an email-only account and cannot read this NG so *please*
> > email me your comments.
> >
> > Thanks in advance, and 73,
> > Jeff KH2PZ / 7

5469. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: Roland Burgan <rburgan@up.net>
Message-ID: <33903998.2FF5@up.net>
Source record: 93645

Chuck (Jack) Hawley wrote:
>
> Try http://www.cl.ais.net/farcir/
> --
>
> Charles (Jack) Hawley Jr.
> Amateur Radio: Chuck, KE9UW
> BMW Motorcycles: Jack, BMWMOA #224
> c-hawley@uiuc.edu
> Sr. Research Engineer Emeritus
> University of Illinois, Urbana-Champaign

I have 847 as the area code. He just took care of a PCB for
me for my 73 Amateur Radio Today article..May, 1997.
Roland , KB8XI

5470. *** New Vintage Kit Co. Web Page!! ***

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: bry@ix.netcom.com
Message-ID: <33904a3f.19452183@news.mnsinc.com>
Source record: 93646
Cross-posted to: rec.radio.amateur.boatanchors,rec.radio.amateur.homebrew,uk.radio.amateur

There is a new web site on the net for:

VINTAGE RADIO KIT CO.

They sell receiver and transmitter kits using tubes (that's VALVES for you UK-types!).

For full details, take a butchers at:

http://www.mnsinc.com/bry/vintage.htm

Enjoy! 73 de G3XLQ/AF4K, Bry

5471. Re: surface mount

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: "Carl R. Stevenson" <wa6vse@fast.net>
Message-ID: <01bc6de1$89f475e0$2e95f5ce@wa6vse.fast.net>
Source record: 93647

Try Digikey ... they're a mail-order distributor and they have a website
at http://www.digikey.com ...

Carl - wa6vse
wa6vse@fast.net

Watts <watts@rgv.net> wrote in article <338FBCB1.681A@rgv.net>...
> Does anyone have a source for surface mount capacitors in the pf range.
>
> Gary Watts K5XZ watts@rgv.net
>

5472. Re: Who can help me with a Simple stepper controler ??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: Madjid VE2GMI <mboukri@cam.org>
Message-ID: <33904EFD.6EF8@cam.org>
Source record: 93648

erwin cremers wrote:
>
> Can any one help me to a site on the net that has a simple stepper
> controler on display including the parts i need to buy.
>
> I want to build a remote antenna controler and would like to use some
> stepper motors from a old printer to rotate the C's and windings.
>
> So if you know any thing that could help me please send me a reply .

Check the Uof Aloberta cookbook

at ftp://nyquist.ee.ualberta.ca/pub/cookbook/comp/parallel/

you have two or three files for steppers like the 3axis file

Madjid, VE2GMI - Home Page: http://www.CAM.ORG/~mboukri
NEC4WIN Windows Antenna Simulation Software

5473. 12V FT-51,11 Cigar adpt,case,IntelMB,SVGA,14.4

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: kc4srn@aol.com
Message-ID: <19970531173101.NAA08679@ladder02.news.aol.com>
Source record: 93649

YAESU EDC-12 Cigar adapter/noise filter/voltage regulator/fuse/batt clip/trickle charging/fits FT-11/41 & FT-51. New in box. $39 *SHIPPED* US.

YASEU CSC-67 Soft case for FT-51, FNB-31 small battery. Has open flap at bottom for larger batt and for above EDC-12 connection (without removing this protective case). $20 *SHIPPED* US.

14.4KBPS internal modem $29 *SHIPPED* US.

INTEL PENTIUM 90mhz MB, CPU with PCI, FAN and Y-connector. Compleate INTEL manual $169 *SHIPPED* US.

PCI SVGA card $39 *shipped*

If you prefer COD, add $20

5474. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <339069F6.4739@imaxx.net>
Source record: 93650

Bry C wrote:
>
> On 30 May 1997 22:24:30 GMT, toms@inconnect.inconnect.com (Thomas
> Schaefer) wrote:
>
> >I sent email to FAR recently, but no reply. I called a phone number, but
> >no reply. The phone number I have is 836-9148. I tried many different area
> >codes. Does anyone have this information?
> >
> > --
> >Best Regards,
>
> Please let me know if you find out! I wish I knew too!
>
> Bry AF4K
> bry@mnsinc.com

Try FAR at;

http://www.cl.ais.net/farcir/

I've never had luck calling, even years ago.
Try email or snail mail.

Chuck KD9JQ

--

Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net

5475. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: Chuck KD9JQ <kd9jq@imaxx.net>
Message-ID: <33906A4A.22A@imaxx.net>
Source record: 93651

Bry C wrote:
>
> On 30 May 1997 22:24:30 GMT, toms@inconnect.inconnect.com (Thomas
> Schaefer) wrote:
>
> >I sent email to FAR recently, but no reply. I called a phone number, but
> >no reply. The phone number I have is 836-9148. I tried many different area
> >codes. Does anyone have this information?
> >
> > --
> >Best Regards,
>
> Please let me know if you find out! I wish I knew too!
>
> Bry AF4K
> bry@mnsinc.com

Try FAR at;

http://www.cl.ais.net/farcir/

I've never had luck calling, even years ago.
Try email or snail mail.

Chuck KD9JQ

--

Charles H. Reichert 847-358-3827 Home
KD9JQ 847-632-6669 Work
955 Concord Lane http://www.imaxx.net/~kd9jq
Hoffman Estates, IL. 60195 mailto:kd9jq@imaxx.net

5476. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: hudog@ibm.net
Message-ID: <339072E0.383F@ibm.net>
Source record: 93652

Thomas Schaefer wrote:
>
> I sent email to FAR recently, but no reply. I called a phone number, but
> no reply. The phone number I have is 836-9148. I tried many different area
> codes. Does anyone have this information?
>
> --
> Best Regards,
>
> Tom Schaefer
> Computer Consultant Unisys A Series & Windows NT: Amateur Radio NY4I

Tom- The FAR circuits web page is at:

http://www.cl.ais.net/farcir/

I was just looking at it this morning. Your phone number is correct per
their web page (847)836-9148. Email is farcir@ais.net

5477. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: ke4zv@bellsouth.net
Message-ID: <33909680.121060589@news.atl.bellsouth.net>
Source record: 93653

On 30 May 1997 22:24:30 GMT, toms@inconnect.inconnect.com (Thomas Schaefer) wrote:
>I sent email to FAR recently, but no reply. I called a phone number, but
>no reply. The phone number I have is 836-9148. I tried many different area
>codes. Does anyone have this information?

FAR is still in business, he was at Dayton. Perhaps that's when you called.
As you know, FAR is a one man show, and getting ready for, and going to, Dayton
probably caused everything else to be shutdown for the duration.

Gary
Gary Coffman KE4ZV | You Make It | Email:
Destructive Testing Systems | We Break It | ke4zv@bellsouth.net
534 Shannon Way | Guaranteed | or
Lawrenceville, GA 30244 | | ke4zv@radio.org

5478. Re: CB to 6 meters??

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: jrv <jvaldes@whoi.edu>
Message-ID: <33907509.D5E7348C@whoi.edu>
Source record: 93654
Body handling: HTML body converted to readable text

Jim Valdes wrote:

> Bry Carling, G3XLQ / AF4K wrote:
> >
> > On Fri, 23 May 1997 10:24:20 GMT, "Paul Jordan"
>
> > wrote:
> >
> > >Does anyone know how to convert old CB radios to 6 meters? I've
> seen
> > it
> > >talked about a few times but, never heard any tech data on
> actually
> > doing
> > >it.
> > >Any help would be appreciated...
> > >
> > >Paul Jordan
> > >KL0AN
> > >Fairbanks, AK
> >
> > There is a complete article you can download at:
> >
> > http://www.mnsinc.com/bry/hamfiles.htm
> >
> > For great Ham Radio resources on the web, VISIT:
> > http://www.mnsinc.com/bry/hamfiles.htm
>
> where on the site is the article??

I found my original reference for the CBtoSIX conversion. It's for one
of the Hy-Gain AM boards, 73 Magazine 1985 written by KB5LI.
Jim, WA1GPO

Jim Valdes wrote:

Bry Carling, G3XLQ / AF4K wrote:

>

> On Fri, 23 May 1997 10:24:20 GMT, "Paul Jordan" <jordan@santanet.com>

> wrote:

>

> >Does anyone know how to convert old CB radios to 6 meters? I've seen

> it

> >talked about a few times but, never heard any tech data on actually

> doing

> >it.

> >Any help would be appreciated...

> >

> >Paul Jordan

> >KL0AN

> >Fairbanks, AK

>

> There is a complete article you can download at:

>

> http://www.mnsinc.com/bry/hamfiles.htm

>

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where on the site is the article??

I found my original reference for the CBtoSIX conversion. It's for
one of the Hy-Gain AM boards, 73 Magazine 1985 written by KB5LI.

Jim, WA1GPO

5479. Re: FAR Circuits still around?

Newsgroup: rec.radio.amateur.homebrew
Date: 1997-05-31 00:00:00 UTC
From: Thomas Isgro <kc8dgu@postoffice.worldnet.att.net>
Message-ID: <3390C195.1864@postoffice.worldnet.att.net>
Source record: 93655

FAR CIRCUITS
Printed Circuit Boards
18N640 Field Court
Dundee, Illinois 60118
(847) 836-9148 Voice/Fax
email: farcir@ais.net

Just got this off their website.

--
****
****
73 de
KC8DGU
Tom Isgro
OHIO

10-X #68364 SCI #1479 QRP-L #945 ARS #203
C.A.T.T #2115 FIST 2360 NORCAL ARRL

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